

INDIVIDUALIZED MUSIC IN PERSONS WITH ADRD

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E&D Online Course



Prevalence of Alzheimer's Disease

Estimated 5.2 million Americans with AD*

U.S. has an ethnically diverse population

*Alzheimer's Association (2014)



Prevalence of Agitation in ADRD

- As high as 90% (Fernández, Gobartt, Balaña , the COOPERA Study Group, 2010).
- Community-dwelling persons with AD: 67.5% of the time (Tractenberg, Weiner, & Thal, 2002).



Agitation

“An inappropriate verbal, vocal, or motor activity that is not explained by needs or confusion per se” (Cohen-Mansfield & Billig, 1986, p. 712)



Agitation

- Quality of life (Légar *et al.*, 2002 Samus, *et al.*, 2005; Sloane, *et al.*, 2004)
- Interferes with care delivery and social interaction (Légar *et al.*, 2002, Samus, *et al.*, 2005; Sloane, *et al.*, 2004).
- Causes an increase in falls (Marx, Cohen-Mansfield, & Werner, 1990)
- Interferes with onset and duration of sleep (Cohen-Mansfield & Marx, 1990; Cohen-Mansfield, Werner, & Freedman, 1995; McCurry, Gibbons, Logsdon, & Teri, 2004, Rose *et al.*, 2011)
- A major source of stress to staff in LTCFs (Brodady *et al.*, 2003).
- Family caregiver stress. (Fauth, Zarit, Femia, Hoffer, & Stephens, 2006).



Purpose

There is growing recognition for the identification and testing of non-pharmacological interventions for the management of agitation in ethnically diverse populations.

Evidence-Based Protocol: Individualized Music for Persons with Dementia (5th Edition) by Linda A Gerdner



Mid-Range Theory of Individualized Music

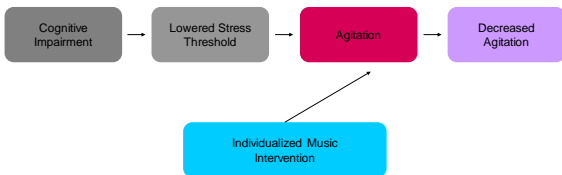
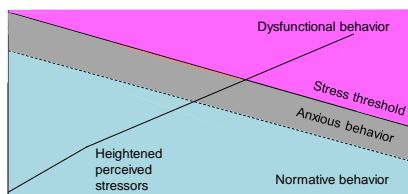


Figure 1. Mid-range theory of individualized music intervention for agitation. From Gerdner, L. (1997). An individualized music intervention for agitation. *Journal of the American Psychiatric Nurses Association*, 3(6), 178.



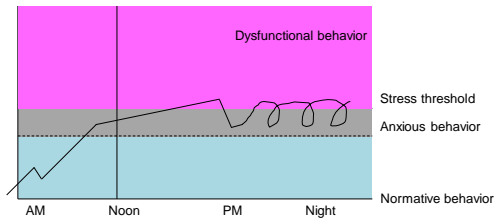
Figure 1. Progressively lowered stress threshold in persons with ADRD.



Reprinted from: Hall, G., & Buckwalter, K. (1987). Progressively lowered stress threshold: A conceptual model for care of adults with Alzheimer's disease. *Archives of Psychiatric Nursing*, 1(6), p. 403, Copyright 1987, with permission from Elsevier and the authors.



Figure 2. Effects of stress during a 24-hour day in the person with AD/DR.



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Individualized Music Defined

Music that has been integrated into the person's life and is based on the person's individual preference.



(Gerdner, 1992)



Individualized Music

- Persons with dementia, such as Alzheimer's disease, are able to process music long after their ability to process the spoken word.
- Cognitive impairment is associated with loss of short-term memory. Long-term memory remains intact into the advanced phases of the disease process.
- Music elicits memory.
- Music that elicits memories of positive feelings will have soothing effect.
- Changes focus to an interpretable stimulus.
- Reduce anxiety and agitation

(Gerdner, 1997)



Timing

Optimal effectiveness is achieved by implementing prior to the patient's "peak level of agitation"

Monitor the patient over several days to determine any possible temporal patterning. For example, does the person usually begin showing signs of agitation during mid-afternoon.

The prescribed time of intervention should precede this identified time by approx. 30 minutes.

Gerdner (1996, updated 2013)



Physiological Cause of Agitation

- Agitation may have a physiological cause (i.e., pain, infection). If a physiological cause is suspected a physician should be notified. appropriate medical attention.
- Individualized music may be used to supplement medical care but not replace it.



Assessment of Personal Music Preference (Gerdner, Hartsock, & Buckwalter, 2000)

Designed to obtain details on the:

- resident's specific music preference
- importance of music during independent living
- Consider the importance of ethnic heritage in the selection of music
- Completed by knowledgeable family member if degree cognitive impairment prevents the resident from providing this information



ASSESSMENT OF PERSONAL MUSIC PREFERENCE (SHORT VERSION)
© 2004 by Andrea C. Beckwith, Ed.D., Director, University of Utah
 Department of Psychology

Mean to often a very important part of people's lives. Please complete the questionnaire based on your knowledge of your family member's music preferences.

Before doing, how important is it for you to know how to play the instrument?
 ___ 1. Not important
 ___ 2. Moderately important
 ___ 3. Highly important
 ___ 4. Not relevant

Could/Did he/she play a musical instrument?
 If yes, please specify (instrument, piano, guitar, etc.)

Does/Did he/she enjoy singing?
 If yes, please specify (singing, around the house, church choir, etc.)

Does/Did he/she enjoy dancing?
 If yes, please specify (dancing, attended dance lessons, participated in dance contest, etc.)

The following is a list of different types of music. Please indicate the individual's choice (1) most favorite type with 1 being the most favorite, 2 the next, and 3 the third favorite.

- ___ 1. Country and Western
- ___ 2. Classical
- ___ 3. Spiritual/Religious
- ___ 4. Big Band/Jazz
- ___ 5. Rock
- ___ 6. Blues
- ___ 7. R&B
- ___ 8. Rap and Hip Hop
- ___ 9. Easy Listening
- ___ 10. Other (please specify location, artist, genre, time period, etc.)**
- ___ 11. Other



Please print or check (if beside the most correct choice) to the following questions.

What kind of music does your family member like best?
 ___ 1. Rock
 ___ 2. Spiritual
 ___ 3. R&B

Please identify specific songs/artists/etc. which made you feel happy.

Please identify specific artists/etc. (artform/etc.) that you enjoy listening to the most.

Please identify specific albums, audio cassette tapes, or compact discs contained in your personal music library.

Intervention Protocol

- Use a CD player, ipod, or MP3 player.
- Play music at a prescribed time for a minimum of 30 minutes daily and as needed.
- Set volume at an appropriate level



Evaluation of the Intervention

- Assess need and appropriateness for headphones
- Conduct ongoing assessment of patient's response to music.
- Monitor other patient's in the immediate environment. Remember what is pleasing to one person may be irritating to another.



Adverse Response

- It the agitation becomes more pronounced - stop the music.
- Reassess music preference with patient or family member
- Provide alternative music selection on the following day
- If patient responses adversely to the second selection, discontinue the intervention



In the Beginning...

Woman with Czech Heritage

- White widowed woman, age 89 years
- Probable Alzheimer's disease
- Daughter worked full-time



Baseline

- Low stimulus room in an adult day care center under supervision of staff
- Flat affect
- Paced to and from door
- "I want to go home, I want to go home"
- She provided no coherent response to any attempts at communication.





Individualized Music

- Two days per week, 30 minutes per session. 15 sessions
- Smiled at onset of hearing the music.
- On average, danced for approximately 11 – 14 minutes
- She hummed to exact rhythm of the melody
- “This is fun” (three separate occasions)
- Tapped hand on arm of chair in rhythm to music
- Sang along with the *Prune Song* and *At the Spring Waltz* (sung in Czech) – didn’t miss a word
- “That was fun!”



A Taste of Czech Heritage



Case Study: Mexican American Man with Probable Alzheimer's Disease

Gerdner, L. A. (in press). Ethnicity an inherent criteria for assessment of individualized music for persons with Alzheimer's disease. *Clinical Gerontologist*.

Case example included in this slide presentation with written permission from the publisher

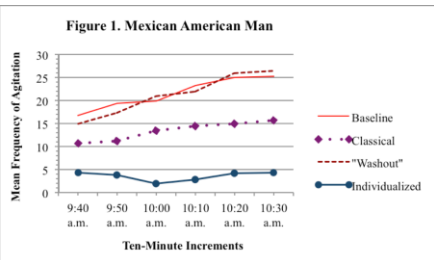


Background

Mr. Hernandez was an 83-year old widowed male, diagnosed 5 years prior and was residing in a long-term care facility. Global Deterioration Scale score = 6.



Figure 1. Mexican American Man



Baseline (Anecdotal Notes)

Mr. Hernandez was non-ambulatory. Would either be lying in bed or sitting in wheelchair.

- Repeatedly, reached and grasped at the air.
- Attempted to get out of wheelchair.
- Intermittently called out: "Come here," "I can't get up," "hey," "help, help"
- Rocked back and forth in wheelchair.
- "I want book." Given magazine, tear pages
- Propelling self in wheelchair to others' bedrooms, then would leave
- Tried to climb out of bed



Mexican American (various artists)

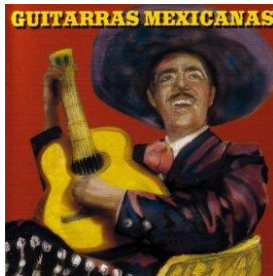
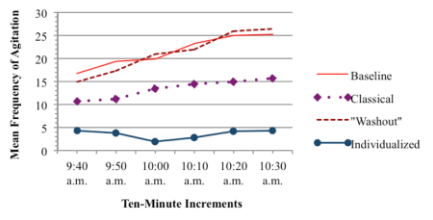


Figure 1. Mexican American Man



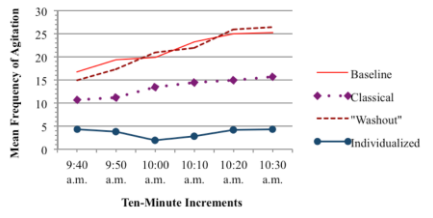
Individualized Music



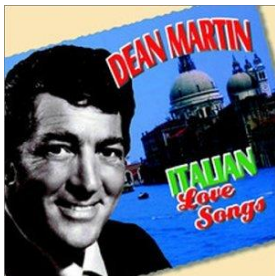
- Sitting in W/C, eyes closed, appeared to be listening to the music
- Smiling
- “Are you having fun”
- “I like music”
- Humming softly



Figure 1. Mexican American Man



Italian American



Gerdner, L. A. (updated version 2013). That's amore! Reducing agitation in an Italian-American elder with dementia through individualized music. [1.5 CEU's] Sigma Theta Tau International Honor Society of Nursing / The John A. Hartford Foundation Online Continuing Education Program at <http://education.sti.org/cm6/cm0670/home.html>



African Americans in Arkansas



Implementation and Evaluation by Staff and Family

- Gerdner, L. A. (2005). Use of individualized music by trained staff and family: Translating research into practice. *Journal of Gerontological Nursing*, 31 (6), 22-30. quiz 55-56.



CNA Interviews

- “It [music] calmed them down.”
- “They were more cooperative - instead of fighting”
- “When a patient started to cry, I did about 5 minutes of the music—turn the music on and they sang along”
- “She just loves to listen to that music.”



Family Interviews

- **Family:** "In the last month ... there seems to be less incidents in which she is agitated...The nurses tell me she's done well with it [music]. It seems to me ... it's working"
- **Family:** "She listened to the music and that relaxed her. I think she was more in touch with reality and what was around her."
- **Family:** "She seemed to calm down when they put it [music] on and she seemed to enjoy it. When she gets anxious she gets confused. When I turn the music on she pretty well gets rid of the anxiety."



Meaningful Interaction

Family: "When I turn the music on, the elderly ladies come in Mom's room and they'll sit on the bed. Mom doesn't interact a whole lot any more. However, 2 or 3 times I've walked in and there was mom's roommate and 2 or 3 other little ladies sitting on the bed...and they're actually talking cause they are listening to the music. They love Frank Sinatra...so I think that helps her socialization as well."

Family: "We discussed the music and...who was singing...she was very free."



Feasibility

CNA: "It made my day a lot easier, cause when they get agitated you just put the music on and they would sit there and listen."

CNA: "I enjoyed playing it [music], it helps me too."

CNA: "I can see the improvement with the music, making them happy and that makes me happy."

CNA: "It helped them and it was something we could do together."

CNA: "some [family] brought extra tapes...so I can play it for them."



Feasibility (continued)

CNA: Sometimes we were short staffed—that’s about it.”

CNA: “They [family] enjoyed and they also go along with the music and take over if they see I’m busy.”



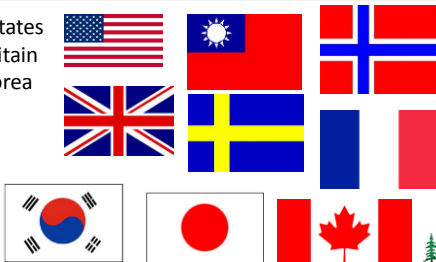
Conclusion

- Positive response served as facilitator [86.3% compliance]
- Facilitated a collaborative relationship between staff and family



Clinical Application and Research

- United States
- Great Britain
- South Korea
- Taiwan
- Sweden
- France
- Japan
- Norway



Downloadable Resources

- Evidence-based protocol available as download.
- Quick Reference Guide
- Assessment of preferred music questionnaire (patient and family version)



In Summary...

Individualized music intervention utilizes family expertise to promote humanistic, individualized care in an effort to enhance quality of life.

It uses a holistic approach that incorporates the person's ethnic identity .



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