

Embedding Music and Music Therapy in Care Pathways for People with Dementia in the 21st Century—a position paper

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Abstract

Unique music therapy interventions are discussed from a clinical educational and research perspective, demonstrating a current position on music therapy for people living with dementia and their carers. The position paper, adapted from the keynote lecture given at the workshop “Music Selves and Societies” at Cambridge University in 2018, outlines current research and practice across music and music therapy fields, focussing upon embedding music in daily life and care for people living with dementia. Worldwide, around 50m people have dementia; this is estimated to increase to 75.6m in 2030 and 135.5m in 2050. This results in increased demand for long-term care and a need for heightened awareness and capacity for home care in local settings. Distinctions between interventions delivered by music therapists (direct music therapy) and interventions delivered by musicians or carers arising from training from music therapists (indirect music therapy) are discussed. Political and strategic developments for music and dementia are summarized, highlighting the need for increased training in the field and access to music at all stages of dementia. Case study examples are presented to highlight emerging practices and research; for example, couples attending music therapy groups in a rural community setting (Together in Sound) improved relationships and attitudes for people living with dementia. An international trial investigating reading and music interventions for people living with dementia and their homebased family carers (Homeside) is introduced, alongside practice and research in care homes where music therapy had been found to reduce agitation and improve carers’ well-being. Research shows music therapy interventions address personalized needs linked to daily lived experiences. However, indirect music therapy is needed to reach all who can benefit from music and are living with dementia. It is concluded that high quality, accessible music interventions should be embedded in care, and further research is needed to ascertain best practice.

Keywords

Carers, dementia care, dementia policy, improvisation, music therapy

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Introduction

The unique and specific interventions of music therapy are discussed from a clinical education and research perspective, drawing upon a variety of sources to demonstrate the current position on music and dementia in the UK and elsewhere. Worldwide, an estimated 50m people have dementia, and this is projected to increase to 75.6m in 2030 and 135.5m in 2050. Nearly 60% are living in low- and middle-income countries. Every year, there are around 10m new cases (World Health Organization, 2018). This results in an increased demand for

long-term care, in which effective management of symptoms is a major issue, and for communities to increase awareness and capacity to care for people at home in local settings.

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The current expansion of music and music therapy practice for people living with dementia raises questions such as: How do we distinguish between interventions delivered by a music therapist and other musical interventions delivered by musicians or carers? Are these distinctions necessary? How can quality, both musical and therapeutic, be assured for people seeking musical interventions?

Music therapy specific direct interventions for people with dementia typically include:

- Community music therapy groups with carers and their families.
- Group music therapy in care homes and hospitals for people at different stages of dementia.
- Individual music therapy.

Case examples in this article were chosen to illustrate the specific aspects of music therapy delivered by a trained music therapist, as well as discussing the scope for music in general for this population. The specific components of direct music therapy practice, as well as highlighting the need for indirect approaches where music therapists share skills and train carers and others in effective ways of embedding music in daily care, are outlined.

Direct music therapy approaches traditionally include improvisation, singing, songwriting, and listening to live and recorded music (receptive techniques), and these are adapted to community, group, or individual needs. Wood (2014) and Hsu et al. (2015) outline the specific effects and role direct music therapy has for people living in care homes, as well as indicating that training carers to use music in their daily communication with people living with dementia improves quality of life for both the person and their carers. Odell-Miller et al. (2017) discuss the “indirect” role of music therapists, working with communities, families, carers, and multidisciplinary teams. In the dementia care environment, music therapists also supervise others using music in everyday care, which improves communication with people living with dementia and carers’ own well-being (Hsu et al., 2015).

Background

Music-therapeutic training is increasing in prevalence, for professional musicians working in orchestras and ensembles, and for carers. Music therapists train student music therapists at undergraduate, masters, and doctoral level. In the UK and most European countries the professional registration level is at masters level, and whilst masters and doctoral level training is well developed across the world, in some countries, such as the United States, Argentina, and Australia, music therapists are trained at undergraduate level also.

An emerging need for a different kind of music skills sharing and training has been recognized and a new large international trial, Homeside (Baker et al., 2019), funded

through grants in different countries resulting from an award of EUR 2.5m from the Joint Programme for Neurodegenerative Diseases (JPND), is currently taking place.¹ In this randomized controlled trial, family carers are randomized either to receive training at home in music and reading interventions by qualified therapists, or to receive support for standard care only. Couples then draw upon the training for music or reading together, for 30 min daily. Reduction of neuropsychiatric symptoms is measured, but also quality of life and competence for carers and people living with dementia. This builds upon earlier work by others; for example, Hsu et al. (2015) found that carers’ attitude was more positive on units where music therapy was delivered, as opposed to those not receiving it. Relating to neuropsychiatric symptoms, Ridder et al. (2013) found a statistically significant increase in agitation disruptiveness during standard care alone, and a decrease in this for those receiving standard care and twice-weekly individual music therapy during a 6-week period. Similarly, in a feasibility study, Hsu et al. (2015) found that dementia symptoms in the standard care group significantly increased over 5 months, whilst dementia symptoms in the music therapy group significantly decreased, during individual music therapy once-weekly. This trend continued for both groups after the intervention ended.

Baker et al. (2012) showed music sharing experiences were beneficial for spousal couples, for satisfaction with caregiving, as well as for carers’ well-being. Hanser et al. (2011) trained carers to use music to facilitate stress reduction, which led to increased relaxation, comfort, and happiness. Further studies also found music therapy to be helpful for daily challenges in dementia, including aphasia (Baird & Thompson, 2018) and cognitive, emotional, and social aspects (Särkämö et al., 2013). Park and Pringle-Specht (2009) advised carers in the preselection of individualized music for their spouses, showing that listening to music reduced agitation for people living at home.

We know from the literature that music therapy makes a unique contribution in many social, psychological, and physiological areas for people living with dementia. Music therapy helps procedural memory (Baird & Samson, 2009), emotion regulation, social and relational communication with loved ones and carers. It also contributes to those with psychosocial needs (Hsu et al., 2015; Ridder et al., 2013) and music can “catch” attention and memory, especially through song recollection (Cuddy & Duffin, 2005; Drapeau et al., 2009; Hsieh et al., 2011, 2012; Jacobsen et al., 2015; Johnson et al., 2011; Samson et al., 2009; Vanstone et al., 2012). These processes can lead to flow and arousal and also to reduction of behavioral and psychological symptoms of dementia (BPSD). Further international multi-site research studies are needed to expand the evidence, such as the aforementioned HOMESIDE (Baker et al., 2019), and the MIDDEL, a group music therapy study in progress (Gold et al., 2019) such as agitation and anxiety, reported to affect 80% of people with dementia living in care homes

(Hsu et al., 2015). Medication is sometimes used controversially in care homes to calm BPSD. Music therapy research in some studies (Hsu et al., 2015; Ridder et al., 2013) indicates a decrease in the use of medication for recipients receiving music therapy more than for those not receiving music therapy. This indicates that music therapy interventions can have efficacy for relaxation and reduction of agitation of dementia sufferers.

The evidence presented here arises from direct music therapy interventions but also through music psychology, music perception, and other experimental studies outside of the direct music therapy field. I argue that it is important that these fields inform each other rather than work in isolation or in competition. A systematic review by Livingston et al. (2014) looked at non-pharmacological interventions for agitation for people living with dementia, and concluded that music therapy effects happen in the moment and immediately after sessions rather than having long-term effects. It is important to recognize that sometimes those meaningful moments *are* the most important for people with severe memory loss. A more recent review of non-pharmacological interventions for BPSD by Abraha et al. (2017) concluded that music therapy was one of just two forms of intervention for which there is convincing evidence of effectiveness in reducing BPSD.

Music Therapy Practice in the Wider Community

Music therapy practice can be distinguished from other kinds of practice using the following definition of music therapy individual or small group interventions: “individualized personal care through music, adapted in the moment for the person’s needs and their family/carers” (Odell-Miller, 2018). The specific professional training enables a focus upon the process of engagement with, and the relationship to, clients, musically adjusting to their social, psychological, and physical needs in the moment.

Until recently, music interventions by people who do not have a formal music therapy qualification might typically be more focused upon:

- Public performances geared for people living with dementia.
- Playlists individually compiled.
- Music appreciation.
- Entertainment including interactive engagement such as joining in singing, with percussion, in larger groups; karaoke provided by professional and sometimes more amateur musicians.
- Singing for the Brain choirs, which may be led by music therapists and non-music therapists (Bannan & Montgomery-Smith, 2008; Dowson et al., 2019; Osman et al., 2016)

However there is a growing need for the practice of sharing skills, and for music therapists to work in parallel

as well as in consultancy, advisory, and supervisory roles, with musicians not trained as therapists, and with carers. This was recognized in the recent Commission on Dementia and Music, during which participants worked with all stakeholders, funded by the Utley Foundation and which resulted in the International Longevity Centre publication (Bowell & Bamford, 2018) launched in the House of Lords, UK. Following this scoping paper, which includes current evidence for music and music therapy practice and theory and training relevant for people living with dementia, the following recommendations were made: access to music for people living with dementia, their carers and families is essential; more research and further training and resources to involve the expertise of music therapists working across the field is needed; music ambassadors should be geographically placed. Led by Grace Meadows, the Music for Dementia campaign is making a difference and leading the implementation of the recommendations from the Commission. The opening case study here provides an example of current practice in the community, and is referred to in the Bowell and Bamford (2018) report as evidence of good practice.

Example 1: Together in Sound is a partnership between Saffron Hall, a rural concert hall built within a comprehensive school, and The Cambridge Institute for Music Therapy at Anglia Ruskin University. The new model provides a way forward for people in the early stages of dementia. Three groups of eight couples living at home, where one person has dementia and the other is a significant family member or carer, participate in a weekly music therapy group. Claire Molyneux, music therapist, together with music therapy trainees, runs the three weekly groups during one day a week, so up to 24 couples can participate at any one time. The groups use music therapy techniques including improvised music, composed songs, and song-writing and also incorporate visiting professional performers. Professional musicians, local community members, and extended family and friends also visit in a one-off sharing event at the end of the 10 weeks. The team devises training sessions for visiting musicians. The expressive powers of music have been evident throughout the sessions, using improvisation, free and structured, often leading to flow between couples and participants. In one example from interviews with couples after the groups, theme-based improvisation, including themes chosen by participants, brought communication between a father and daughter to their life outside the weekly group and the transferrable benefits at home. Early evaluations show couples highly value the groups, their mood is helped through the sessions, and their daily life and relationships improve. In addition, attitudes about the experience of living with dementia are changed or adjusted through song-writing. For example, emotional expression between couples is facilitated and vivid descriptions of the music remembered from sessions, which seem significant

(Molyneux et al., 2019). Further research is looking at quality of life and impact, including adapting the work to move online to respond to the COVID-19 lockdown situation, featured on national BBC One News in April 2020 (BBC News, 2020). Early outcomes are reported as uplifting, fun, and “a lifeline”; the music making connects couples isolated at home, through innovative Zoom music therapy sessions (Molyneux et al., 2020).

Bob, a carer from *Together in Sound*, participated in planning and reviewing of sessions by joining the music therapy team at the British Association for Music Therapy (BAMT) conference. Such participation from service users is essential for the success of training, research, and clinical work. Here is a quote from his report:

“We sing, we talk about our music and the feelings it provides us with, we smile, we laugh a lot, we have fun. Gone for this hour are the feelings of uncertainty, turmoil, fear, suspicion and confusion—we are at rest. As we say goodbye to each other and especially Claire, Lizzie (music therapists), and the Saffron Hall volunteers, we head home and for a short while we will be at peace with the world and ourselves.”

Other participant feedback from couples includes comments about singing whilst undertaking daily life, such as coming downstairs each morning, introduction of song to improve flow in daily activities such as dressing, and adding an extra dimension to emotional qualities in couples’ relationships at home (Saffron Hall, 2020).

Further research will analyze the components and ingredients needed for this developing approach, using arts-based measures including video analysis and measures of quality of life and change in daily living related to the music therapy group attendances.

Clinical and Theoretical Considerations

The music therapist’s unique role in dementia care provides interventions where others might not easily meet specific needs for people living with dementia and their carers as, for instance, when a person experiences behavioral and psychological disturbance, in advanced stages of dementia, and when cognitive function deteriorates and confusion is prevalent. Non-verbal communication through musical interaction is crucial at this stage; using improvised music, the music therapist supports, validates, recognizes, and musically develops the person’s musical expression with them.

The unique potential of music therapy for people living with dementia includes many features, such as:

- Non-verbal possibilities.
- Use of all the senses.
- Artistic spontaneity and musical narrative.
- Physical, intellectual, and emotional capacity of music.

Music therapy does not always require conscious thought for the participant (Odell-Miller et al., 2017).

Theories developed by Colwyn Trevarthen draw upon Daniel Stern’s concept of synchrony, which states, “there would be no way for me to sympathize with another person’s intentions and feelings if we could not share the rhythms of this self-synchrony to establish intersynchrony” (Trevarthen, 2009, p. 77). When the person is in a state of self-synchrony, opportunities to establish intersynchrony are possible. Cueing and social communication is often impaired for a person in late-stage dementia and music therapy helps surmount these deficits (Odell-Miller, 2002). Through using live interactive musical improvisation, the music therapist can frame a safe environment drawing upon neurologically informed approaches such as acoustic cueing. Such conditions are needed for the person with dementia to engage in social communication. Single case studies by music therapists offering a narrative perspective with musical examples also provide recent powerful evidence, in three texts spanning music in care (Richards, 2020), music and dementia: from cognition to therapy (Baird et al., 2020), and psychodynamic approaches to music therapy (Evans et al., 2020). Music therapists may carry out microanalysis to examine meaningful moments and moments of amelioration (reduction) of difficult behaviors (Wosch & Wigram, 2007). Pizzolo (2020) recently found in a mixed methods study for people living with dementia in the community, using a prevalence analysis, that in group music therapy the most-used aspects of the music therapists’ interventions to reduce difficult behaviors were *musical grounding*, creating a satisfactory group atmosphere, *flexibility of the music therapist*, the *group musical resources*, and *giving value to client’s music*, in an atmosphere where the patient feels accepted and welcomed. Wigram (2004) described musical grounding as when the therapist provides a steady harmonic and rhythmic accompaniment above which participants can improve freely and feel musically and satisfyingly supported.

Music therapy clinical material in research studies shows how musical interventions can be effective for people living with dementia, regardless of whether they have had intensive musical training previously (Hsu et al., 2015; Odell-Miller, 2002; Ridder et al., 2013). Another clinical outcome through music therapy can be increasing happiness, through reducing depression. Familiar songs are shown through musical interaction in Hsu et al.’s (2015) study to stimulate memory, laughter, movement, and a sense of self. Whilst increasing happiness is a crucial aim in therapy, another distinguishing feature of direct music therapy is the capacity for music therapy delivered by a trained music therapist to also work with a whole range of emotions and feelings, which may also include pain and distress (Darnley-Smith, 2020). Verbal psychotherapy is not usually possible for people living with dementia to access when in the final stages of dementia. Music therapy is therefore needed for this type of expressive process, and

it is often a relief for a person who cannot express happiness, frustration, or sadness through words to do so musically.

Example 2: Darnley-Smith (2020), through a narrative case study, describes vividly her experience as music therapist for Mrs. G, who “could walk slowly but had virtually no spoken language” (p. 148). She describes how a range of emotionally expressive moments unfold in the session, and then draws upon Winnicott’s (1986) concept of the mirror to help further the therapy and understanding of the interactions, reflecting mood rather than attempting to change it, even when the mood is sad or showing pain. She describes not only what happened but also includes her clinical notes from the session. Drawing upon Winnicott’s psychoanalytic theories on mirroring (Winnicott 1986), she describes how early ways of relating remain for an older person living with dementia, and how a kind of “procedural memory” is present, through another type of pre-verbal recognition and meaning that is musical.

Policy Making

The discussion so far presents a complex picture, given the many different types of interventions, different uses of music, and on-going development of music therapy. Ensuring ethical best practice should include adherence to authenticity, for example encouraging personal musical engagement that feels genuine to the participants, inclusion of culturally specific music, a high quality of musicianship, and good quality of the interventions. For music therapists in many countries, monitoring is through registration bodies, for individual therapists and for approval of training. The Health and Care Professions Council (HCPC), for example, legally registers music therapists as Allied Health Professionals in the UK. Whilst welcomed by most, this type of regulation might not always be culturally desirable, for instance when music is so embedded in a society as to constitute a naturalistic way of being for ordinary events and communication.

In the UK and some other countries, music and other arts activities, including music therapy, are now indicated as important in national guidelines for people with dementia (National Institute for Health and Care Excellence [NICE], 2018). Relatives and carers therefore need to know they can have access to therapies and activities that do not require complex cognitive skills but focus upon positive non-verbal interaction, which is usually possible even in the last stages of dementia. Through the Commission on Dementia and Music (Bowell & Bamford, 2018), and subsequently as a result of a mapping exercise that has been drawn nationally, relatives and carers in the UK can now find the different music and music therapy services available, which ones might be suitable at which stages and for which situations in the dementia pathway (Music for Dementia 2020, 2020).

Education

Education and training have been highlighted (Bowell & Bamford, 2018) as essential for the therapeutic potential of music for those who work with people with dementia to be realized, and a program of awareness-raising was recommended. However, missing from some of these programs currently is an emphasis on how to communicate through sensory, art-based media, such as music; this could be integral to such training. Current research (Hsu et al., 2015; Wood, 2014) shows early indications that training carers to use music in their daily communication with people with dementia improves quality of life for both the individual and their carers.

On the question of education, to summarize, music therapists are needed for the following reasons:

- To educate others such as carers, other health practitioners, and family members on the specific details of music therapy in practice.
- To teach music therapy clinical techniques and skills to trainee music therapists.
- Qualified music therapy educators are required for formal professional music therapy training in some countries owing to legislation. For example, in the UK the Health and Care Professions Council (HCPC) legally regulates music therapy (HCPC, 2017, 2020).

There are not enough music therapists to work with all people living with dementia; however, specialist music therapy skills are essential to personalize musical interventions and to musically respond to participants’ needs “in the moment.” Adapting to and capturing emotional expression and changing pace momentarily according to need is core to music therapists’ specialist training. However, in some situations, carers, relatives, professional/community musicians, and healthcare workers who are not trained music therapists will also contribute to embedding music in care.

Music and Cognitive Neuroscience Research

Scientific theories and emerging music neuroscience evidence also support the unique need for music therapy. When listening to music, several areas of the brain, including in the left and right hemispheres, are involved in processing the various features of music. For example, the auditory cortex within the temporal lobes is engaged in general auditory perception (Plakke & Romanski, 2014), the basal ganglia and motor system are involved in processing rhythm, and the amygdala is involved in processing emotional aspects of music. As reported by music neuroscience researchers, a common observation for dementia clients is that certain songs seem to reactivate memory and cognitive function, especially songs with strong emotional connections (Cuddy & Duffin, 2005). Research on music

and emotion shows involvement of the nucleus accumbens and amygdala (Fosha et al., 2009), which triggers dopamine release, which in turn may enhance attention and memory processes (Levitin, 2006; Salimpoor et al., 2011). MRI evidence from semantic dementia indicates that atrophy in the left anterior and inferior temporal lobe is correlated with decreased ability to recognize emotion in music (Hsieh et al., 2012). Most recently, EEG measures during music therapy for people living with dementia (Maidhof et al., 2019) and older adults (Fachner et al., 2019) have shown that synchronicity is present whilst listening to music and improvising. In the study with older people without dementia, Fachner et al. (2019) demonstrated the feasibility and usefulness of EEG hyper-scanning for music therapy research. Importantly, results suggested that sharing emotional states and an experienced feeling of mutuality is reflected in the synchrony of a neural marker of emotional processing. So, normally perceived changes during significant moments of personal interest, previously defined by some scientific communities as ‘anecdotal evidence’ can be linked to a neural signature that can be identified and analyzed with adequate adaptive brain research methods.

Specifically, in a recent study, Maidhof et al. (forthcoming; in preparation) investigate the neural indices of affective processes during dyadic improvisation based on wireless dual-EEG and synchronous audio and video recordings from a music therapist and a person with dementia engaged in a real-world music therapy session, video footage of which is shown in *Our Dementia Choir* (BBC One, 2019).

The following example from an early narrative perspective case study supports the idea that musical function can remain in dementia, despite atrophy in temporal regions of the brain.

Example 3: In the third year of individual music therapy, held weekly in his home, M, a musician with early onset dementia, needed help with daily living skills (Odell-Miller, 2002). His speech was often confused, agitated, unintelligible, and he was in cognitive decline, but he could still sense pitch and musical form. His musical language within improvisations appeared intact during moment-to-moment phrases; he accompanied the therapist’s singing with musically coherent recitative-style chords. The therapist was also able to work with M’s wife to help her communicate with him using music and to provide emotional support. Brain images from the neuropsychiatrists’ files showed temporal lobe atrophy consistent with the dementia diagnosis of simultanagnosia, but interactive new musical improvisations were still possible.

Learning from Clinical Research in Care Homes

Clinical interventions in research studies are now applied more systematically, learning from what we know already.

In Hsu et al.’s (2015) randomized controlled feasibility study, we introduced a consistent individual music therapy framework for people living with dementia, similar to music therapy interventions described in earlier research (Odell-Miller, 1995). The framework used in Hsu et al. (2015) involved a music therapy program designed to involve care staff, with the study focussing on outcomes including neuropsychiatric symptoms and well-being for the person living with dementia as well as interactions between carers and residents. The 5-month program included weekly 30-min individual music therapy sessions for people living with dementia and communication with care staff via video presentations using material from music therapy sessions once per week. Results from the study indicated that both symptoms and well-being improved for people living with dementia who were randomized to music therapy or standard care interventions. The intervention was considered feasible, with staff providing positive feedback for the program with regard to their approaches to caregiving.

In this study similarly to the Danish study by Ridder et al. (2013), we recognized that goal-directed use of music in music therapy can incorporate live improvised music, using song and structured directed instrumental work, to meet identified aims for managing neuropsychiatric symptoms via:

- Catching attention and creating a safe setting.
- Regulating arousal level to a point of self-regulation.
- Social communication for psychosocial needs.

The music therapist’s specific role is to understand the general problems of the older person together with the multidisciplinary team or care staff. The music therapist can show how music therapy can help these problems within music therapy sessions and how care staff can incorporate music and/or different ways of interacting, learned from the music therapists, in between sessions. In this study, we found that working with one lady in particular showed that her functioning abilities could be identified and promoted during music therapy sessions (Hsu et al., 2015). Auditory and visual perception remained very sensitive and therefore she was able to adjust her music playing or bodily expressions accordingly to the volume, intensity, and dynamics of the therapist’s music input and the therapist’s facial, vocal, and bodily expressions. It was noticed over 5 months of music therapy that she seemed to be more able to use words to respond to the therapist latterly. She also used more complete and consistent phrases in answer to questions. This lady displayed a visible reduction in anxiety and agitation during sessions, and an increase in positive affect. Music therapy was also seen to lift mood and improve well-being through the music therapist’s playing of upbeat music in sessions when appropriate.

The following individual music therapy case study provides an example of how the music therapist’s input links to the general needs of resident N (Hsu et al., 2015, p. 10).

Example 4:

- *Familiar songs with familiar musical structures engage N and motivate her to participate in musical activities, often playfully with a sense of fun. She displays a visible reduction in anxiety and agitation during sessions, and an increase in positive affect.*
- *Prompting and encouraging N to play the piano helps her to use and reconnect with her remaining abilities; this also encourages memory retrieval of childhood memories.*
- *Matching N's rhythm and pace and then slowing down encourages N to play and interact at a slower, calmer pace. This helps to reduce her anxiety levels.*

For those in the music therapy group in our study, BPSD significantly reduced by half, mostly in the first 3 months, and continued to fall beyond the end of the music therapy intervention. In contrast, BPSD for those who did not have the therapy and were randomized to standard care increased (Hsu et al., 2015).

Indirect Music Therapy Training

As mentioned above, communication between care staff and music therapists was a primary focus of the music therapy program reported in Hsu et al. (2015). As part of the study, care staff viewed 3-min video clips from music therapy sessions of meaningful moments identified by the music therapist post-session. Staff were trained and encouraged by the music therapist to use effective musical elements, including singing, rhythmic interaction, and listening, outside of sessions. The music therapists also drew up suggestions for carers' interventions between sessions, in their daily routine, for example:

"B often appeared to be breathless after walking for a while. This seemed to consequently result in her agitated behaviour as she did not seem able to cognitively appraise what might have upset her mood. The staff usually walked with B to the quiet lounge for music therapy and on many occasions she arrived in an agitated and breathless state. The therapist advised the staff to observe B when she walked around the unit and to be vigilant to any signs of agitation. From then on B attended therapy sessions in a wheelchair. This seemed to prevent B's agitation from the outset of the sessions and allowed the therapy to enhance B's brighter spirit." (Hsu et al., 2015, p. 11)

This example shows how music skills and sharing of music therapy knowledge and training can help to embed music within the daily care for people living with dementia, supporting new directions in management of dementia care.

Conclusions

Further research combining qualitative and quantitative methods is needed and data should be collected at all levels

of the work across larger populations. However, despite the need for further research, some organizations are convinced by the impact of music therapy. MHA Care Homes, a large service provider of 83 care homes, has changed its policy and care provision to offer music therapy to 22,000 of its clients across 65 care homes, building up its music therapy team from one therapist in 2006 to 25 in 2020. The MHA music therapy service prioritizes people living with dementia and has been embedded in care, transforming quality of life including reduction of agitation and regulation of mood for residents. The examples given in this paper also demonstrate the public need and impact realized within communities for people living with dementia, through media attention and funding of new large research studies.

At all stages for people living with dementia and their carers and companions, musical and music therapy interventions are needed and should be defined as central pathways of care. It is interesting that during the period of COVID-19, some care home organizations, such as MHA, have included music therapy as a basic form of care alongside care workers, and music therapists have continued working safely in many care homes during lockdown. However in other instances, music therapy may have been seen as non-essential and ceased during lockdown. Overall, the specific unique interventions provided by music therapists are shown to be helpful at all stages for the person living with dementia. The distinction between when indirect and direct interventions are needed can begin to be outlined. It is proposed that direct interventions between the person living with dementia and the music therapist should be prioritized in the later stages, when other more verbal interventions are not appropriate or possible, and the specific skill of the music therapist to work via music is needed. In earlier stages, when people living with dementia can still access more mainstream musical activities, music therapists may work alongside others who are delivering community choirs and Singing for the Brain interventions, providing advice and sometimes participating.

Clearly there is now evidence of trends showing where musical communication and expression helps, especially when language use declines. There are strong indications that music therapy is beneficial in later stages of dementia to ameliorate agitation, anxiety, and apathy, and to enhance memory. More research focussing upon links between neurological processes and musical and social/relational/environmental factors is needed, but there is now general agreement amongst practitioners that music has a unique and powerful role for dementia care.

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