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AOTA Evidence Briefs

Older Adults

Structured Abstracts

A product of the American Occupational Therapy Association's Evidence-Based Literature Review Project

Music from earlier eras may improve recall, social interaction, and mood in patients with Alzheimer's disease

CITATION: Lord, T. R., & Garner, J. E. (1993). Effects of music on Alzheimer patients. *Perceptual & Motor Skills, 76,* 451–455.

LEVEL OF EVIDENCE: IA2b
Randomized control trial, n=20 per condition, moderate internal validity (attempt to control for lack of randomization), moderate external validity (between high and low)

RESEARCH OBJECTIVE/QUESTION
To investigate the effects of music on Alzheimer patients' memory, social interaction and mood.

DESIGN

X	RCT		Single Case		Case Control
	Cohort		Before-After		Cross Sectional

SAMPLING PROCEDURE

X	Random		Consecutive
	Controlled		Convenience

SAMPLE

N=60	M range = 72–103	Male=18	Ethnicity= unknown	Female=42

PARTICIPANT CHARACTERISTICS
No difference between the groups at the beginning.

MEDICAL DIAGNOSIS/CLINICAL DISORDER
Alzheimer's disease

OT TREATMENT DIAGNOSIS
NR = Not Reported

OUTCOMES

AREA	OT TERMINOLOGY	ICIDH-2	MEASURE
Mood & mental state	Performance components	Impairments	Questionnaire (developed by facility and given by nursing director)

INTERVENTION

Description
Group 1: Music (Big Band) with musical instruments
Group 2: Puzzle play activities
Group 3: Regular recreation activities of drawing, painting, and watching TV

OT & ICIDH-2 Terminology
Performance areas
Activity limitation

Who Delivered
Researcher
Activities specialist
Two nurses

Setting
One of four common rooms for recreation in the nursing care facility

Frequency
6 sessions per week, for 30 minutes each

Duration
6 months

RESULTS

STATISTICAL TESTS	STATISTICAL RESULTS	DESCRIPTIVE INFORMATION	SUMMARY OF KEY RESULTS
*Analysis of variance of 'right' answers	*Between groups $p<.01$	*Means between the three groups showed significant effect on	

		recall, social interaction, and general mood	
Correlation co-efficient *t*-tests performed on pair means	Control-placebo p=ns Music-placebo p<.05 Music-control p<.05	The music group scored significantly higher	

CONCLUSIONS

- Music from earlier ages can assist Alzheimer's patients in recall, social interaction, and generally improved mood.
- Conclusions optimistic but limited due to measurement limitations, additional studies warranted.

LIMITATIONS

- Sample (only one site)
- Measurement: observers were not masked – only the analyst; nonstandardized measure used
- Contamination and co-intervention were not addressed.

- Terminology used in this document is based on two systems of classification current at the time the evidence-based literature reviews were completed: *Uniform Terminology for Occupational Therapy Practice—Third Edition* (AOTA, 1994) and *International Classification of Functioning, Disability and Health (ICIDH-2)* (World Health Organization [WHO], 1999). More recently, the *Uniform Terminology* document was replaced by *Occupational Therapy Practice Framework: Domain and Process* (AOTA, 2002), and modifications to *ICIDH-2* were finalized in the *International Classification of Functioning, Disability and Health* (WHO, 2001).

This work is based on the evidence-based literature review completed by Mary Law, PhD, OT(C), Debra Stewart, BSc, MSc, and Brenda McGibbon Lammi, BPHE, BHSc (OT), MSc.

For more information about the Evidence-Based Literature Review Project, contact the Practice Department at the American Occupational Therapy Association, 301-652-6611, x 2040.

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