Music Therapy in Elderly Patients

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Introduction

- Music therapy to promote enhanced sleep quality will be implemented at an assisted living facility. Residents 65 years of age or older will be able to sign up each quarter (January, April, July, and October) to be a part of this program. Each resident that is interested will be required to fill out a self-rated questionnaire to assess baseline sleep quality and disturbances. The questionnaire will be completed throughout therapy to assess effectiveness.
- Each resident will be provided a CD player and their choice of music from a list. Music therapists can be available to help with selections if needed. All interested residents are encouraged to attend the information sessions.

[M.L.H.]

Purpose

- To enhance quality of sleep of those 65 years and older in assisted living facilities
- To positively impact sleep patterns in older adults using music therapy
- To non-pharmacologically promote sleep, avoiding possible side effects related to medications
- To support older adults in their capacity for self-care
- To promote relaxation and reduce anxiety, both promoting well-being and better sleep quality
- To provide and adhere to evidence-based practice guidelines regarding music therapy [M.L.H.]

Supportive Data

- Music, although it may not effect vital signs or sleep *quality*, may show substantial improvements in sleep scores and is a non-invasive method to improve sleep (Chan, M. F., 2011) [M.L.H.]
- Music can be helpful in decreasing anxiety related to poor sleep quality while conversely increasing relaxation, both leading to better sleep quality (Johnson, J., 2003) [M.L.H.]
- Music therapy provides significant benefits to sleep quality and quantity without unwanted side effects (de Niet, Tiemens, Lendemeijer, & Hutschemaekers, 2009) [M.K.H.]
- Music therapy enhances endogenous opioids by activation of the central nerve system which is advantageous for patients with chronic sleep disorders and/or chronic diseases (Wang, Sun, & Zang, 2014) [M.K.H.]
- "It is shown that listening to music may act as an effective intervention to improve sleep quality and allay depression levels in a group of older people" (Chan, Chan, & Mok, 2010) [F.L.]

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[M.F.S.]

Procedure

- For all those who would like to partake in Music Therapy, a meeting with a music therapist can be offered to better implement music needs and selections
  - Residents and the music therapist can make a CD/playlist to promote sleep
  - Residents will meet with the music therapist after a week to evaluate their chosen selection of music and can continue meeting with the music therapist per their request
- A music playlist is encouraged to include what music a resident prefers but if they need help in the selection there a various playlists/CD's to choose from that include:
  - Classical, Relaxing Nature Sounds, Jazz Instrumentals, A capella, Country, Christian, Meditative, Chinese Classical, Western Classical, and Western Modern-Jazz, along with other soothing instrumental music
  - Hispanic and other cultural music can be provided upon request
- The guidelines for the music are:
  - Approximately 60-80 beats per minute (slow)
  - Minor tonalities
  - Smooth melodies with no dramatic change in volume or rhythm to achieve a relaxing effect
- Each genre of music will be played in one hour increments or played throughout the night per the resident's request
- Volume can be controlled by the resident with a maximum setting at 80 decibels or less to prevent hearing loss
- The patient's room will promote relaxation with low lights, comfortable temperature, and reduction in noise levels

[Y.L.]

Evaluation

- The intervention will be evaluated using the Pittsburgh Sleep Quality Index (PSQI) tool (link below).
- The 19 questions are separated into seven component scores, each of which is scored "0 – 3". "0" indicates no difficulty, and "3" indicates severe difficulty. The component scores are combined for a "global" score
- The components include: 1) Subjective sleep quality, 2) Sleep latency, 3) Sleep duration, 4) Habitual sleep efficiency, 5) Sleep disturbances, 6) Use of sleeping medication, and 7) Daytime dysfunction [F.L.]
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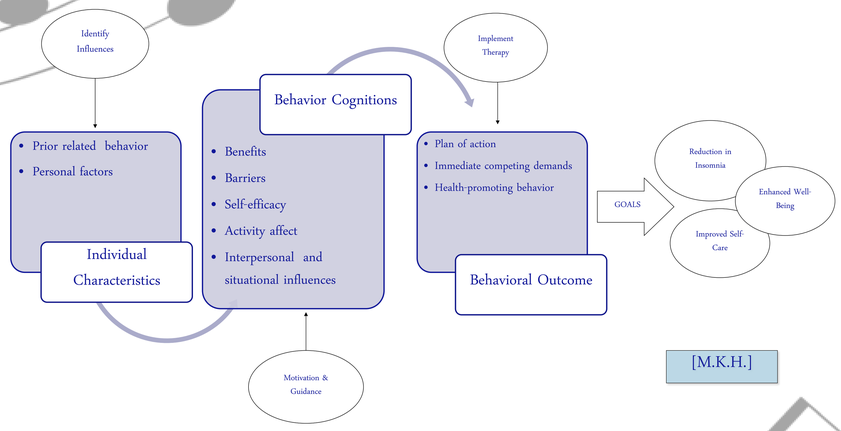
Barriers to Study

- Patients with cognitive disabilities would be excluded from the study
- Some patients may be disappointed with the options provided for the music therapy selection
- Patients may feel they are not seeing benefits from the therapy and choose to withdraw from the study
- Music therapy will not address certain medical issues (i.e. Sleep Apnea) that impact a person's sleep quality
- It has been found that subjects do not always accurately report their sleep quality (Buysse, et al., 1989) [F.L.]

The Health Promotion Model

- The Health Promotion Model explores what motivates individuals to engage in health promoting behaviors. The model focuses on patient health and well-being. A specific focus on individual characteristics, behavior-specific cognitions, and behavioral outcomes are assessed
  - These factors influence and motivate health behaviors (Pender, Murdaugh, & Parsons, 2011)
- Promoting adequate sleep hygiene through music therapy would increase overall wellness and adhere to the Healthy People 2020 guidelines for sleep health. [M.K.H]



[M.K.H.]

Individual Characteristics

- How many hours of sleep do you get per night?
- What is your age, height, and weight?
- Have you ever had problems sleeping?
- On a scale of 1-10 how would you rate your sleep hygiene?

Behavior Cognitions

- Do you believe music therapy would promote sleep?
- What barriers would prevent you from using music therapy?
- On a scale of 1-10 how likely are you to implement music therapy into your bedtime routine?
- How do you think you would feel before, during, and after music therapy?
- How does your family feel about music therapy?
- How comfortable are you with implementing music therapy into your environment?

Behavioral Outcome

- Implementation of a music therapy action plan.
- What competing demands will impede music therapy implementation?
- What health benefits would music therapy help you achieve?

[M.K.H.]

[M.F.S.]