



UZ  
LEUVEN



# Music Therapy

Inge Bracke

**Pijnbeleid bij kinderen : Een intergalactische missie**  
**Antwerpen 6 februari 2020**

UZ  
Leuven

Herestraat 49  
B - 3000 Leuven

[www.uzleuven.be](http://www.uzleuven.be)  
tel. +32 16 33 22 11

UNIVERSITY HOSPITALS LEUVEN

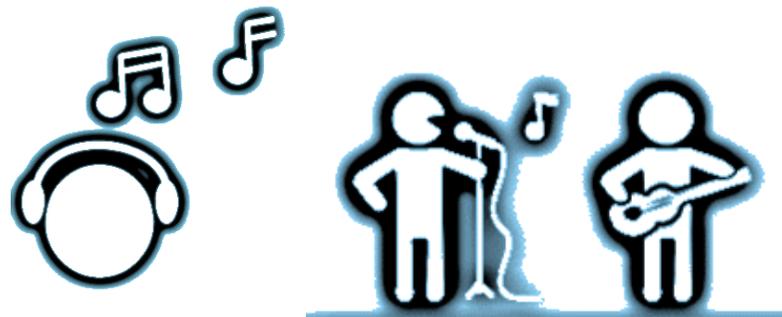


# Music Therapy in Pediatric Hemato-Oncology

- 🎵 New sounds in het University Children's Hospital in Leuven since October 1990
- 🎵 Music therapy to help children with cancer deal with their illness

# Music Medicine

- 🎵 **Listening** to recorded or live music selected by a music therapist

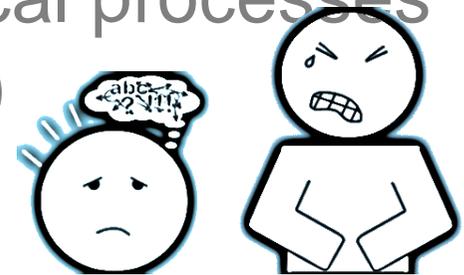


# Objectives Music Medicine

🎵 **Supporting** medical procedures

🎵 **Improving** mood 

🎵 **Influencing** psychological and physical processes  
(decreasing stress, pain, and anxiety)



🎵 **Enhancing** relaxation



# Music Therapy

- Receptive music therapy with a music therapist

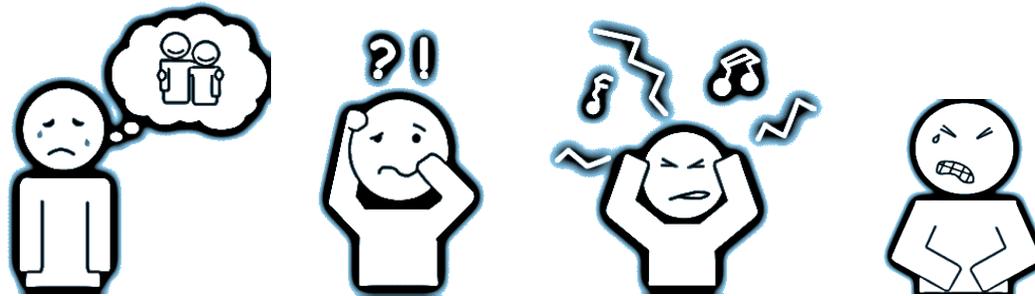


- Interactive music therapy with a music therapist

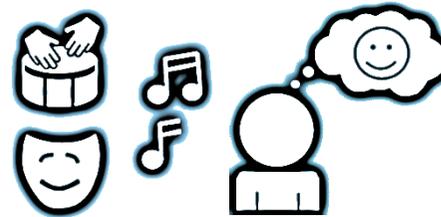


# Objectives Music Therapy

- 🎵 **Reducing** psychological and physical pain



- 🎵 **Improving** the quality of life and resilience, boosting the ego, empowerment



- 🎵 **Helping** to cope and to find and emotional balance
- 🎵 **Supporting** the development of the child

♫ **Addressing** psychological needs, offering support and comfort



♫ **Distraction**

♫ **Stimulating revalidation**, development and family bonding by singing and playing music



♫ **Empowerment, resilience**

♫ **Facilitating communication** and enabling to express the unspeakable in music



♫ **Support** during medical procedures

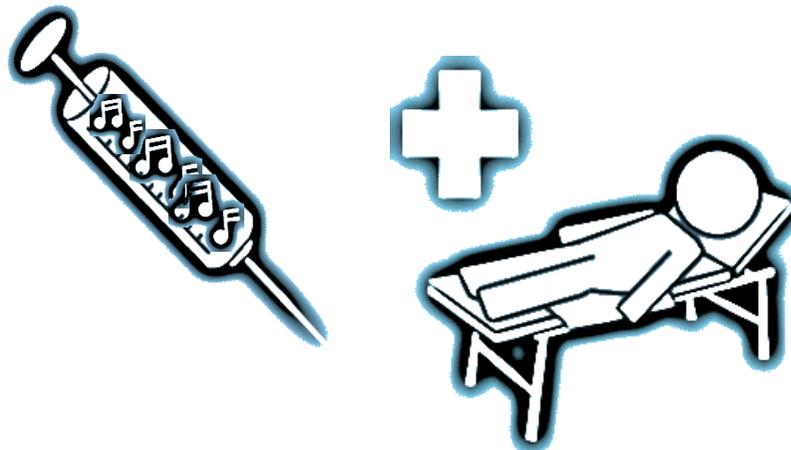
♫ **Palliative** music therapy

# Musical Support during Medical Procedures

- ‡ **Melzack and Wall (1965), Gifford and Butler (1997), Morlion (2014):** Psychosocial factors play a significant role in the perception of pain.
- ‡ **Dr. Ralph Spintghe (2015):** Practise and Research about music medicine in clinical situations to reduce pain, fear and stress.

# Musical Support during Medical Procedures

- ♫ **Dr. Ralph Spintghe: Practise and Research with Adults**
  - ♪ Distribution of pain and stress hormones is reduced by music, production of endorphins, less need for tranquilizers and painkillers
  - ♪ Objectively measurable parameters of music benefit

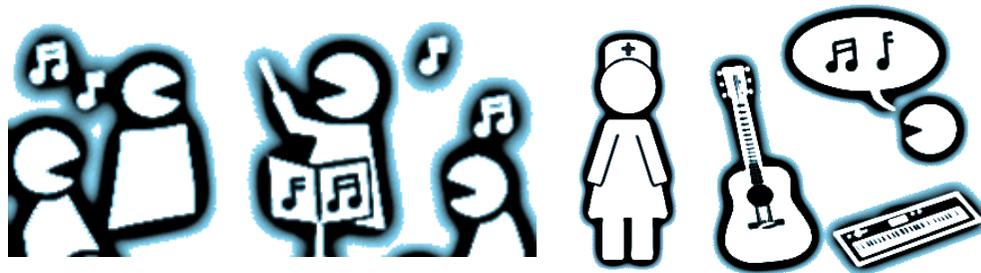


# Music Therapy and Medical Procedures in Paediatrics

- ‡ **Gousie (2001):** Pain decreasing
- ‡ **Barton (2008) en Negrete (2011):** Reduction of fear and pain.
- ‡ **Nguyen, Nilsson, Hellström en Bengston (2010):** Fear score is lower then conrole group.
- ‡ **Malone (1996):** Children with music therapy are more at ease and less anxious then controle group.
- ‡ **Sanfi (2015):** Decreasing fear and pain, better cooperation

# Music Therapy during Lumbar Punction in UZ Leuven

- ‡ Live Music (Kalinox)
- ‡ Receptive, active, interactive music making



# Positive Results

- ‡ Less fear, better coöorporation
- ‡ No need for general anesthesia
- ‡ Doctors and nurses support the music therapeutical intervention
- ‡ Sometimes nurses take over the singing-method

# Possible Downsides

- ⌘ Time and **patience** of the doctor/staff
- ⌘ Sometimes stress remains
- ⌘ Habituation to the music
- ⌘ Pain policy of the paediatric hospital
- ⌘ Full-time music therapist
- ⌘ Concerns of music therapists

# Music Therapy and Mental Support

- ‡ **Psychosocial factors** play a significant role in the perception of pain and general well-being of the patient
- ‡ **The emotional processing** of being ill can be positively influenced by music therapy
- ‡ **Expressing and processing** thoughts, feelings, and experiences on a musical symbolic level can reduce anxiety, powerlessness, loneliness, and feelings of isolation and loss of control
- ‡ **Having fun playing music** also helps to find an emotional balance

- ‡ **Studies** show (Barrera, Rykov and Doyle, 2002) that patients with music therapy support during treatment
  - ♪ have lower levels of pain, nausea, ...
  - ♪ have less feelings of loneliness, isolation, loss of control
- ‡ **In practise** music therapists in medical settings use
  - ♪ different interactive music therapy methods
  - ♪ the qualities/effects of music itself
  - ♪ to help the child dealing with the illness

# Music Therapy in Practise in UZ Leuven

- ♯ Playing music instruments with adapted sheet music
- ♯ Writing music, improvising on music instruments
- ♯ Singing children's songs, pop music, ....
- ♯ Writing songs, improvising songs

♫ Musical games on several instruments

♫ Fantasy play with little ducks, .



♫ Poem writing/story telling with a musical accompaniment

♫ Receptive music therapy

♫ 🎵 🎵 🎵 ... ..

- ‡ During hospitalisation
- ‡ In the music room, at the bedside
- ‡ Individual or together with the family, sometimes little groups
- ‡ Needs and wishes of the patient
- ‡ Process oriented

# Ina's Song

- ‡ 7 years old girl with leukemia, long periods of quarantaine.
- ‡ Ina loves to sing and to play music, she loves the movie “The sound of music”.
- ‡ New lyrics for “My Favorite Things”
- ‡ “It helps me to think about my favorite things, when I have to be in the hospital for such a long time. It makes me feel happy again.”

## Ina's Song

“These are a few of my favorite things.

When the dog bites,  
when the bee stings,  
they are mad at me.

I simply remember my favorite things and then I'm happy again.”

*“Dat zijn de dingen waar ik zo van hou.*

*Als de hond bijt, als de bij steekt, zijn ze boos op mij.*

*Dan denk ik aan alles waar ik zo van hou en ben ik meteen weer blij.”*

# Jonas' Song

- ♫ Boy, 9 years old, metastatic brain tumor
- ♫ Palliative situation at home, music therapy during more than 2 years, almost every week.
- ♫ Different methods, song improvisation.
- ♫ Music therapy helped him to deal with this very difficult and painful period in his life.
- ♫ Sometimes Jonas sings that he is strong and will overcome his cancer, sometimes he is just very sad.

## Jonas' Song

"I am not really happy.

My illness makes me  
angry and that is why I  
am often sad.

If only it were a dream ...  
those miserable cancer  
cells...

And no one, no one  
deserves that!"

*"Ik ben in het echt wel  
niet zo blij.*

*Mijn ziekte maakt mij  
boos en daarom ben  
ik ook dikwijls  
verdrietig.*

*Was het maar een  
droom... die ellendige  
kankercellen...*

*En niemand niet,  
niemand verdient dat!"*

# Story time with Lisa: The Gnome Family.

- ‡ 9 year old girl with leukemia
- ‡ Music therapy during treatment in the hospital
- ‡ Lisa loves to play music, she loves to make musical stories.
- ‡ We agree on a few things about the content of the story and then it flows by itself, like a long **improvisation.**
- ‡ Lisa wants me to be the storyteller, she wants to do the voices.
- ‡ Sometimes her parents play along, and they get their own voices in the stories.

**The Gnome Family lives in the forest.**

**The gnomes are friends with Mister Stork.**

**They experience all kinds of adventures. If they get into trouble, Mister Stork is there to help.**

**When the gnomes come home after their adventures there is a party.**

# A Journey to Egypt

- ‡ At first, we hear Lisa playing the harp. After that the family Gnome goes looking for the Nile. Mister Stork flies along.
- ‡ At the Nile they face a crocodile. Thankfully gnome Jan is there. He comes to save them with his friend Snake.
- ‡ After their adventures in Egypt, they fly back on the back of mister Stork to the forest of the Gnomes.
- ‡ Methaphors : Mister Stork, Crocodile, Snake, Gnome Jan, ... represent aspects of her personal story.

# Conclusion

- ♪ More research about the effects of music therapy?
- ♪ Integration of music therapy in pain policy of paediatric hospitals?
- ♪ Questions?



**Le Vase donne une Forme au Vide  
et la Musique au Silence.**

**(Georges Braque)**