

PUENTES

IBERO-AMERICAN MAGAZINE OF MUSIC THERAPY IN CRITICAL CARE

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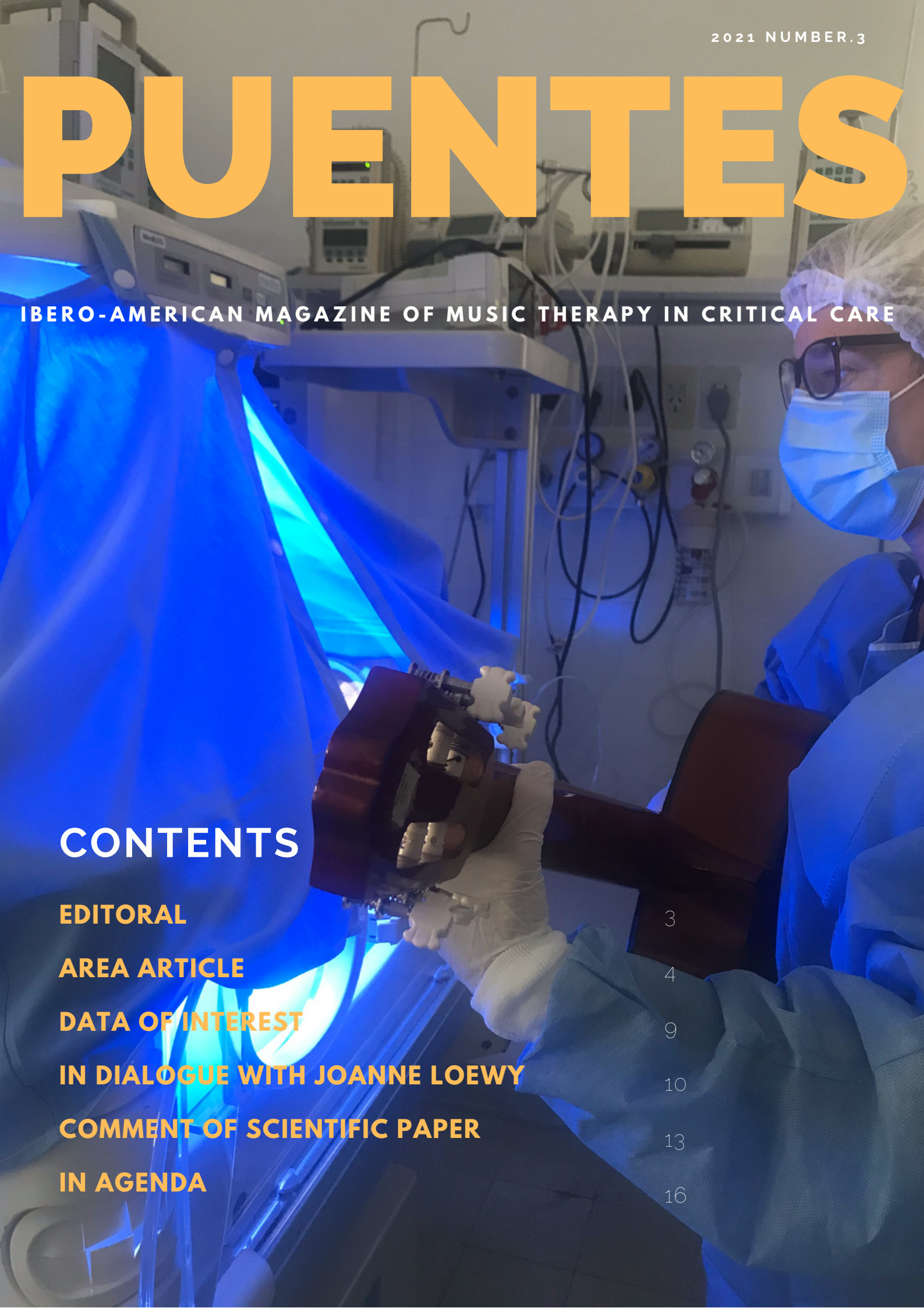
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COLLABORATORS

VANESA BLOTTO (ARGENTINA)

TRANSLATION

FRANCO ELKIN DARIO (COLOMBIA)

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MANAGING EDITOR: KARINA DANIELA FERRARI

MARIO BRAVO 1007 CABA BUENOS AIRES ARGENTINA CP(1175)

CONTACT: PUENTESAREASCRTICAS@GMAIL.COM

FOLLOW IN ITG @REVISTA.PUENTES

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Editorial

For more than two decades, the Neonatology area has been one where many music therapists from the critical care area work in. In this new issue of our magazine, we want to share information on the area from recent scientific evidence, which allows us to understand the scope of our specialty. For that, we have the honor of having interviewed Dr. Joanne Loewy, an international reference in the area. We also present a central note that describes from scientific evidence the main findings and objectives as well as the current intervention methodologies. We also comment on a recent study that sheds light on a little-studied issue regarding the impact of maternal singing voice on high-risk neonates. Finally, you will find information on several projects that are being carried out in the Ibero-American region.

We hope readers enjoy reading it as much as we have enjoyed making it.

Editorial team



AREA ARTICLE

Music therapy in Neonatology

Authors:

Vanesa Blotto (Argentina), Veronica Chiavone (Uruguay), Patricia Lallana (Chile).

GIMAC Members (Ibero-american Group of Music Therapy in Critical Care)

Introduction

The current paradigm of humanization in health, positions music therapy as one of the most appropriate disciplines to integrate into teams, and thus carry out interdisciplinary work, since it collaborates in improving the quality of care of the newborn, their families and the environment of the Neonatal Intensive Care Unit.

Characteristics of the area and its population

Neonatal Units are characterized by being environments where neonates are exposed to a sound density that often exceeds the recommended parameters, which are 45db (AAP). The sound environment usually presents noises and undesirable sounds, coming from alarms, machines, and conversations of health personnel, which generates stress both in health professionals and in babies and their families.

PROFILE OF THE MUSIC THERAPIST IN NEONATAL CRITICAL CARE AREAS

The complexity of the newborn patient situation, requires from the music therapist, a wide range of tools and techniques, attitudes and skills to put at the service of their needs: active listening, flexibility and adaptability, acceptance, many of them, oriented towards a model of care centered on the patient and her family.

The main referral criteria are:

- Sleep quality
- Stress Reduction
- sensory stimulation
- Pain management
- work with family
- Containment and emotional expression

Into NICUs are attended neonates with various health problems such as respiratory distress syndrome (NRDS), chronic lung disease / bronchopulmonary dysplasia (BPD), apnea and bradycardia, retinopathy of prematurity, jaundice, anemia, heart murmur, heart and respiratory rate, difficulties in sucking, swallowing, breastfeeding, stress, anxiety, pain in the face of intrusive interventions, difficulties in regulating sleep, oxygen saturation and difficulties in the development of the attachment bond. In some cases, babies with social causes (abandoned by their parents or given birth in public, etc.) are also hospitalized. It is estimated that each year around 15 million babies are born prematurely (less than 37 weeks' gestation), a number that is increasing, and 21 million newborns have low birth weight, that is, less than 2.5 kg (Organization World Health Organization, 2018-2021). More than 1 million die because of prematurity and others may have neurodevelopmental sequelae. (Global Action Report on Premature Birth, 2021). In relation to the caregivers, they usually present stress, anxiety, and difficulties in the bond of attachment and in their role within the unit. The health professionals of the team may present symptoms of stress in relation to work in the area and the sound environment of the neonatal unit.



Music therapy and Neonatology

Music therapy in neonatology began to be implemented in New York in 1999 by Joanne Lowey, who proposed encouraging the mother, father, or guardian to caress the baby and sing softly to him (Loewy, 2003). They should preferably be lullabies and/or a melodic hum of about three to five tones, or the choice of a meaningful song transformed into a lullaby. She likewise affirms that the dynamics of the relationship between the parents and the child will be reinforced to the extent that the soft tones and the phrases sung repeatedly become a recognizable pattern of dream schedules, transition and/or separation.

The risks associated with prematurity are related to the maturation of the brain, which increases the possibility of suffering from neurological problems such as: attention deficit syndrome (ADS), executive function disorders, language and speech disorders, emotional lability, difficulties low intelligence quotient (IQ), visual motor integration difficulties, and visual motor limitations

(Pharoah, Stevenson et al. 1994a; 1994b; McCormick, Workman-Daniels et al. 1996; Stjemqvist y Svenningsen 1999; Peterson, Vohr et al. 2000; Marlow, Wolke et al. 2005; Marlow, Hennessy et al. 2007; Volpe 2008; Wolke, Samara et al. 2008; Hack, Taylor et al. 2009).

Similarly, there is scientific evidence to ensure that predictable and ordered musical elements create a structure that helps the baby calm down and reorganize physiologically and neurologically (Lowey 2013). The transition from the intrauterine environment to the intensive care unit environment can expose both the baby and her caregivers to stressful situations (Chiavone, Lichtensztein, 2019). As soon as the child is born, he reacts attentively to her sound environment. This observation is especially significant in the case of premature infants, in whom growth and development are compromised.

When the premature baby is hospitalized in the unit, the parents often feel powerless and incompetent in their role as such. For this reason, care that takes place in the noisy environment in which the baby is found, although beneficial from a medical point of view, can at the same time hinder the attachment process (Nataka and Trehub 2005; Shoemark 2006; Nocker-Ribaupierre 2011). According to research studies, music therapy can deepen the baby's sleep state, stabilize heart rate and breathing, and reinforce the sucking/feeding rhythms with the consequent weight gain (Loewy et al., 2013).

Music therapy interventions in this area can reduce physiological stress and promote the neurodevelopment of babies, reducing the risk of dysfunctional plasticity (Chiavone, Lichtensztein, 2019). Music therapy proposes, among other things, interventions aimed at parents and babies where difficulties are observed in relation to the development of a healthy bond, necessary for the development of a secure attachment necessary for the development of a secure attachment.



"In the Ibero-American region, the work carried out by a disciple of Dr. Loewy, Dr. Ettemberger, who has carried out several investigations within the Olaya Polyclinic Center Hospital in Bogotá, Colombia, stands out"

Scientific evidence shows that Music Therapy:

- Impacts mental well-being, decreased anxiety and depression of caregivers (Ettemberger, Beltrán 2018)
- It favors communication and support centered on the family, taking into account their culture and their biography. (Ettemberger, 2017)
- It reduces stress and induces significant sensory stimulation, fostering bonding and enhancing neurological development.

(Haslbeck, 2017)

The voices of the mother and/or father are, within the family musical context, culturally relevant, parameters of stimulation optimal, personal and integral that must be used precisely (Coleman, Pratt et al. 1998; Trainor, Clark et al. 1997). By offering a containing space and emotional support, the music therapist can offer to the vulnerable dyads an opportunity to meet and explore a new form of communication. (Edwards, 2011).

The clinical objectives of the area

The focus is on the neonate and her family, with goals that go through emotional/social and neurophysiological areas.

In relation to the newborn

- Stabilize heart and respiratory rate
- Regulate oxygen saturation
- Reinforce sucking/feeding rhythms
- Deepen the sleep state
- Decrease the impact of sounds from the NICU environment
- Reduce the pain of the newborn.
- Promote sensory stimulation
- Comprehensively assist the newborn and her family from palliative care



Regarding the caregiver

- Promote the bond of attachment
- Raise awareness of the importance of the use of the singing voice by caregivers.
- Provide emotional support
- Reduce caregiver stress and anxiety

Methods and techniques of intervention in the area:

One of the best-known protocols in music therapy for premature babies and their caregivers, based on empirical evidence, is the one developed by Joanne Loewy and collaborators, RBL-First Sounds (Rhythm, Breath & Lullaby). It works from the following clinical interventions:

- Medically stable premature infants, greater than 32 weeks gestation
- Parents and caregivers to deal with stressful situations, strengthen the bond and generate attachment
- The sound environment of the NICU
- The techniques he uses are:
 - Lullaby
 - Entrained breathing sounds with the ocean disc
 - Entrained live heartbeat sounds with the cat box

Another benchmark methodology of the Ibero-American region is developed from hospital music therapy (Ferrari et al., 2017) which proposes a comprehensive view of the patient not only from a psycho-emotional point of view but also from a neurophysiological one. This makes it possible to think of non-pharmacological strategies centered on the patient and her family and adapt them to the needs in each situation. In the field of Neonatology, the music therapist works in a transdisciplinary way collaborating with medical interventions. Likewise, this methodology proposes a systematic professional performance that allows a record of clinical interventions and the use of different evaluation tools that give rise to the measurement of impact in a clear way and from validated tools.

Significant perceptual, expressive, and mixed musical experiences are used, including Singing set of lullabies, recreation of songs, listening to edited music, contingent song, and The Welcome Song. At the level of prevention and health promotion, the objective is to make caregivers aware of the importance of using the family voice to promote the bond of attachment, within the framework of the "first song" project, which offers information and written material to the families (Ferrari, 2010).

Conclusions:

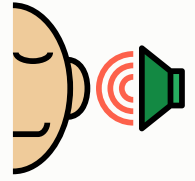
In conclusion, and based on the results obtained in different international neonatal units, we can affirm that those premature babies who receive music therapy assistance can achieve greater regulation of vital signs, weight gain, better sleep patterns, prolongation of calm alert states (which reinforce the neurological mechanisms linked to attention, sleep, among others) and decreased perception of anxiety in parents during their stay. Also, the promotion of attachment through bonding behaviors that are enhanced through maternal and paternal singing, particularly when the caregiver is in tune with the newborn (Lowey, 2013).

BIBLIOGRAPHICAL REFERENCES

- Edwards, J. (2011) The use of Music therapy to promote attachment between parents and infants. *The arts in psychotherapy*, 38, 190-195. doi: [10.1016/j.aip.2011.05.002](https://doi.org/10.1016/j.aip.2011.05.002)
- Ettenberger, M. (2017). Music therapy in the neonatal intensive care unit: Putting the families at the centre of care. *British journal of Music therapy*, 31 (1), 12-7. doi:10.1177/359457516685881.
- Ettenberger, M & Beltrán Ardilla, Y. (2018). Music therapy songwriting with mothers of preterm babies in the neonatal intensive care unit (NICU) - A mixed- methods pilot study. *The arts in psychotherapy*, 58, 42-52. doi: [10.1016/j.aip.2018.03.001](https://doi.org/10.1016/j.aip.2018.03.001)
- Ferrari, K. D. (2010) (sin publicar). "Proyecto Primera Canción". Guía para su implementación. Musicoterapia en el ámbito hospitalario. Hospital General de Agudos Dr. Teodoro Álvarez. Buenos Aires (Argentina).
- Ferrari, K. D. (Ed.). (2013) Musicoterapia aspectos de la sistematización y la evaluación de la práctica clínica. Buenos Aires: MTD Ediciones
- Haslbeck, F., Bucher, H., Bassler, D. & Hagmann, C. (2017). Creative Music therapy to promote brain structure function and neurobehavioral outcomes in preterm infants: a randomized controlled pilot trial protocol. *Pilot and feasibility studies*, 3(36). doi: [10.1186/s40814-017-0180-5](https://doi.org/10.1186/s40814-017-0180-5)
- Haslbeck, F. and Bassler, D. (2018). Music from the Very Beginning- A Neuroscience- Based Framework for Music as Therapy for Preterm Infants and their Parents. *Frontiers of Behavioral Neuroscience*, 12. doi: [10.3389/fnbeh.2018.00112](https://doi.org/10.3389/fnbeh.2018.00112)
- Lowey, J., Kristen, S., Dassier, A., Telsey, A. & Homel, P. (2013). The effects of music therapy on vital signs, feeding and sleep in premature infants. *American Academy of Pediatrics*, 131(5), 902-18. doi: [10.1542/peds.2012-1367](https://doi.org/10.1542/peds.2012-1367)
- Lowey, J. V. (2021). Modelo Clínico de Musicoterapia en la unidad de Terapia intensiva neonatal. En Nocker-Ribaupierre. Oir, despertar a la vida. Musicoterapia, bebés prematuros y recién nacidos. Buenos Aires: Editorial Kier S. A.
- Nocker - Ribaupierre, M. (Ed) (2021) Oir, despertar a la vida. Musicoterapia, bebés prematuros y recién nacidos. Buenos Aires: Editorial Kier S. A.
- Philbin, M. K. (2000). The influence of auditory experience on the foetus, newborn, and preterm infant: Report of the Sound Study Group of the National Resource Centre: the physical and developmental environment of the high risk infant. *Journal of Perinatology*, 20, 77-8. doi: [10.1038/sj.jp.7200453](https://doi.org/10.1038/sj.jp.7200453)
- Shoemark, H., Hanson-Abromeit, D. & Stewart, L. (2015). Constructing optimal experience for the hospitalized new born through neuro based music therapy. *Frontier in Humans Neuroscience*, 3. doi: [10.3389/fnhum.2015.00487](https://doi.org/10.3389/fnhum.2015.00487)
- Stewart, K. y Schneider, S. (2000). The effects of music therapy on the sound environment in the NICU. A pilot study. En Lowey, J. (Ed). Music therapy in the neonatal intensive care unit. Boston, MA. The Louis y Lucille Armstrong Music therapy program, Beth Israel Medical Center, 85-100.
- Van Der Heijden, M.J.E., Ollai Araghi, S., Jaekel, J., Reiss, I.K., Hunink, M.C. & van Dijk, M. (2016). Do hospitalized premature infants benefit from music interventions? A systematic review of randomized controlled trials. *Plos One*, 11(9). doi: doi.org/10.1371/journal.pone.0161848.



Sound environment in neonatal intensive care units



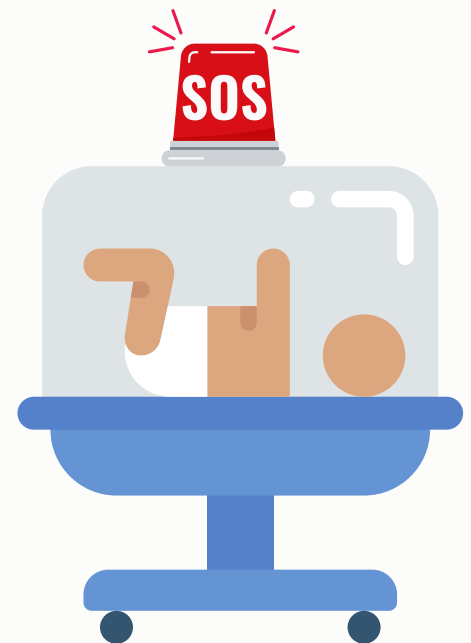
DATA OF INTEREST

The sound environment of neonatal intensive care is a very important issue to consider. The different sounds added to high frequencies are not only associated with stressful situations in the newborn, but also generate negative psychophysiological effects in the medium and short term.

It is for this reason that music therapists carry out musical experiences using low volumes and a small number of sounds simultaneously. The sung voice is usually accompanied by an instrument (guitar or tone drum or oceanic drum), close to each patient so as not to affect the rest of the neonates. In turn, each of these sound resources will be used for a specific purpose and not randomly, preventing sound overstimulation, given the prematurity in cortical processing that patients usually present.

Sounds with frequencies above 50db (library murmur) can generate:

- **hypoxemia, bradycardia,**
- **Increased intracranial pressure, arterial hypertension,**
- **Apnea, Stress,**
- **Disorganized and maladaptive behavior**
- **Metabolic instability,**
- **Sleep disturbances,**
- **Irritability, Tiredness,**





IN DIALOGUE WITH JOANNE LOEWY

ENTREVISTA

Our editorial conductor Karina Daniela Ferrari (Argentina) was able to interview Dr Joanne Loewy (USA). As one of the main international referents in the area of music therapy in critical neonatology, they talked about the particularities of music therapy and her latest research findings. She was also able to reflect on interdisciplinary work and the contribution of our speciality from this perspective.



Joanne Loewy DA, LCAT, MT-BC is the Director of the Department of Music Therapy, and an Associate Professor at Icahn School of Medicine at Mount Sinai, and is a Founding Member of the International Association for Music and Medicine. The Department of Music Therapy, which she initiated in 1994, among many populations is serving musicians and their unique ailments including chronic fatigue, chemical dependency, performance anxiety and overuse, children with developmental delays, teens with emotional issues, adults with neurological disorders and all ages of patients with asthma and COPD. Dr. Loewy is the Editor in Chief of the international, peer reviewed journal 'Music and Medicine' and serves on several editorial boards- and is a Cochrane NICU and Palliative Care reviewer. She received her doctorate from NYU and has edited several books including Music Therapy in Pediatric Pain, Music Therapy in the NICU, and she co-edited Music Therapy at End of Life and Caring for the Caregiver: Music Therapy in Grief and Trauma and the Integrative Advances in Music and Medicine: Music, the Breath and Health.

I want to start this interview by thanking your commitment and passion for music therapy that motivates other colleagues so much. You are one of the great references of music therapy in the hospital environment both for your clinical work and for your research. Do you remember your first clinical work experience in this field?

I began having an interest in hospital music therapy when I myself was hospitalized for a serious illness. At the time I had been working in a clinic/school with emotionally challenged toddlers through teens. When I was pregnant I developed DVT and had a 3 month hospital stay. It was there-as a patient I volunteered in my gown and with an IV on a Pediatric unit. I also saw how gonging and toning could thin my blood-as well as heparin (blood thinner). This was pre-clinical (official) work. I never returned to my clinic/school job, Instead, I wrote a grant- which is now 28 years renewed, and have been at the same hospital-and growing practices in this hospital system ever since. I fell in love with the work.

What would be according to your criteria the main areas of intervention of music therapy in the NICU?

There are 3 main areas in the approach we have developed in NICU MT. The 3 prongs are the environment, the caregivers (personal and professional) and the infants.

Do you consider it important to work with other professionals within the NICU?

Yes, in the NICU and in any area of practice, not only NICU. A focus on integrative music therapy – means that best practice involves a team-oriented approach where music therapists attend rounds, understand diagnoses and treatment plans, and participate in educating and sharing central aspects of patients' lifeworld that affect care and quality of life. Music therapy also so often impacts medical outcomes-we invite MDs and RNs to observe and witness how music interventions influence medical treatment plans.

What do you think should be the basic instrumental equipment of a music therapist in neonatology?

The most basic instrument is ourselves-as receptive listeners to referrals from MDs, RNs ACSWs and team members. We also listen to parents and the infants' cries. Using the self as instrument is the most critical aspect of care. Next, the voice. Some of the techniques we have developed include the voice-such as tonal vocal holding. The First Sounds Rhythm, Breath and Lullaby co (RBL) kit is used in the model-and includes ocean disc, which can be entrained to infants' breathing-enhancing regulated breathing and/or sleep, the gato box which is used for heart rate regulation and feeding-suck, swallow, breathe coordination-sustenance, and the SOK (song of kin)-the special technique whereby we witness and support parents'/family's special song-this can be from their heritage, or adapted form a meaningful melody, or composed in music therapy sessions with an MT.



"We invite doctors and nurses to observe and witness how musical interventions impact on medical treatment plans".

We should consider starting first with parents and provide interventions that can address their possible trauma states.



Retrieved from <https://www.artez.nl/dit-is-artez/nieuws/save-the-date-conference-and-training-music-therapy-interventions-in-neonatal-care>:

From your latest research on the impact of the physiological elements of music, which do you consider to influence the improvement of the newborn's self-regulatory behavior?

It all depends on the assessment. The music mechanisms which help infants self regulate, and help parents feel assured as participants in the possibilities of musicking, include repetition, predictability, familiar voices and small chunks of recognizable melodies-strategically sequenced at opportune times. We should also consider beginning first with parents-and provide interventions which can address their potential trauma states. Using RBL with parents and staff opens doors for live music making and signal reading for the cues and clues of their infants. EMT daily can nurture the entire process and can influence the anxiety and noise in significant ways.

What advice would you give to a music therapist who wants to start working in the area of neonatology?

Observe, observe, observe...
.and make sure to read and receive training.
(NICUmusictherapy.org)

We want to end our interview by thanking for your time and your generosity.

More information (NICUmusictherapy.org)



RHYTHM, BREATH & LULLABY KIT

COMMENTED

SCIENTIFIC ARTICLE

By

Belén Rodríguez y Patricia Lallana

In this section we will comment on the article “Preterm infants with severe brain injury demonstrate unstable physiological responses during maternal singing with music therapy: a randomized controlled study”, published in 2020 by Epstein S. et al., which reports on what happens during singing mother in the music therapy session with premature babies with severe brain injury. The study was conducted in Israel at the NICU of Meir Medical Center in Kfar Saba, dedicated to individualized neonatal developmental care and Certified in Assessment Program (NIDCAP), and was led by a qualified music therapist.

The inclusion criterion was premature babies born before 32 weeks of gestation, admitted to the NICU between 2014-2018, who developed IVH (Intraventricular Hemorrhage) grade 3 or 4 and/or PVL (Periventricular Leukomalacia). Forty babies participated in this study, but 35 of them were taken into account for the final analysis, since 3 could not complete the necessary sessions for the research and another two were excluded because they presented prolonged illnesses during hospitalizations and the music therapy work was interrupted for more than two weeks. Music therapy (MT) sessions had a frequency of 2 or 3 times a week and began 30 minutes after feeding.

Each mother-child duo participated in 3 sessions of music therapy with maternal singing combined with Skin-to-Skin Contact (SSC), and these were compared with three other sessions of SSC without music therapy. Regarding the intervention plan, it was single-center, prospective and randomized, and used a design of repeated measures, crossed and in which the participants were their own controls.

The person who analyzed and evaluated the data was unaware of the treatment received by each pair (blinded evaluator). Physiological responses of the infant were assessed during the MT sessions, including autonomic nervous system stability (low frequency (LF)/high frequency (HF) power), heart rate, respiratory rate, oxygen saturation, and mental status. The state of maternal anxiety and its physiological data were also evaluated.

Intervention method:

Before each session, the intensity of environment sounds was measured and those above 50 dB were avoided. All sessions were held in a closed room, with lights off and a quiet environment. They started with 10 minutes of SSC (baseline phase), followed by 20 minutes of MT and/or only SSC (intervention phase) and a final phase of 10 minutes of SSC (recovery phase).

According to the IRB protocol, it was established that if the baby had bradycardia or apnea with MT, the intervention would be interrupted.

The music therapist guided the mother in choosing and singing lullabies to her baby, using a repetitive and relaxing tone, soft, simple and slow in rhythm, in tune with the breathing patterns, movements, voice or other reactions of the baby. If necessary, the MT accompanied vocally or instrumentally using a nylon-string guitar (mid female vocal range from G3 to C5). From the baby's reactions, they decided whether to continue or change the rhythm, tempo, voices or pause. At the end of the musical intervention, a space for reflection on the experience was promoted.

From the pre-existing studies of this intervention, which support and promote the use of music therapy in premature babies without brain injuries, and affirm that music therapy sessions can reduce the anxiety of caregivers, we can infer that the music therapist of the present research hypothesized that the combination of Music Therapy and SSC in stable premature babies with severe brain injury would have beneficial effects for both the baby and the mother. In the case of the baby, in achieving a stable physiological state and improving the quality of sleep, and in the case of the mother, in reducing her anxiety.

In the study "Creative Music Therapy with Premature Babies and Their Parents: A Mixed-Method Pilot Study of Parental Anxiety, Stress and Depressive Symptoms, and Parent-Child Attachment" (2021) by

Selina M. Kehl et al., using mixed methods, evaluated whether creative music therapy could relieve anxiety, stress, and depressive symptoms in parents and support the process of bonding with their babies. Sixteen pairs of parents were included (ten pairs were randomly assigned to the music therapy group and six to the control group).

An important point to highlight in the article is the reference to the creation of a specific stimulation plan in each case, given the consequences that can result from the provision of any musical stimulation randomly or by a person with no professional training in music therapy. This in some way highlights the need to incorporate qualified music therapists in critical neonatal areas, who can carry out this work in a responsible manner.

The results of the quantitative analyzes revealed reductions in anxiety levels, as well as decreases in depressive symptoms and a significant increase in attachment over time. Qualitative research confirmed that creative music therapy can support the relationship between parents and children, that musical interaction evokes feelings of joy and relaxation in parents, and encourages them to interact more deeply with their babies. In another study, by music therapist Mark Ettenberger et al. "Music Therapy with Premature Babies and Their Caregivers in Colombia - Pilot Mixed-Method Study including a Randomized Trial (2014), in a Neonatal Intensive Care Unit (NICU)". 19 medically stable premature babies born between 30 and 37 weeks of gestation and their caregivers, were evaluated to establish whether music therapy could help newborns stabilize their physiology and help mothers reduce anxiety and strengthen their relationship with their baby.

The results showed a trend towards weight gain in babies, a shorter duration of hospitalization and the perception in mothers that music therapy was useful for them, for their babies and the strengthening of the mother-baby bond. Based on this background, the results of this research were not as expected. The main conclusion is that maternal singing may induce physiological and behavioral instability in preterm infants with IVH or PVL and may increase anxiety in their mothers during NICU hospitalization. From the research it is pointed out that it would be best to design a unique MT intervention plan for severely brain-injured preterm infants and their mothers.

Bibliographic references:

Epstei, S., Bauer, S., Stern, O., Litmanovitz, I., Elefant, C., Yakobson, D. y Arnon, S., (2020). Preterm infants with severe brain injury demonstrate unstable physiological responses during maternal singing with music therapy: a randomized controlled study. *European Journal of Pediatrics* doi.org/10.1007/s00431-020-03890-3

Ettenberger, M., Odell-Miller, H., Rojas Cárdenas, C., Torres Serrano, S., Parker, M. y Camargo Llanos, S., (2014). Music Therapy With Premature Infants and Their Caregivers in Colombia – A Mixed Methods Pilot Study Including a Randomized Trial. *Voices: A World Forum for Music Therapy*, 14 (2) <https://voices.no/index.php/voices/rt/printerFriendly/756/652>

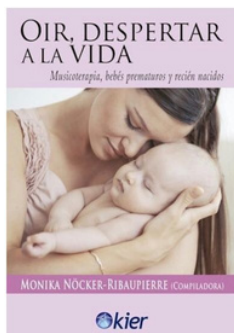
Kehl, S., La Marca-Ghaemmaghami ., PHaller M., Pichler-Stachl, E., Ulrich Bucher H., Bassler D. y Haslbeck, F., (2021). Creative Music Therapy with Premature Infants and Their Parents: A Mixed-Method Pilot Study on Parents' Anxiety, Stress and Depressive Symptoms and Parent-Infant Attachment. *Int. J. Environ. Res. Public Health* 18 (265). doi.org/10.3390/ijerph18010265

IBERO AMERICAN AGENDA

BOOKS, FORMATION, RESEARCH AND NEWS OF THE REGION

LISTENING, AN AWAKENING INTO LIFE

This book is a compilation prepared by German music therapist Nöcker-Ribaupierre, with different chapters written by different authors. They deal with the use of music in Neonatology, fetal hearing, premature babies and the music therapy work carried out in ICU-N in different parts of the world. There are also texts related to families with premature babies, taking into account that pregnancy, birth and pre-maturity is a continuum.



The book's goal is to describe the benefits of a musical experience as support for babies and their parents, both in the short term and the long term. It is a book that describes recent developments in research and clinical praxis, offering practical advice to apply new tools in neonatal care. Already printed three times since it first appeared 20 years ago, this translation into Spanish offers the most up-to-date version of music therapy in the context of UCI-N.

CHILE

MUSIC THERAPY
WITH PREMATURE
FAMILIES

Between April 2021 and April 2022 we will be running the project "Recursos de Musicoterapia para Familias de Bebés Prematuros recientemente dados de Alta. Un abordaje de Musicoterapia Centrado en el Vínculo" ("Music Therapy Resources for Families of Premature Babies recently Discharged. An approach to Music Therapy based on Bonding"). The project receives financing from the "Fondo Nacional de Desarrollo Cultural y de las Artes" (FONDART) ("National Fund for Cultural and Artistic Development"), managed by the Chilean government. The project is being managed by music therapists Patricia Lallana, Francisca Yousef and Franziska Willi, in cooperation with the Newborns Unit from the Gustavo Fricke Viña del Mar Hospital, in the region of Valparaíso, in Chile. Our goal is that, after the project is over, we can publish its results. That is why we are carrying out a meticulous recording of all interventions, using different evaluation tools, in order to find the impact of the project in: (1) the development of parent/child self-regulation and co-regulation abilities; (2) any changes in the perception of bonds and bond-related behavior; (3) any reduction of stress-related symptoms and of parental anxiety; and (4) any communicative changes in the family system.



SPAIN

MUSIC THERAPY IN THE NICU) OF THE PEDIATRIC HOSPITAL SANT JOAN DE DÉU, BARCELONA (SJD).

During the Master of Music Therapy at CODARTS (Rotterdam), the professional colleague Elisenda Pujals had the opportunity to attend a course in music therapy applied to NICU given at ArteZ, (Enschede) by Joanne Loewy and her team. That seminar inspired her to search for a location for her undergraduate research project. That opportunity arose at the pediatric hospital Sant Joan de Déu, in Barcelona. Under the guidance of Núria Bonet and her team from Associació Ressor, she observed multiple music therapy sessions in the NICU as well as in other hospital wards. This allowed her to discern which interventions are specific to NICU in order to document them for academic purposes. This work also focused on aspects on which there were few publications to date, i.e., exploring beyond the regulatory impact of music therapy for neonates. More particularly, she evaluated the effect of therapeutic interventions on parents and on the relationship between parents and the preterm infant. These observations provided her with an empirical perspective on the practical implications of S. Porges' polyvagal theory and A. Schore's regulation theory in the attachment domain, specifically:

- 1) the conscious use, by the therapist, of voice as a musical instrument as well as of the underlying breath as a regulatory means towards patients;
- 2) the impact of music therapy on attachment, which is a cornerstone of the infant's neuro-cognitive and emotional development.

<https://www.elisenda-pujals.com/>

<http://ressomt.org/es/>

<https://www.sjdhospitalbarcelona.org/es>

ARGENTINA

SCHOLARSHIPS FOR
PUBLIC HEALTH AND
MUSIC THERAPY

Between the years 2017 and 2021, music therapist Vanesa Blotto received a scholarship from the Ministry of Health of the City of Buenos Aires, in order to carry out a Music Therapy project in the areas of Neonatology and Obstetrics in the Dr. Teodoro Álvarez Emergency General Hospital. That scholarship covered assistance to more than 700 people, including pregnant women, newborns and their families. The most impactful areas were improving bonding, managing pain and emotional control. The experience also included deepening awareness of the singing voice as primary communication method with babies, in the frame of the "Primera Canción" ("First Song") project, which offered spoken and written information to family members and carers of newborns.

URUGUAY

GUIDES FOCUSED ON
NEURODEVELOPMENT
AL CARE IN
NEWBORNS



Music therapy has been included in the team of Family- and Neurodevelopmental-centered care of Newborns, in Uruguay. This is a multidisciplinary team with professionals from different ICU-N, which joined the team of their own free will through common interests. In the music therapy area our colleagues Lic. Alejandra Goldfarb and Lic. Verónica Chivone are part of the team, as experts in the area.

As part of their tasks there will be exchange and reflection activities in order to improve multidisciplinary outlooks, sharing details and achievements of each area. It must be emphasized that in November we will introduce the Guides Focused on Neurodevelopmental Care in Newborns and their Families, with a chapter on music therapy written by Lic. Alejandra Goldfarb. During the presentation of these guides, divulgation activities will take place, making emphasis in the fact that Music Therapy is included in the list of care activities for newborns, as part of their inherent rights.

Follow our project



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CENTRO ESTADUAL DE REABILITAÇÃO E
READAPTAÇÃO DR. HENRIQUE SANTILLO

