

Full-Length Article

Music therapy & music based interventions in dementia: Recommendations for clinical guidelines Part II

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Abstract

The therapeutic benefits of music are well-recognized in care of the elderly and especially in its application for people with dementia (PWD). Currently, music-based programs occur at varying levels and are offered by a variety of professionals. The challenge is to ensure that music is provided in a beneficial way. There is a growing need for clinical practice guidelines that are based on research outcomes, in order to guarantee reliable music therapy and music-based intervention procedures for people with dementia (PWD). This will ensure that these interventions are properly implemented by professional music therapists, or other health allied professionals, as well as caregivers, in the cases of music-based interventions. This paper reflects on this need and highlights recommendations leading toward greater definition of best practices in the use of music with PWD.

Keywords: *music therapy; music-based interventions; dementia; clinical practice guidelines*

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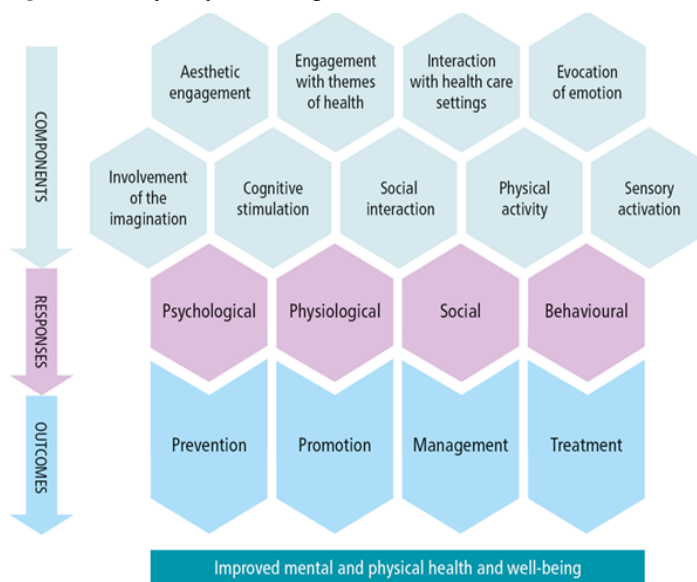
Music in the Context of Dementia

Music is ubiquitous in most everyone’s life. Music encapsulates memories, associations, emotions, connections to others throughout one’s lifetime. Music can also arouse and provide cues for active physical movement. The therapeutic benefits of music are well-established in care of the elderly and most particularly for those with neurocognitive deficits such as Alzheimer’s disease [1]. The challenge is to ensure that music is providing a benefit - whether it is offered as a general entertainment program, an active engagement program, or is specifically tailored to address a specific treatment goal [2].

By definition and by training, credentialed music therapists are the professionals who are qualified to address treatment goals with music-based applications. There are also therapeutic aspects of music, in and of itself, that can be generalized in such a way that others may find its implementation useful in benefitting seniors. Several scoping reviews were published in 2019- 2020 indicating the many ways music can benefit older adults to maintain health and

wellness as well as enhance the quality of life for those in care facilities. One of these reviews, from the World Health Organization - EU [3], outlines the components, responses, and outcomes that arts programs can have on health outcomes.

Figure 1: Benefits of Arts Programs [3]



Dementia is an overall term for a set of symptoms, associated with a decline in memory, reasoning or other thinking skills, caused by disorders affecting the brain. There

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are many different types of dementia and various conditions cause it, being Alzheimer's disease the most common, accounting for 60-80% of cases [4]. Dementia progresses in three general stages: mild, middle or moderate and late or severe. In addition, mild cognitive impairment (MCI) is an early stage of memory or other cognitive ability loss which may (or not) develop into dementia [4].

Elderly people with dementia often have difficulty taking care of themselves, remembering information, thinking clearly, communicating with others, and can even struggle with their recognition of family members. In addition, dementia can cause mood swings, aggression, depression, and change a person's style of personal expression and subsequent behavior. In the context of dementia, goal areas addressed by music-based interventions include the use of music to 1) enhance memory both to retain memory and to delay the onset of symptoms of dementia; 2) address behavioral and psychological symptoms of dementia (BPSD) including agitation, physical aggressive behavior, abnormal vocalizations, anxiety and depression, 3) retain speech and communication skills; 4) manage pain 5) maintain mobility and reduce falls; 5) enhance the quality of life, 6) provide comfort at the end of life care; and 7) provide support for professional caregivers [5].

There are various levels at which these music-based programs can occur. On the most basic level, these can be part of a general recreational program. Targeted therapeutic programs and interventions should be informed by best practices from music therapy research while specific clinical interventions are the domain of the professional music therapist.

Music therapy is the professional use of music and its elements as an intervention in medical, educational, and everyday environments with individuals, groups, families, or communities who seek to optimize their quality of life and improve their physical, social, communicative, emotional, intellectual, and spiritual health and wellbeing [6]. Research, practice, education, and clinical training in music therapy are based on professional standards according to cultural, social, and political contexts [6]. Music Therapy is a credentialed profession requiring academic training in clinical populations and clinical and evidence-based applications of music followed by supervised clinical training (the number of hours vary in different countries, ranging from 500 1,200). Music therapists evaluate the best uses of music for clients and will actively engage the client directly with music and components of music to determine the most efficacious use of music to achieve a specific clinical goal.

In some hospitals and care centers, other health professionals are using music to address clinical needs. [7]. In these hospitals, for example, nurses, and medical doctors may use personalized playlists to reduce delirium, pain, agitation, and improve ease of care. [8]. In skilled nursing facilities or in-

home care, the care partners and/or family members might use music to increase comfort, reducing resistance and agitation during activities of daily living [9]. Music might provide means of personal connection and outlet for meaningful interactions. [10]. Music-based interventions can include 1. Playing music eg, improvising, [11], drumming [12] song-writing,[12] use of melodic instruments/or singing – one-one, chorus, group singing [13], 2. Moving to music and [14], 3. Listening to music, via recordings such as mp3 players, tablets, and smart TV's or led by a music therapist, visiting musician, or performing artists. All of these benefits enhance the overall quality of life [6].

Clinical Practice Guidelines

Clinical practice guidelines are a key component of the medical field, as they provide evidence-based recommendations for health care professionals about the management of care for patients with diseases or other clinical conditions. Definitions of Clinical practice guidelines have evolved over the years. The changes have reflected the need for more rigorous methodologies that are based on scientific evidence to improve high-quality interventions.

The release of the 2011 Institute of Medicine (IOM, now the National Academy of Medicine) reports *Clinical Practice Guidelines We Can Trust* was an important step forward [15]. With this report, for the first time, an authoritative body proposed methods for guideline development that could no longer be ignored. Thus, the current and prevalent definition of best practice guidelines adopted by the Institute of Medicine (IOM) is the following:

Clinical guidelines are statements that include recommendations intended to optimize patient care that is informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options [15; 290]. Stated in a simpler way: Guidelines are a convenient way of packaging evidence and presenting recommendations to health care decision-makers [16].

What derives from these definitions is that clinical practice guidelines are usually specific and contextualized for use within specific environments and health conditions [15]. The purpose of clinical practice guidelines is to improve the effectiveness of interventions and quality of care, to minimize variations of interventions for a given problem, and to decrease costly and preventable mistakes and adverse effects.

In other words, the aim is to create intervention protocols that are based on the evidence obtained through rigorous research studies. Thus, these are evolving documents that should be updated periodically as new scientific evidence is available. Health care professionals from all areas have increasingly sought to support their work in scientific

evidence from research based on protocols designed and standardized to ensure maximum reliability of results.

Music therapy and music-based interventions in the field of dementia are broad and diverse. There is a need for integrating Clinical Guidelines, based on research outcomes in order to guarantee reliable music therapy intervention procedures for PWD.

Although there are many systematic reviews and meta-analyses in the field of music therapy, and particularly in the area of dementia care that show positive effects of music-based interventions in a variety of domains of PWD and their family caregivers [17], evidence-based clinical practice guidelines for this population are nonexistent. Some explanations for this may be that there is:

1. Insufficient details in published research about the procedures used to carry out the interventions.
2. Lack of interest in reading scientific literature and updating knowledge on the population they work with.
3. Difficulty by some professionals in interpreting scientific literature and research results.
4. Lack of interest in designing and structuring sessions following standardized procedures that have already been successfully evaluated.

In addition, it is observed and noted in some systematic reviews [18] that methodological procedures in research in the field of music therapy can be diverse, leading toward a lack of standardization in data collection, intervention procedures, and/or evaluation instruments.

Therefore, it is crucial to develop clinical guidelines for music therapy professionals as well other professionals that implement music-based interventions in the area of dementia to deliver the best treatment. These should be based on research evidence so that music therapy interventions become more standardized for specific problems.

The evidence-based clinical guidelines would be a great contribution to the clinical as well as research endeavors of music therapy professionals.

Clinical Practice Guidelines for Caregivers

Caring for a loved one with Alzheimer's disease (AD) or other type of dementia presents a host of challenges. Music therapy is a familiar treatment modality for PWD and their caregivers [19]. The quality of life of elderly people with dementia is often reliant on the actions of professional and family caregivers. Thus, caring for the elderly with dementia also includes working with their families. Psychoeducational interventions can be used to provide information about the illness as well as some practical strategies to deal with the challenging behavior problems and communication

difficulties often encountered when caring for a person with dementia [20].

Another possibility is to use music therapy interventions to support the maintenance of quality relationships between family caregivers and PWD by developing and implementing training programs at home with caregivers of people with dementia, increasing and expanding the scope of their training time. Music therapy interventions can also be addressed to caregivers and their cared ones to improve the quality of their relationship. In addition, behavior problems, reciprocity between family caregivers and PWD can be improved while increasing satisfaction with the role of family caregiver [21].

Music therapists, can also work directly within the music application to address accompanying depressive symptoms and / or anxiety of family caregivers. The scientific literature often includes research supporting the use of music with caregivers as there is a growing interest in investigating how music therapy can help family members address their roles as caregivers [22]. Some research suggests that active participation in group music can provide a path to emotional release, offering psychosocial support to caregiver, encouraging meaningful interactions between them and their loved ones with dementia. Other studies [23-24] show the use of music therapy support groups with family caregivers.

The question here is: Who should use music interventions for PWD and their caregivers? When and by whom should music be recommended and/or used? Who should train caregivers in the use of music with their loved ones with dementia? What protocols should be used? Caregivers can sing for or along with people with dementia during day-to-day care situations, including hygiene sessions, dressing time, mealtime, medication time, bedtime, etc.[25]. It is important that these interventions are mediated and supervised by a professional music therapist so that caregivers are trained to use music appropriately. Once again, this calls upon the need for protocolization and standardization of music-based interventions in the field of dementias.

Final Remarks

It is important that physicians, psychiatrists, neurologists, geriatricians, nurses and other health professionals should refer/recommend music-based interventions to caregivers of individuals with dementia. Music therapy treatment should be used with PWD at all stages[26].

Family caregivers, along with the guidance of a music therapist, should assess the clients' musical preferences, enabling therapeutic music care (TMC) interventions. There is a need for guidance regarding the disease and strategies for coping with the disease by the family caregiver and musical activities that can be performed in this process.

Evidence-based Clinical Practice Guidelines for music therapists as well as other health allied professionals who offer music therapy and/or other music-based interventions to people with dementia, would be of great benefit and would guarantee that standardized procedures which have been evaluated, are applied properly and successfully.

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