

Bold print is information that is covered in the 15 min presentation.

Normal and **bold print** is information that is covered in the 42 min presentation.

Music Therapy definition: using music for non-music goals

1) How and why music affects us

A) Research handout discussion

B) Music and stress

1) **Two important keys to increase the benefits of music**

a)

b)

2) Primary cognitive experience – this means:

3) Music's temporal aspect – this means:

2) The purposeful use of music and voice during **PREGNANCY**

A) **Alfred Tomatis, MD. Relative to our discussion, his work and research found:**

1) **that a developing fetus is able to hear _____% of sound outside the womb**

2) how to duplicate the sound (frequency range) that a baby experiences in the womb

3) how specifically important mother's voice is to the baby

a) **How can we utilize music and voice during pregnancy?**

1) **Refer to 1-B-1 above**

2) **Add to this, using music in a regimented manner, i.e., certain types of music at specific times of day**

3) **Moms (and dads and sibs) regularly read pleasant story books out loud**

4) **Mom, place headphones on your belly as you play pleasant but purposeful music**

(***Mozart)

3) The purposeful use of music and voice during **LABOR**

A) Entrainment is:

B) **Make 3 playlists or CDs of your (mom's) favorite music. Have the 3 playlists or CDs consist of slow, medium and fast tempo songs. If you have a metronome the basic tempos are:**

1) **Slow - Largo – 42-66 bpm (beats per minute)**

2) **Medium - Andante – 56-88 bpm**

3) **Fast - Allegro – 84-144 bpm**

*****Playlists/CDs do not have to be vast. Songs can be repeated!** Remember the definition of Music Therapy! Don't think about entertainment, think about the purpose of the music.

*****Phone app mentioned on 40 min presentation is replaced by pdf file called “Popular Music Playlist Guide” in Resource Center that can be viewed and printed.**

4) The purposeful use of music and voice during **INFANCY**

A) **Again, refer to 1-B-1 above**

B) Music and sleep (also music for other times and tasks)

The Purposeful Use of Music from Pregnancy Through Infancy
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The overall purpose of this (42 min) presentation is to educate parents as to “how” music affects us and to gain knowledge of music's purposeful use during pregnancy, labor and infancy.

Upon completion of this **42 min** presentation participants will be able to:

- 1) Identify at least two (music therapy) clinical research findings that pertain to pregnancy and labor
- 2) Identify two important keys to increase the benefits of music
- 3) Understand what percentage of sound is perceived by an unborn child
- 4) Define entrainment
- 5) Describe how to utilize music during the labor process, i.e., for relaxation, to support rhythmic breathing and to be a positive diversion from pain and stress

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RELATED MUSIC RESEARCH AREAS

Music has been clinically proven to:

- 1) PROVIDE A POSITIVE DIVERSION FROM NEGATIVE EMOTIONS – NOT COMPATABLE WITH WORRY
- 2) ALLOW THE MIND AND BODY TO RELAX AND ACT AS A NON-ANALGESIC SLEEP AID (with no side effects)
- 3) INCREASE THE POSITIVE EFFECTS OF MEDICATIONS
- 4) DECREASE THE PERCEPTION OF PHYSICAL AND EMOTIONAL PAIN
- 6) DECREASE STRESS LEVELS (increasing endorphin levels (our body's natural opiates))
- 7) BOOST OUR IMMUNE SYSTEM – AFTER A 30 MIN MUSIC EXPERIENCE ENZYMES IN OUR SALIVA, THAT AID IN DIGESTION (thus boosting our immune system), ARE PRODUCED, NAMELY IMMUNOGLOBULIN A (IgA); ALSO PRODUCED, INTERLEUKIN 1 WHICH IS A PROTEIN THAT ALSO AIDS IN BOOSTED IMMUNE RESPONSE
- 8) AID IN TISSUE REGENERATION (repair)
- 9) AID IN SURGERY SETTINGS BY: DECREASING THE AMOUNT OF ANESTHESIA NEEDED; DECREASING BLEEDING AND SPEEDING UP RECOVERY TIME
- 10) PROVIDE REALITY ORIENTATION AND OFFER A POSITIVE DIVERSION FOR THOSE EXPERIENCING HALLUCINATIONS OR DELUSIONS
- 11) BE AN EFFECTIVE “HELPER” DURING EXERCISE/FITNESS TIMES BY ACTING AS A MOTIVATOR, POSITIVE DIVERSION FROM EXERTION, PACE SETTER, ETC.
- 12) REDUCE THE CONDITIONED SIDE EFFECTS OF CHEMOTHERAPY, i.e., NAUSEA AND VOMITING
- 13) ACT AS AN EMOTIONAL STIMULUS, ELICITING INSTANT FEELINGS AND EMOTIONS (primary cognitive experience)
- 14) INCREASE COGNITIVE (brain) AND PHYSICAL ENERGY AND DECREASE FATIGUE

******The above mentioned benefits of music are more readily attainable when we utilize music in a purposeful manner, i.e., preferred music used often with no or minimal distractions.***