

HOW DOES A MUSIC THERAPY STUDENT WORK TO FACILITATE
REMINISCENCE AND MEMORY IN DEMENTIA PATIENTS

BY

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An exegesis submitted to the Victoria University of
Wellington in fulfilment of the requirements for the
Degree of Master of Music Therapy

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“Whoever saves one moment of happiness, could save one life entire”

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Table of Contents

Table of Contents.....	iv
Abstract.....	v
Acknowledgement	vi
Introduction	1
Background of Facility.....	1
Literature Review.....	2
Methodology.....	7
Data Analysis.....	7
Data Gathering.....	7
Ethical Consideration	8
Findings	9
Familiarity	9
Cultural Knowledge.....	17
Access to Background Information	17
Structure and Repetition.....	18
Containment	22
Connection.....	24
Cues – to access Memories.....	31
Themes – to access memories	34
Discussion.....	36
Conclusion.....	40
References	41
Appendix I	44
Appendix II	46

Abstract

This study was prompted in response to increased interest in, and demand for, music therapy provision in improving quality of care for dementia patients. It is an exploration of the strategies to facilitate memory and reminiscence in persons with dementia, and considers the need for those preparing for end of life to recall identities, connect with family and others, and express feelings. This research is a qualitative study involving secondary analysis of clinical data from my clinical practice and identifies the strategies, techniques and procedures that I applied in my clinical work to stimulate preserved memory 'islands'. The findings show that familiarity is central in enabling a remembering process, and music can have unique ways of accessing memory in people with limited cognitive and social abilities. Eight core categories of music therapy strategies were found to be helpful in enabling memory and reminiscence. This study includes examples of both individual and group music therapy. The objective of this study was to examine my music therapy practice, and potentially provide some beneficial ideas and insights to other music therapists working on memory and reminiscence with dementia patients.

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Introduction

The purpose of this exegesis is to characterize and discuss the music therapy techniques I used to facilitate memory and reminiscence with patients with mild to severe dementia. The study focuses on how I, as a music therapy student, used music elements to help people with memory loss reconnect and be reminded of events from their past. This study took place over one year of my music therapy student placement. The setting for this placement was a combined rest home, hospital and dementia unit for elderly people with dementia or those who are highly dependent on support to undertake daily activities. In this facility, the religious and spiritual wellbeing aspects are core to the care to all residents.

The global population is aging fast, and there is a pressing need to find low cost, personalized, and effective non-pharmacological interventions to assist the elderly and their families in coping with the complications that arise as dementia progresses.

This is a practice-led study, based on my clinical experiences. This study will begin by reviewing relevant literatures in both English and Chinese that relates to dementia and music therapy's role in dementia care. The process of data gathering and research methodology will also be presented. Theoretical ideas of music's exceptional ability to associate with memories, and why reminiscence and memory recall is important in the context of dementia, will be discussed. The 'findings' section will give details on the music and non-music strategies that this study characterize as being important in enabling memory and reminiscence. The findings are presented in eight core categories supported by excerpts from data and relevant literature.

Background of Facility

My placement was in a combined rest home, hospital and dementia care unit. The philosophy of the facility is to provide total-quality-care to all residents following the religious mission of the Board. The mission is to maintain residents' quality of life by offering resident-centred approach through an emphasis on the spiritual and cultural wellbeing of each individual. During my placement at the facility, I kept in mind that my practice was needed to be consistent with the care philosophy of the facility. Most long-term care residents and dementia unit residents are Catholic, but the facility aims to respect each

individual's spiritual beliefs, values and lifestyles by offering non-Catholic spiritual services (i.e. Anglican Mass). In addition to this, during my time working at the facility, I worked with a few Asian (i.e. non-English-speaking) residents to assist in their transition to this long-term care facility.

The religious mission of this facility is to entrust in Christ's love through excellent care to relieve sufferings, and to restore and promote quality of life. The mission includes the provision of total-quality-care, which means to offer compassionate, cultural, spiritual and quality care to all people. All residents who are entrusted to the home's care are expected to be treated and supported simultaneously by trained professionals while within a spiritual environment. The philosophy of the home is to maintain each resident's and family's goals for caring, and believes that quality care is a never-ending process that happens through people.

Literature Review

'Dementia' is a household name in today's world. Time is pressing on for the exploration of non-pharmacological therapies for dementia, and aging population has become a global phenomenon. According to the 2015 World Alzheimer's Report, there are currently 60,000 New Zealanders with dementia and the number is expected to triple by 2050 (World Alzheimer's Report 2015). A similar pattern has been observed in other developed countries, especially in Western countries. The number of people with dementia worldwide for 2015 estimates one new case of dementia diagnosis every 3.2 seconds, and the number will nearly double every 20 years (Hall, 2015). Given the increasing rates of dementia, studies commonly point towards increasing importance and demand on both social infrastructure and health budget to find cost effective, easily accessed, and creative non-pharmacological therapies (Matthews 2015; Aldridge, 1992; Nair, 2013; Kydd, 2001).

The 2015 New Zealand National Dementia Summit recently held in Wellington, focused on the 'economics of caring' and 'cultural concerns for caring'. The economics of caring includes spending money at the right time and in the right place, which the current New Zealand health system is criticized for failing to do today. The fast growing number of people diagnosed with dementia hastens the impact on the domestic workforce (Dale,

2015). As Dale (2015) described, eventually there will be one person in every one couple needing to attend to the other person diagnosed with dementia. The summit points out a desperate need for earlier diagnosis, aid in transition, keeping patients at home for longer, educating society to be dementia-friendly, and educating the family at an earlier stage of diagnosis for them to walk this journey together for as long as possible. These arguments were pointed out by music therapist Ruth Bright as early as 1972, regarding how music can benefit dementia patients, not only for the patients, but also for the people involved in providing the care. I believe that music therapy can provide some solutions to these urgent issues in dementia care today.

My literature search identified studies that evaluate the effects of music therapy on dementia patients' memory and reminiscence. My key search terms included: (1) music therapy; (2) dementia; (3) memory; (4) reminiscence. However, due to the relatively small number of good quality studies on music therapy's effect on memory with dementia patients, I also included 'music' as a secondary search term to find music intervention studies conducted by other professionals with dementia patients. The databases I used to conduct the literature search included MEDLINE, Cochrane Collaboration, JSTOR, PSYinfo, SAGE, Geriatric Psychiatry and books or manuals on music therapy and aged-care. The literature consisted of case studies, intervention reviews, randomized controlled trials, and controlled trials. I also evaluated secondary sources of music therapy on behaviour, cognitive, emotional and motor skills.

Over the last two decades, growing numbers of studies have assessed music therapy (MT) as an important form of non-pharmacological strategy in dementia. Studies have shown that music therapy is considered as an effective measure to lower agitation (Nair, 2009; McDermott, 2012; Chu, 2014), manage behavioural psychotic symptoms of dementia, decrease anxiety (Bright, 1972; Nair, 2009; Chu, 2014), elicit communication (Bright, 1972; Kydd, 2009; Pavlicivic, 2015), and produce many more emotional and ambulatory effects (Garcia, 2012).

Why is music therapy intervention important in aged-care and dementia settings? Music therapy is the most common amongst art therapies found in aged-care facilities (Matthews, 2015). It differs from other non-pharmacological art therapies because of music's unique ability to reach people across all stages of dementia (Tomaino, 1998). Music has nonverbal,

creative, structural and emotional qualities (Kydd, 2001) that can reach patients through multisensory approaches for maximum effects (Garcia, 2012).

Dementia is a progressive neurodegenerative disorder with clearly defined clinical characteristics. Cognitive deterioration in dementia includes practically all cognitive abilities, but the most evidently affected one, from onset, is memory. Memory loss is progressive, starting with some mild word loss which gradually becomes more severe, until patients cannot even remember their own personal history (Garcia, 2012), or as Oliver Sacks' describes it, they 'lose their story'. Losing one's story means losing the capacity for closeness with people who once were familiar to the person, such as family and friends, thereby losing relationships. Therefore, the most common goals for studies old and new target on using music to facilitate connections, interactions, socialization and sometimes reminiscence in dementia patients, in the hope of delaying the deterioration of cognitive functions, or in other words, delay the time before he or she drifts away completely from his or her loved ones and their worlds.

As early as the 1970s, several studies explored the use of music to aid aged-care programmes and especially dementia care. The studies were written as manuals for carers and families who were caring for patients with dementia, and music was used as a tool for connecting with their loved ones who had no idea who they were. Bright (1972) outlined the importance of music therapy, and since then it has become one of the most common art therapies applied in managing dementia symptoms, in addition to the many studies and work done by other health professionals who commonly use music for general entertainment and stimulation purposes.

There is currently no pharmacological cure for dementia, although it is possible to slow down the dementing process and to aim to minimise some of the complicated side effects for those at the end of their life (Sato, 2013). Therefore, recent studies point towards using non-pharmacological intervention as first-line treatments (Sato, 2013) and music therapy is recently considered as an important non-pharmacological invention in all stages of dementia (Ueda, 2013). Likewise, Kydd (2009) and Tomaino (1997) have shown that music therapy when used to assist in transition to a long-term care facility allows the patients to adjust to the facility quicker than those without music therapy intervention (Kydd, 2009).

Music therapy has also been found to be effective in maintaining memory organization and attention processing (Guy, 2013), and to slow down the deterioration of cognitive functions.

Why is working on memory and reminiscence particularly important in the dementia population? According to Forrest (2001), patients who are facing the end of their life may express a need to return, explore, re-establish and confirm their identity as a member of the family, social circle and wider cultural and ethnic heritage. Music can facilitate the process of reminiscence, reality orientation, life review and validation (Kydd, 2001). Music can be a way to enable conflict resolution and an important part of preparation for death. Studies from a range of fields including neurology, nursing, palliative care and music therapy continue to investigate the mechanism behind music's association with memory. Music has an exceptional ability to elicit memories, movements, motivations and positive emotions from older adults with dementia (Ahn, Ashida, 2012). Music can provide a sense of familiarity and predictability when carefully structured and planned, especially used at a consistent space and time (Bright, 1988). Music's association with memory provides access to patients' earlier memories, which will be discussed later on in the chapter.

Aldridge (1996) supported the idea that receptivity to music may remain until the late phases of dementia, when cognitive functions decline during disease progression. Music encourages reminiscence and discussions of the past (Vinc, 2010), and unlike many treatments of dementia, music therapy does not depend on the client's ability to communicate verbally. Rhythmic response can occur in absence of the need for sophisticated levels of neuro-cognitive processing (Matthews, 2015).

During this literature search, I found few studies assessing how specific music therapy methods can enable memory recall and reminiscence. Studies across many fields commonly agree upon some benefits of music therapy in dementia care. These include cost effectiveness, safety and non-invasiveness, ease of access, relief of anxiety, relaxation, providing cognitive stimulation, increasing attention span, lowering agitation, increasing socialization and many more psychosocial benefits, which are believed to slow down the dementing process and try to maintain the abilities that are still intact (Bright, 1972; Chu, 2015; Gracia, 2012; Weinstein, 2011; Ueda, 2013; Kydd, 2009). A majority of studies on the use of music or music therapy with dementia patients focus on the physiological, social and psychological effects. Some found short-term improvements in psychological and

behavioural disturbances in dementia patients receiving music therapy (McDermott, 2012), but only a few like Chu's study (2014) show persistent significant reduction of depressive symptoms one month after music therapy intervention. Music therapy intervention is therefore seen as a temporary 'release'. Few studies show significant effects in follow ups a few months after in the music therapy intervention.

When it comes to studying music's relation to memory in dementia patients, melodies are the most studied element in the field (Omar, 2015). In musical terms, melody can be defined as a succession of musical tones that are perceived as a single entity (Randel, 2003), but melody itself can also be associated with musical and extra-musical meaning (Omar, 2015). Therefore, studies have assessed patients with Alzheimer's type of dementia (AD) using widely popular tunes with easily recognizable melodies, and the evidence suggests that identification of familiar melodies is superior to episodic memory (i.e. memories for objects and concepts), thus musical memory may constitute a relative "island" of cognitive preservation in the face of widespread cognitive decline (Omar, 2015). Dassa and Amir (2014) assessed the relationship between specific songs and conversations that occurred during and following music therapy session. The result showed that the use of familiar songs, especially songs related to participants' identity and early memories, could stimulate conversations related to their singing, and there was an increase in their level of social responsiveness during and after the singing. This study is about how I use music therapy to facilitate reminiscence and access memory with dementia patients using individually designed and regular music therapy practice. This study's perspective arose out of eight months of music therapy practice with patients and families facing end-of-life, and observing the significance of resolving unresolved emotions from the past, and preparation for death. From the patient himself, who is suffering from progressive cognitive dysfunction, memory loss, and loss of all social abilities, to the carers and families who suffer to see the process of their loved ones 'losing their story'. This study examines music therapy techniques that might enhance music's ability to elicit memories, movements, motivations and positive emotions from older adults with dementia.

Methodology

My research method was the use of secondary analysis of data. The data I gathered included my clinical notes, weekly reflective journals, staff notes, music therapy session plans, song records and audio recordings. The focus of this research was to explore music and non-music strategies to facilitate memory and reminiscence in patients with dementia.

Principally, I took a qualitative approach and applied secondary analysis of my clinical data, drawing out and analysing relevant data to include in this study. The clinical data I recorded was not collected for the purpose of this study but as usual part of my clinical practice.

Therefore, secondary analysis involved using my self-collected pre-existing data to investigate new questions and specific clinical settings in this study.

The use of secondary analysis on my collected data during my placement did not involve patients' direct participation in my study. However, I obtained informed consent from the patient or the patient's family when there is substantial amount of information about an individual included in my study (Appendix II).

Data Analysis

The reflection and analysis of data began after five months into my clinical practice. I engaged in recording, gathering, reflecting and analysing clinical data to further explore my research question on weekly basis. I transcribed the data to Excel documents for initial coding (Appendix I). During the process of coding, recurring patterns and themes emerged, and eventually became eight main categories. After establishing the categories, I went through a process of critically examining the initial codes and connecting them to the categories.

Data Gathering

I gathered clinical data on daily basis. The data were not collected for the purpose of this study, but as a regularity of patients' development record. The data I recorded include information from nurse files, occupational therapy file, recreation file and consulting in person with patients' families.

Ethical Consideration

I abided by the Code of Ethics for the Practice of Music Therapy in New Zealand (Music Therapy New Zealand, 2012) and the Code of Ethical conduct of research teaching and evaluations involving human participants (Victoria University, 2015) throughout my clinical project and in undertaking this research. Informed consent was obtained from my placement facility for the clinical data to be subjected to secondary analysis for research purposes. Informed consent was also obtained from family members and people acting as enduring power of attorney or guardian for individual residents. Consent was gained for their clinical data to be used for research purposes (See Appendix II), and to write a vignette to illustrate a particular point in this project. I was able to discuss with the participant and participant's family about the nature of my research project, and I was able to discuss questions in person when I encounter them in the facility.

Findings

The findings section aims to give detailed illustrations of my clinical practice. This section includes eight core categories. Each category consists of music therapy strategies that I used to evoke reminiscence with dementia patients and is illustrated with direct quotes from clinical practice data. In particular, familiarity is found as a core component of my approaches. Other features include using visual stimuli, cues and conversation as part of evoking memories, and retaining abilities to connect with others. These illustrations have been included in lieu of a longer single vignette.

Familiarity

Familiarity is perhaps a central catalyst to disclose associations with early memories. Of course, the analysis of the music therapy methodology to enable reminiscence brought out much more than that, but familiarity was needed to access these associations.

Using music (and musical elements), objects, and text that I knew or assumed would be familiar to the patients was important for promoting connections and stimulating memories. I would introduce a topic for the session, such as 'flowers'. Topics are important because they help to provide a focus for the music making, and the repetition that is involved in talking or singing about a particular topic can support memory, thus providing a channel for reminiscence.

Bringing objects related to songs can reinforce the concept and provide additional sensory stimulations, such as visual and olfactory stimulations associated with a familiar object. I chose music that I believed would be familiar because it was from the patients' era (i.e. would have been popular when they were 15-35). The music may remind them of particular events, such as a wedding or a family parting, allowing the participants to experience the music in their own personal ways.

1. Familiar music

There are many well-documented studies on improved cognitive function in AD patients following a session exposed to familiar music. I used music that is familiar or has been heard before with individual participants to elicit their long-term memories, an approach to enable some form of communication and remember a sense of self. I assumed that memory for music from early adulthood would be intact, and therefore the association could be elicited through familiar melody, lyrics and music motifs. Below is an example of a man with advanced dementia, who chose to be in isolation most of the time. He suffers from hallucinations of his early childhood experiences as a refugee during the war. His hallucinations seem real to him, and he is at risk of harm as with the behaviours he initiates so that “those boys” won’t hurt him. I would use music that he might know or might relate to, as a method of eliciting his memories of family, church, war, and Poland, facilitating reminiscence and some conflict resolution.

In the corridor, I greeted Mike using his native language as a start to our music session,

“Pam Petrus, Nazywam się Ichen! Jak się masz?”

Mike stood still, smiled a little and said, “Well done”. It was a good day for him.

I started to sing, Hej Sokoly, one of his favourite patriotic songs. I sang at his walking pace, as I held onto his walker and walked him to his room. Mike stopped before slowly saying,

“My father...was a great man. A soldier. The Polish did not want war...”

I stood and allowed silence. Mike’s mouth was moving, but no words came out. So I asked in a soft tone,

“How old were you?”

“I was 5” replied Mike.

It was helpful knowing some of his background and early life experiences through other reminiscence sessions. Despite his advancing dementia, Mike recalled his early

memories of his father, who is believed to have died in the war before their departure to New Zealand as refugees, and he was willing to convey his memories through language. Perhaps, familiar music known to him in his childhood improved his autobiographical memory recall.

Below is an example of using a familiar tune to motivate verbalization, and to recall melodic memory.

I brought Anna an ABC song with big letters printed on the page. Anna grabbed the page tight with trembling but strong fist. Her right hand pointed on the letter A, and she started to slowly pronounce:

“A B C...D...E...FFFFFF....” I came in with the singing, slowly, I supported Anna to keep going. I sang the song once through then put down my guitar. I touched Anna’s pointing finger and move it gently across the page while I sang,

“A B C D E F G...” and surprisingly, Anna’s voice began to raise, as if unintentionally singing the song.

2. Familiar object

I would bring objects related to songs or a topic (such as fresh flowers, ribbons, feathers) to provide visual stimulation, focus, and a medium for reminiscence. Below is an example of an object – my guitar, elicited a participant’s memory of me followed by her own reminiscence of her family.

“Oh do you sing?” asked Mary with a sudden ray of smile, as I put the guitar on my lap. I was till that moment that I knew Mary does not remember me. Mary carried on to say, “My father played the piano, and my sister and I were taught how to sing. He knew many instruments”

I started to pluck alberti bass pattern on the guitar, Mary suddenly called out, “Oh! It’s you! I remember you sang this to me before!”

Mary associated the visual object – my guitar, with her early memories of her family. She also disclosed recognition of me and my ‘role’.

3. Familiar text

For many patients, the lyrics that were remembered tended to be the opening and closing phrases or refrains of a familiar song. As mentioned in an example above, it seemed that memory for melody is better preserved than lyrics. Even so, there were instances when I found using familiar texts (e.g. lyrics and poems) more useful as cues to assist memory recall and reminiscence. Despite impaired verbal skills as dementia progresses, participants can improve their word finding capabilities through prompting familiar words (i.e. cues) that remain intact, a category I will deeper discuss later on. During my practice, there were such instances such as an old text that was set to well- known music at a much later date, an important aspect often overlooked by carers providing music entertainment.

I brought read aloud the poem ‘Secret Love’ with Am Dm F chords on the guitar, creating a calm and serene background mood. As I finished, Mike said, “William Blake...Ode of Blindness, was written in Latin. It’s fitting for him, he was blind...Poland was last to keep Latin in the 1770s...”

Music is present to enhance mood and focus to this poem, which might have aided to enhance his memory and recollection of the knowledge he knew from long ago. Nevertheless, the familiarity of the poem encouraged him to verbalize, and to find relations between the “bits and pieces” of memories as he described it.

4. Familiar music - Enables connection or participation with group participants

Group work is a much emphasized aspect in long-term care facilities. I found that group work has many benefits such as encouraging socialization, stimulating interests, reminiscence, and a sense of belonging in an otherwise isolated day. Music is one of the most common activities for patients in a long-term care facility, and using music that is familiar to the group participants can engage the group and

enable them to share a moment and connect with each other. A subtle sound, scent, movement, touch can have impact on dementia patients who are otherwise unlikely to recognize people, place and time. The example below is an example of facilitating connection between participants, and allowing them an opportunity to build relationship with each other under difficult psychophysiological circumstances.

Michal recently broke his hip, and after his transition to hospital from the dementia unit, he spends most of his time in his bed. The transition suddenly put him in complete isolation, at the same time coping with distress of himself “never able to walk again”.

I arranged Fr. John to meet Michal together in a session. I knew from previous reminiscence sessions that both of them spent their youth in the same city, and both are Catholics, but never had the chance to meet within the facility. I began by introducing Michal to Fr. John.

I put down a ‘A’ major chord on the piano and allowed it to ring, replicating the sound of a church bell. I told them that I’ve got a song for them today, ‘How Great Thou Art’. Michal sat still, his nose dripping, eyes closed, facing the ground while I sang. I heard Fr. John sang along quietly with me at the chorus section. After the song, I allowed the piano to ‘ring’ by sustaining the last note. Then I allowed a gap of silence.

“Can you pray for us?” asked Michal, moving his head a little to look up.

“Shall we have Fr. John to say a prayer for us?” I replied in a calm voice.

Fr. John leaned forward and laid his right palm on Michal’s head. He said a prayer in a fluent and calm manner. Michal responded, “Amen”, then slowly looked up.

Fr. John reached out to touch his shoulder, drew a cross on Michal’s head, as if a familiar practice from his earlier days as a priest.

5. Allows for shared memories with loved ones

Dassa and Amir (2014) assessed the use of familiar songs to encourage conversation between participants with middle to late stage dementia. The study suggested that the ability to form a conversation was increased immediately after singing, especially when the conversation is relevant to the content of the familiar songs, and further suggests that the majority of songs that elicit the richest memories and encouraged conversations were songs from earlier decades of life (Dassa & Amir, 2014). In the following example, I worked to encourage interactions between the husband and wife through a familiar song that may evoke shared memories between them in earlier life. The wife was struggling with mild dementia. She was verbal but was constantly uttering words that sounded incoherent and empty. The husband would always sit there quietly without a word by her side.

I selected particular songs that were known to both husband and wife in their earlier days as a way to facilitate reminiscence. The husband started to hum a tune following a song that they used to associate with a special occasion, they started to interact with each other in that shared moment after the songs.

After singing 'Blame it on the Bossa Nova' requested by Phyllis, I asked if she has danced Bossa Nova before, Phyllis did not reply but carried on saying that she likes music. I asked about how they met, Phyllis said they "met at a church through common friends" with enthusiasm in her voice. At this time, Bill sang softly a tune that I find familiar, Phyllis looked at Bill as he vocalized the tune, and she responded by saying,

"This is for new year, for new year!" said Phyllis to her husband in an excited voice.

This was the first time I saw the husband and wife connecting in a mutual moment, sharing a mutual memory during my time on placement.

6. Promotes motivation to verbalize

I noticed that patients were more readily able to verbalise after listening to, or participating in, familiar music. Participant's verbal responses immediately following a familiar song could be identified as 'associative memory' (Tomaino, 1998). One of

my most important goals of using music for reminiscence is to encourage discussions, or at least to encourage using 'words'. Because I find that verbalization stimulates intellectual abilities, and music is used to motivate discussions through reminiscence.

This was our first time having our music session here, a very different venue than the dementia unit. I sat in the chapel with Rose, there were nobody around but us. Her carer brought Rose to the chapel an hour early before the service starts, so I decided to have our music session in the chapel instead. Rose has advanced dementia.

Although she remains verbal, most of her time using her verbal capacity would be crying out loud or scolding fellow residents, perhaps a part of personality change due to dementia. Other times she stayed away from others in her room. It has always been hard to involve Rose in a group session because her yelling often cause nervousness to fellow participants, and I would at times have to pause the music and draw immediate attention to Rose for safety reason.

I sat next to her and sang a familiar opening tune looking at her,

"Good afternoon Rosie, how are you?"

"Who are you?" Rose said in quite a strong and angry voice.

"I am the music lady" I replied. Rose did not move but kept looking straight ahead at the empty podium with no facial expressions. Then I spoke to her with a slow but firm voice.

"We are in the church now, we're a bit early, aren't we? We have time for some music, haven't we? Shall we sing a few songs about church together?"

I slowly turned to face the ground as if praying, then started to sing unaccompanied with gentle and steady voice 'Ave Verum Corpus' to Mozart's familiar tune. I repeated the main tune three times with steady voice and speed, while observing Rose's response. She did not move nor looked, but I saw her raise her right hand and drew a cross on her chest, as if associating the mood and familiar tune to an early and familiar practice. I paused after the third repetition and sat quietly with her.

"You know the prayer, Rose?" I asked softly and looked at her.

“Ave verum corpus, natum...de Maria Virgine, vere passum, immolatum, in cruce pro homine.... O lesu dulcis, O lesu pie, O lesu, fili Mariae...miserere mei. Amen”

Rose muttered with straight vocal tone, drew another cross on her chest and lips, and still looking straight ahead at the empty podium with no facial expressions.

7. Elicit rhythmic response

I found ‘dance rhythm’, particularly, was associated with early memories. Rhythm is one of the most identifiable elements in a piece of music. Although we may respond to rhythm without it being familiar or belonging to a familiar piece of music, rhythm itself can carry a musical agenda that sets the foundation to a particular stylistic feature, a specific mood, and an environment that is associated with it. This association can help bring back familiarity for dementia patients. Rhythm is timeless, and can elicit long-term memory for people with memory loss, enabling associations with early memories and meanings. The other good reason for using rhythmic music is that a rhythmic response can occur in absence of the need for sophisticated levels of neuro-cognitive processing (Matthews, 2015). Below is an example of how a familiar rhythmic style motivated a patient with advanced dementia who was partially blind to stand up from her armchair and move her legs around to the rhythm.

...I sat at her keyboard and started to tap my foot on the first beat of a 6/8 rhythm, replicating an Irish jig. As the music started, Kathleen almost instantly stood up from her armchair, and without her walker, she tried to move her foot around, tapping and circling as if dancing in circular dance around the keyboard, she danced with skilful manner, placing her foot at the right spot of down beat...

Cultural Knowledge

Accessing the cultural knowledge of an individual is central to my work in an aged-care facility with residents from a diversity of social and religious backgrounds. Aligned with the facility's emphasis on spiritual care, preparation for end of life is central to the therapy work provided. Cultural knowledge of patients is very important in a dementia setting, as many of the patients I work with have intact early memories that are related to religion, family, migration, ethnicity and early schooling. Music selected through cultural knowledge of patients can enhance a remembering process, stimulate cognitive functions and affect moods.

Using music related to patients' cultural identities, including ethnical identity, spiritual identity and social identity, would be an important approach for targeting 'themes' in a therapeutic process, thus stimulating past memories and motivations to interact. I would introduce music that relates to patients' cultural identities, which include the use of specific religious and ethnic music or music that belongs to a specific population in the community. For example, I used 'Pie Jesu' to allow an agitated participant to associate the song with the familiar environment of a chapel, which in his memory would have been calm and solitary. Obtaining the life history of patients with memory loss can be a challenge. Consulting with family members was crucial in choosing suitable music and non-musical strategies to target reminiscence and enable connection.

Access to Background Information

I found that obtaining background information regarding diagnoses and functioning can assist in planning an individualized strategies for maximum effects. However, I was also aware that knowing the patient's 'diagnosis' may impact on the subjectivity and clinical judgement during my work. Therefore, it was important for me to balance what is known from the diagnosis with a sense of 'not knowing'.

An example of the above statement from my clinical practice was with a man with mild dementia, who was newly admitted to the facility and was not a regular music participant. One afternoon, when I was conducting a group session by the piano with a few regular participants sitting in half a circle around me, he suddenly broke into our circle and stood in

front of me, as if disregarding the presence of others. He started to talk in a flat and loud voice about a song he loved dearly, 'Goodnight Irene, goodnight'. Based on my brief knowing about his personal background from the staff team, I knew that he had a failed marriage with his first wife, and this song might bring back meanings of that event. I gave him the choice to share with the group what this song meant to him, and I supported his input to our session by empathizing on the key words 'she left', 'goodbyes', 'broke', and nodded to show my attention. I took his pause and sighs as signals, and played soft *alberti* bass minor chords on the piano, holding the attention of other participants while supporting his story before we all sang 'Goodnight Irene, goodnight' together as a group.

Balancing what is known with a sense of 'not knowing' allows openness for the therapeutic relationship to evolve in a session, which can reduce the interference of pre-assumption based on knowing a person's background information prior to working with a person.

Structure and Repetition

Applying structured and well-planned music at a consistent space and time can provide sense of physical and time boundary and predictability, which contributes to memory recall and recognition of the therapist and the music session. I used structured music repertoire and planned music as the opening and closing of music sessions to enable a sense of time boundary. For example, I consistently used the same music as the closing of each session. Planned music can encompass participants' emotions, make aware the boundary of self and others in a music session (i.e. helping another participant to stand up from the chair at the end of a session when hearing the 'goodbye song') and provide a sense of control over the evolving environment.

1. Using the same piece of music as opening and closing of a session

Consistency of my presence at a particular time of day provide a sense of predictability, familiarity and security to the participants in the dementia unit, which could stimulate their awareness of the environment and time. Below is an example of 'signalling' a clear start of a music therapy session, which allowed the participants to expect the session, and even to remember who I was and to recognise the instrument I consistently use.

I started the session with foot stamping on the ground singing Vive L'amour while I laid out the instruments on the ground and waving at each corner of the unit making eye contact. As I sang, a few residents wandering around the unit and the few sitting at the back corner of the unit made their way to a seat around the piano, although some remained standing by the piano not realizing to take a seat. Shanta immediately approached my guitar and took it out of the case and passed it to me before she sat down.

I also noted the important link between creating an atmosphere (i.e. in a consistent living room with curtains up) and the mood for participation.

2. Planned Music Repertoire

A well-planned music repertoire can provide a better sense of predictability and security to the participants, therefore can enable reminiscence through music to take place. I needed to be flexible with music during the session, allowing the session to evolve based on a 'fluid relationship' (Bunt, 2002) between the therapist and participant. I found it important to balance what is known with a sense of not knowing, and a well-planned music repertoire can provide a safety net for the practitioner to fall back on, or to lead towards a goal during the progress of a session. I found this strategy crucial when working with memory and reminiscence, as the process of accessing participants' memory requires, at its most basic, a discussion of past experiences including unresolved difficulties and conflicts (Kydd, 2009). This emotional and cognitive process would not happen unless the music environment felt comfortable for the participant within it. Below is an example from my early stage clinical notes of a music session, involving two participants at different stages of dementia. I planned the repertoire according to Pam, who I knew more about as she attended regular individual sessions. Margaret wandered around and joined in the session while I was working with Pam.

When I played 'Home on the Range', Margaret walked in. I worried that I'd lose the attention of Pam. Margaret instantly started to request songs, one after another

which directed me off my list of music. I paused and asked Margaret if she knows the songs Pam knows.

"How old are you?" asked Margaret.

"I am 78" says Margaret. Pam is slow in replying, but chatted with her.

"I'm 78 too!" she replied.

"You are both 78! Both grandmas!" I said.

I prompted the interaction further by giving Margaret a 'Grandma's Songs' book.

Then Margaret passed it to Pam. Margaret demands the next song, 'Oh Suzanna', by voicing the melody. I asked her to sing it again, and tried the I IV V chords on the piano. Pam quietly looked at Margaret, but smiled and even sang a few words together when she recognizes the chorus of the song.

"Oh I know!" Pam broke out a smile when she recognized a tune.

I tried different chords on the piano while they hummed the tune, once I got it right, Margaret and Pam said together, "there you go!" with a big smile.

3. Music listening

I used music listening as an approach when live music therapy was not possible or not suitable.

For example, when Mike showed distress and was crying in bed and shouting everyone out of his room, I sat with him for a few minutes without saying a word to allow his sobbing, then I quietly turned on music of his ethnic culture which he might be familiar with stylistically. I observed his crying eased up, and he slowly turned his head around to face me.

What happened musically here is that instrumental music has a more timeless quality (Bright, 1998). The approach is similar to Winnicott (1965) 'musical holding' and the strategy of 'just being with' the silence. Controlled music listening allows me to observe participants' mood changes and reaction closely, and to adjust the playing device in response to the observable changes. Here's an example from my clinical notes:

"I sat for 5 minutes in his room. I selected a 2 pieces from Tchaikovsky's most well-known tunes, based on Mike's ethnic identity and understanding of his common interest about history...I quietly set up the CD player and the 3 CDs with my selected music. I decided to start with the slow and pianissimo entry of Romeo and Juliet Overture. I turned down the volume to begin with, reducing intrusiveness or shock factors to Mike. I deliberately chose this piece because it lasts 15 minutes long, enough time for Mike to respond to music listening. I felt confident that Mike would know the other two pieces, as they are by far the most well-known Tchaikovsky's work. As the first motif came in, I saw Mike's hands trembling and his eyes tried to open. I did not interrupted, but sat next to his bed, allowing him time to express, I kept looking down at the music notes. Mike began to move his mouth, as if having something to say. I then leaned forward at this moment to listen. Mike looked at me and said with clear words,

"It's very emotional"

"It's Romeo and Juliet" I replied.

"I love Romeo and Juliet" Mike's head sank back on his pillow, he seemed too weak to raise his head.

I smiled and said, "Tchaikovsky wrote it"

"My favourite", said Mike with a clear and determined voice.

"Shall we have a listen together?"

Mike was too weak to reply, but his face showed somewhat satisfied.

The above example demonstrates more than controlled listening technique, but shows how familiar music (i.e. stylistically or rhythmically familiar) was provided as a cue to associate past memories that remained intact.

Containment

I found that using music techniques to synchronize with patients' responses and needs at a particular moment in a session was very important for creating a safe and supportive space to enable patients' reminiscence, emotional expressions and interactions to evolve during a music session.

I applied music techniques such as temporary 'pause' or giving participants 'leadership' to provide a space for emotional expressions and stimulate some form of interactions. This approach is important because it can increase patients' awareness of self and the surroundings and increase some confidence of being 'in charge' of the music and session.

1. Pre-composed music

I used pre-composed music that is familiar to the participant to encourage him to participate and to contain his personal expressions through instrument playing. This approach can channel memory and expression for those who find verbal expressions not possible. The example below is a man of Polish origin who experienced Parkinson's disease and advanced dementia, and demonstrated traits of self-harm and challenging behaviours. He seemed very depressed, and was reluctant to come to his regular music session. In the session described below, I adapted a familiar tune into the texture of randomly improvised piano sounds given by the participant. This method seemed to be able to channel his thoughts, improve his mood, and his possible memory association with the music.

I sat Michal by the keyboard at a distance that his right arm could reach the keys. He has been very distressed and isolated since the transition from dementia unit to the hospital, and he might not understand that he cannot walk nor stand anymore. I played a low and steady E note on my left hand with resonance pedal and kept it going before holding Michal's right hand to touch a G note on the upper keyboard. He lifted his hand again and put it heavily down on the key, creating a high pitch tone cluster above the low and resonating E note I played. Michal tried hard to lift his eye level to see the keys, and consistently repeating the tone cluster, as if concentrating hard. I added in the middle range of the keyboard, the motif of Chopin's 'Funeral

March'. Michal might have known the tune, gradually he stopped, laying his hand sink deep into the keyboard and listened attentively as if in deep thoughts, his eyes filled with tears. I allowed the tune to fade out, leaving the left hand E note carry on to the pace of Michal's breathing.

This finding suggests that using pre-composed music that is familiar to the participant might encourage participation, thus enabling some form of interaction and emotional release when physical and verbal abilities are limited.

2. Pause – Allow interaction

I created a temporary 'pause' in the music at appropriate times to allow participants to make emotional expressions in their own way or engage in meaningful interactions such as a short conversation.

I sang 'Hej Sokoly', a Polish wartime song with fast marching tempo. During the second verse of the song, about Ukraine being invaded and blood being lost, I realized that Mike raised his head from his pillow to look at me as if having something to say. I dropped the singing volume and faded away at the end of the music phrase.

"My father was a great man, a soldier. He met my mum in a dance, he impressed her because he had a few drinks but remained sober till noon the next day...Drinking is a big part for New Zealanders", said Mike.

"I must say nowadays, drinking is still a big part amongst youngsters, it is costly isn't it!" I replied.

"Yes. It is" said Mike, as he confidently made eye contact with me, as if liking this casual chat.

3. Pause – Allow space

Pausing the music to give space for participants to express themselves emotionally or socially amid silence, perhaps amid an extended mood created by the music seemed important. Expressions can be verbal or non-verbal (i.e. emotions channelled through an instrument, such as drumming). I find this an important strategy as to allow the participant know that I would patiently be there with them, and allow things to happen.

4. Pause – Allow Leadership

During music playing with participants, I observed closely the change in facial expression, dynamic, speed, and the physical involvement the participants showed while engaging with me. Confidence takes time to settle, so I would contain participants playing until a time that they feel comfortable and focused, then I would diminish my volume or pause for the participants to take over the leadership.

I strum a Bossa Nova dance rhythm on the guitar then leaned over to Bill, who started to tap on the drum. I prolonged the introduction to give time for him to settle in our tempo and indicated that 'I'll follow you' by nodding my head to his drum beat. I faded out my Bossa Nova rhythm and integrated to his rhythm with tapping on my lap and stamping my feet.

Connection

Music therapy can re-activate some fragments of 'shared history', even just for a brief moment between the family and the patient. Connections can be verbal or non-verbal, even a subtle movement of eye contact or a nod to show engagement can be very meaningful. I outline below six music and non-music strategies I applied in my practice to re-activate memory, thereby enabled connection to happen between dementia patients, therapist, carers and family members.

1. Conversation

For dementia patients who were verbal but seldom provided the chance to express themselves, I used music as introductions to topics that I thought would encourage

some verbal interactions between the participants or with me. Topics can include the time of day, season and weather for reality orientation, or can be a familiar topic from participants' earlier life, accessing memory to stimulate verbal interactions.

For example, Pamela is a music therapy participant with mild dementia. She is verbal, but due to hypertension, breathing difficulty and lower body paralysis, Pamela is rarely brought out of her room for group activities. Instead, she spends her day in isolation, which could have quickened the decline of her cognitive functions. Pamela often ask about the weather, "How is it out there today?" she would slowly mutter the words.

I engaged my participants with topics that I thought would prompt verbal interaction. I did not provoke just any conversations, but similar to Bright's description of 'affirmative approach' (Bright, 1998), I only gave the information that the participants needed to avoid confusion. For example,

"Good morning, Pam I am the music student. It's a warm day, isn't it?"

"Is it?" Pam replied, turning her head towards me and muttered the word. Her eyes engaged with mine.

"Spring is here! 'It Might as well be spring'" I said.

"Oh is it?" Pam replied with a smile. And I began to sing 'It Might as Well Be Spring'.

The above example uses a topic – the time of day and weather, to prompt a conversation. During my work at the hospital, it was evident that some of the participants who are still verbal and aware of the environment were curious and longing to 'feel the world' outside their room.

In the second example I used music that dementia patients might know from their earlier days as a reminiscence medium to stimulate connections between the withdrawn individuals:

I sat down with Bill and Fr. John, their seats facing me forming a semi- circle around the upright piano. A few chairs behind them were for people to 'drop-in' the session. I said to them that it is almost Christmas, and "what follows Christmas, Bill?" I leaned towards him. He lifted his head up a little to look at me from his wheelchair.

"Chinese New Year, isn't it? Shall I play a Chinese New year song for us? " I said.

I turned towards the piano and started playing a jolly Chinese New Year melody. I heard Sr. Loyola's foot step, she followed the music to us from her room. She immediately said, "When I hear this music I must come! I'm very blessed"

"I remember this was one of your favourite music pieces, from back a few weeks ago" I said, as I turned my head to look at her as I played.

I put down an early cadence to end the tune,

"For Bill", I said on the last chord. I then turned to her and started to play a slow tune of Traumerei. As I played, she talked over my tune and said,

"It brings back those memories you know...I am blessed over here, listening to a performance which I would have needed to pay for"

Fr. John nodded in response to her, and Bill's eyes were open, and he kept looking at the keyboard.

2. Voice imitation and synchronizing for reminiscence

For non-verbal participants, call and response to their vocalization can provide a sense of self-worth and connection. I engage my clients' vocalizing by imitating the pitch, tone and style of the vocalization. Musically, it's a 'call and response' way of forming a connection when words are not possible. For participants, this can be confusing and uncomfortable at the start, but I was able to pick up the motif and trigger connection, such as noticing a hum or a long sigh. Theoretically, this approach is similar to that of Bunt's therapeutic 'resonance' (Bunt, 2002) or Wilber's 'spectrum of consciousness' (Wilber, 2001), which means the therapist must be very aware and prepared for resonating any signal or vibration without invading the participant's space, but instead, to help the participant to connect beyond that space.

Anna is a Russian lady with advanced dementia and she is non-verbal. Although restricted to bed and isolated in her room, she seems to be stimulated easily by sounds, and would reach out for attention by vocalizing an upward interval "Hooray..Hooray" of a major 5th while waving her doll in the air. While I noticed this from the beginning it seemed to be overlooked by most of the staff. On one occasion, Anna plucked the open strings on my guitar at a consistent, rapid pace, she stopped after a short while looking confused, then vocalized "Hooray Hooray", I responded with retrograde interval using her "Hooray Hooray" as a reply. Her hands clapped together, then she waved her arm left to right in the air then pointed at the door. I looked at the door, acknowledging that

'I know'. My vocalization gets louder and softer following her arm's direction while engaging eye contact. I then sang a Russian tune 'Hej Sokoly', which sounds similar to 'Hooray', I followed Anna's hand waving as the tempo. Anna giggled, at the silence following the song, she made a murmuring sound and nodded at me, as if saying "thank you".

3. Exercising choice

For dementia patients in a LTC facility, the opportunity to 'choose' for oneself is rare. Choice-making is however an effective method to stimulate preserved cognitive function and increase sense of self-worth and confidence. Choice-making can provoke interest, thus motivating the participants to make connections and to be aware of self and the non-self (Bunt, 2002). The 'choices' can be visual objects or song choices. I would bring objects that were related to songs, preferably good-quality objects that can provide meaning to participants. It is important to bring good quality objects, whether it's a little drum, a hand bell, a flower, a piece of fabric to avoid the participants feeling like they are in their 'second childhood' as described by Bright (1998). The following example is my music session with a lady with mild dementia, who had limited verbal expressions and was confined to bed after a fall. She seemed at times aware of her decline, which might have caused depression and contributed to her refusal to leave her room. I felt that it was important to maintain her cognitive function with music, and her motivation to express and to respond. I would sometimes challenge her by questioning the choices she made, thus provoking her to communicate her choice more clearly.

I sat next to her bed, held out 4 feathers in colours of green, red, pink in front of her and asked her to pick the colour she likes. Pat almost immediately picked the green feather. I reinforced her choice by saying, "Green! The colour for the Irish?" and started to sing a tune 'When Irish Eyes are Smiling', I held onto her hand with the green feather and used it as our conducting wand.

After the song, she remembered and asked for the 'dog song', then gestured the

stairs and window. I knew the song she was asking for, but challenged her to give clearer instruction by singing 'Doggie in the Window'.

"NO!" said Pat with a determined voice, shaking her head. I knew which song she meant, so I decided to start playing her favourite song 'A Guy is A Guy'.

"Is it the one?" I asked.

"Yes" Pat responded, looked at me and smiled.

4. Group member connection

As mentioned in an earlier section '*Familiar music – Connection and/or Participation with Group participants*', group activities can be more than just entertainment in a long-term care facility, and music has been used as one of the most applied group activities at dementia units. Music therapists working in dementia care often require to work with a group of participants at different levels of dementia. Therefore, it is important to use music and non-music strategies that can engage attention, accommodate a range of cognitive and physical abilities and to connect. In my practice, I found it useful to use music that I knew provided meaning and enjoyment to one individual as a core to group music-making. I would acknowledge that this song is from an individual and for an individual, but it would be a good idea if we all have a sing-along. When working with a music therapy group and without specific background knowledge of each participant, choosing familiar music from their youth, particularly as suggested by many music therapists, music from adolescent to young adulthood (i.e. Age 15-35) can be useful for group reminiscence, which can sometimes encourage connections between participants. Connections can be as subtle as a giggle at a silly song, or having shared memory of a song relating to a memorable event, for example a 'wedding day'. Below is an example from my clinical notes. This extract shows the strategy I applied when working with a group of participants at different levels of dementia, some of them I know better, some of them I know nothing of.

I introduced myself by humming my opening song 'Vive L'amour', while I turned off the television and organized the armchairs in a semi-circle for everyone to easily make eye contact with me. Anna looked at me, her shaking hands cuddling the two

dolls, "How do you do?" she uttered suddenly with clear dictation. I replied to Anna with eye contact and asked, "How do you do?" At the same time, a new resident's voice from the back row called out, "Do you know Ten Guitars?"

"Yes, I do! What's your name Sir?"

"Jack" he replied.

"Shall we do Ten Guitars for Jack"

I started to pluck the rhythm and sang 'Ten Guitars'. Anna, lady is was presumed to be non-verbal pronounced the word, "Gui-tar" looking at me when I started to play. Two residents walked in during the singing, humming, and found a seat in the back. They were two priests who could still read, so I gave them each the sheet music of How Great Thou Art, a popular religious song. Fr. Berry held onto the music and looked closely at it. When I sang, Anna lit up instantly, Sr. Sebastian, Fr. Berry, Jack sang aloud together, Fr. John who is blind raised his arms up in the air as if remembering a routine gesture of giving out blessings as a priest.

5. Engagement – attention

I used music (or assisted with visual object) to gain attention from participants as a method of connecting with them, and engaging in a common theme. In a long-term care facility, I find that the opportunity to connect to 'nature' is also very limited. For example, the feel of grass or wood. I find that providing a stem of flower, a wooden stick, even a puppy (i.e. pet therapy is applied in my facility) things that are from nature, not a part of a ward environment, can elicit participants' memories associated with these visual objects. The example below is with a lady with advanced dementia and depression. I used music that she might be familiar with in her childhood as an Irish immigrant.

I placed a spring flower stem in her right hand, Mary waved the stem to the pulse of 'Sweet Rosie O'Grady', herself humming at the chorus.

Mary's carer came in to feed her. Mary's face seemed frightened, still holding the stem of spring flower but shaking her head vigorously to push the carer away. I

held onto her hand which was holding the flower, and I persisted the singing at the same pace and volume while the caretaker fed her the coffee. Mary was at first trembling and spewing out the drink, but slowly she calmed down a bit and started to swallow. The continuous music might have engaged her attention, and for a brief moment, took her mind off the feeding. I kept on singing while holding her hand with the flower stem till after the feeding. Mary seemed calmer, and asked where I got the spring flowers from. I pointed to her vase and said it's from her son, a gardener, which she then started to talk about briefly to me.

6. Engagement – participating

I engaged the participants by encouraging them to join musically with the slightest motor movement, instruments or singing. As mentioned above, I find that many residents in a long-term care facility become withdrawn from natural things, such as the touch of woods, scent of fresh grass or even sounds of dripping water. In my practice, I find that these early and neutral memories of nature could be used to facilitate reminiscence. The example below shows a lady with advanced dementia, who was referred to music therapy because of her depression and isolation from others. However, as music therapy sessions evolved, I found that she loved music, and could be motivated to participate with music she enjoys. She gradually opened up to connecting with me through music, and later on was able to participate with others in group music therapy.

I laid down the long wooden rain-stick on her walker. Cathy could not see well but leaned forward to grip the shaker with both hands.

“Oh this...” she said as she ran her palms curiously through the wood, and held it close to her ears. She tipped the shaker side to side and listened closely to the glittering sounds. She started a constant beat, moving the shaker up and down, gripping on both ends, I picked up a familiar tune and played ‘Ten guitars’ to match her rhythm. It lasted 5 minutes and Cathy sang along with the tune. I kept the chords going while bending closer to her, I stopped the string, then start

again, matching her pulse. She changed a rhythmic pattern, shaking tremolo at great strength, and I strummed tremolo to mirror her. Cathy leaned forward, a smile of contentment, as if happy to be the lead. She picks up the mirroring very quickly. We ended the improvisation with a Rock'n'Roll ending, a long persistent tremolo at loud dynamic.

During my practice, I found that disconnection with sense of self and others (memory loss) can be intensified by disconnection with nature (environment). Because the unnatural environment of a ward, hospital-like corridors and fellow LTC residents may increase confusion and anxiety. Therefore, I used music and objects to create a sense of 'norm' to an otherwise unfamiliar environment. As shown in the examples above, familiarity is used as a fundamental aspect in facilitating connection during my sessions.

Cues – to access Memories

Strategic use of 'cues' are effective in stimulating memory processing for patients with memory loss, thus enables reminiscence or recall of short term memory of people, time and events.

I used musical cues such as the '*leitmotif*' concept, to start a session and remind the participants of me and the session time. Music cues such as recurring 'motif' can stimulate reminiscence and allow patients to recall an association with a particular short tune. In my practice, I found musical cues especially useful with individuals whom I knew had a good level of cognitive ability, and memories that could be reached and stimulated by music. For example, my record below shows the use of musical cues to elicit a lady with mild dementia the memory of me and the music therapy session.

Before entering Pam's room, I stood outside the door and tapped a 2/4 rhythm with trill on the cicada wood for 30 seconds before seeing Pamela slowly turned towards me. Then I walked in singing 'Kalinka' tune as I 'marched' into her room to the rhythm of the music. She responded,

“Oh it’s you!” said Pam with a strong and excited voice. Before I walked in, I already saw her smiled before turning her head towards me.

Another instance is using musical cues to prompt memory of a familiar tune.

“What songs did you used to sing?” I asked, wanting to extend the conversation.

“Oh I wouldn’t remember”. “How about...” I came in with The Lord My Shepherd’s opening cadence, Mary instantly picked the tune up and sang along.

I used ‘object cues’ by providing instruments that I think the patients might know in earlier life to channel emotions, expressions and access distant memories. Background knowledge of individual’s interests, hobbies, skills and musical taste in earlier life is important. The following example is a music session with a seemingly reserved man with mild dementia. He is often seen sitting by himself in the common room, or at times talking with another more cognitively capable resident. In group sessions, he would usually be willing to be the drummer, which seems to give him an agency to be important and be in control. Knowing that he used to play in a jazz band in his youth, in one of our individual sessions, I found that more could be channelled through music for him, although he seemed to be able to connect with or even befriend briefly with others in group music sessions. The following example is a session working around the goal of reminiscence using instruments as ‘cues’ to access memories and lost skills. This participant resisted allowing the instrument to channel his emotions, but he demonstrated that seeing this familiar ‘object’ somewhat re-activated his memory of a lost instrumental skill.

Bill was lying in bed when I walked into his almost empty room. He looked at me, sat up and said that he's not well. I asked Bill in a casual tone if he knows the guitar, he shook his head but I passed the guitar to him. He laid it on his lap first, as if not knowing what to do with it. We sat for a while before he positioned it in a guitar posture on his lap, and his left hand fingers moved along the fingerboard, as if finding chord positions. I presumed that Bill once played a little, or at least guitar used to be a familiar instrument for him. I held his finger one by one to play the ‘C’ chords. Bill seemed familiar with the position, and his fingers remained there without shifting. Next moment, Bill started to strum the guitar, although not in a solid ‘C’ chord anymore, his strumming was mature even

putting in 'stopped chord' for music effect. I tapped on my lap to respond to his rhythm, Bill nodded his head to the beat and closed his eyes. I sang to his rhythm 'Blueberry Hill', a jazz song that he would be familiar with in style. He stopped playing during the bridge of the song, and handed me the guitar.

"You used to play the guitar?" I asked softly.

"No" he replied looking down on the ground. He then stood up without another word and walked out of his room.

I used 'memory cues' that were delivered to participants verbally, visually (i.e. key words or objects related to distant memories) or lyrics to prompt interactions and reminiscence. Despite impaired verbal skills as dementia progresses, participants can improve their word finding capabilities through familiar word 'cues' that remain intact. The following example is a challenging session when an old man with advanced dementia refused to receive music therapy. I allowed myself to just be with him for the start, then I gradually turned the recording on a radio, the instrumental music that I think he might be familiar with because of his cultural background. The music set the mood, and he began to relate to the familiar music. Eventually, he seemed moved emotionally, and was even motivated to have interaction with me about his 'remembering'.

I allowed 30 seconds of silence after 'Lascia ch'io pianga'. I bent forward to Donald for him to see me. I explained that I prepared some music for him.

"Lascia ch'io pianga', and the 'Swan Lake", I said.

Donald replied almost instantly with eyes engaged sharply with me,

"Both my favourites" he said.

I decided to leave a gap between the pieces, so I asked him if I should read out the lyrics for him. He did not respond but when I began to read the first line, Donald surprisingly corresponded with enthusiasm in his breathless voice, "La...Li-ber-ta!"

(i.e. La Liberta means 'to be freed)

Themes – to access memories

I found the strategic use of ‘themes’ can be effective in facilitating reminiscence and recollection of past emotions. Themes are chosen carefully based on cultural knowledge, clinical experiences and understanding of pathology to an extent of dementing process and life history. Understanding the culture of the long-term care facility can also be important. For example, in the Catholic founded facility I worked in, I considered the use of cultural and spiritual music and text as themes in my practice. I considered monophonic Latin prayer to access past emotions in patients with memory loss who are Catholic in religion. Themes can be music or non-musical. I found that skilful use of themes can enable participants make association with the past, such as a particular emotion, space, time, and people. Below is an example of a music therapy session with a participant with mild dementia and psychotic symptoms. During the session, he was distressed and threatened to self-harm, wanting to kill himself by falling. I sat with him and gently tapped on his hand as I sang a traditional Catholic tune, ‘Lamb of God’. I tried imitating the singing as if a choir on the podium in a chapel.

I hummed Pie Jesu and gently tapped on Mike’s right wrist to the tempo. I hummed when I forgot the Latin words, and I repeated 3 times before I paused in silence.

He looked down, calmly said, “Thank you. It’s an emotional song. Can you pray for me”

Here is another example with the same music participant above, using a neutral ‘theme’ to give direction and interest to a music session, and to facilitate reminiscence of one’s intellectual ability that remained intact despite of progressive memory loss.

‘Love’ Theme:

1) I started the session with Elvis’ Can’t Help Falling in Love. Mike giggled and looked at me when I read the title. Our theme is ‘Love’, and I said to him that Elvis might not have been his “type of man”, but he does have few good songs, hasn’t he? He giggled as a response. I sang the song with

Alberti Bass guitar. Surprisingly, Mike stopped me to say that the speed could be faster. He remembered the song.

2) I brought Secret Love, read aloud with Am Dm F chords on the guitar, a poem by William Blake. As I finished, Mike said, "Ode of Blindness, was written in Latin. It's fitting for him, he was blind...Poland was last to keep Latin in the 1770s..."

As mentioned earlier, familiarity can tackle a patient with dementia's remembering process. Themes can be constructed on the knowledge of patients' background (ethnicity, hobbies) or 'neutral' subjects such as nature, love and season.

Discussion

Garcia (2012) and Larkin (2001) accessed autobiographical memory in dementia patients using music as stimulus and stated that patients with Alzheimer's disease recalled life events more easily in a condition of musical stimulation than in conditions in which there was no music. No study outcomes oppose Garcia's statement, but exactly what type of music and how music can be used to facilitate memory and reminiscence still require more exploration. Music has the ability to elicit and access early memories that remain intact in mild and late stage dementia patients. Many studies describe the use of music as a stimulus for memory recall but few studies have pointed out how music can be used to achieve this.

Music is nowadays very commonly used by health professionals in day care programmes and residential care for entertainment and general stimulation. This practice-led study hopes to contribute some meaningful findings for future music therapists or any health professionals working on memory and reminiscence with patients with dementia, thus contributing to the wellbeing of residents.

Time is pressing for healthcare industries and families to find cost-effective, accessible and effective ways of treating patients with dementia. There is no pharmacological cure to dementia but the process of cognitive decline can be slowed down with earlier diagnosis and the provision of the right therapeutic intervention at the right time in the right circumstances (Bright, 1972). Moscovitch and Wincur (1992) have shown that environmental influences and psychological factors can significantly affect cognitive function in old age. This study does not claim to present the most effective methods for retrieving memory and enabling reminiscence, but only to present some strategies that I found helpful during my clinical placement. It is about how I used music and non-music strategies to find passageways into the intact 'memory islands' of people with dementia, and how reminiscence can make a person with memory loss become more engaged, connected and happier. Music is experienced in very individualized ways, so we must avoid assumptions or stereotypes about patients' experiences of end-of-life care (Bunt, 2002).

Bright (1998), Kydd (2001), Weinstein (2011), have shown that patients with dementia recalled life events and early memories more easily in a condition of musical stimulation. My findings suggest that multisensory approaches can be effective in enabling reminiscence and

memory recall in patients with dementia. In this study, I characterized and discussed eight core categories of multisensory approaches including music and non-music strategies, some of which can be used simultaneously to maximize their effect. Accordingly, I controlled these music stimuli and other external stimuli as closely as possible in order to target specific needs and particular aspects of the musical experience of an individual.

First of all, my findings suggest that ‘familiarity’ is a central catalyst to accessing memories. Most studies that examine memory-recall in patients with dementia are based on the hypothesis that familiar music is more effective than unfamiliar music in a reminiscence scenario. Thoughtful application of familiar music, texts, rhythms, and objects related to music can generate a sense of safety, a space of familiarity for connection, confidence and therefore often generate positive social, physiological and psychological impacts (Cuddy, 2012). Familiarity can be facilitated through many forms, and is a fundamental aspect to consider when using other strategies. I found that providing a sense of familiarity, whether through music (aural form), texts (aural, visual form) or objects (visual, olfactory, tactile form), can target specific memories and reminiscence. Remembering of one’s past life, even just for a short moment, can have positive effects on social, emotional, physical and behavioural aspects, as many seemingly lost memories still exist and can be stimulated with ‘familiarity’ provided as ‘cues’. Leading authors also agree that melodic memory is better preserved than memory of lyrics or texts (Tomaino, 1996), so this study also examined familiar texts under the ‘Familiarity’ category, discussing both the advantages and limitations of using text as ‘cues’.

Secondly, obtaining cultural knowledge of the participant is important for eliciting memories and retaining self-identity. Selecting specific music at a specific time can trigger the remembering process, stimulate cognitive functions and affect moods. In this study, I find that cultural knowledge is especially important in religion-based L.T.C. facilities, where spiritual care plays a major role in patients’ identity, and affirming of one’s identity is essential for preparation for end of life.

Thirdly, I find that a participant’s level of arousal to music can be linked to how safe and comfortable they feel within an environment. Using planned music repertoires and repetitions as time boundaries can provide a sense of consistency and predictability for people with memory loss. Hence, using the same music in the opening and closing of

sessions can assist the participants to remember the therapist and the session, building a more trusting therapeutic relationship.

Fourthly, I assessed the effectiveness of 'musical holding' (Bunt, 2002) by leaving space in the middle of a piece of music, whether it synchronized with, or channelled participants' expression during music improvisation. Allowing 'space' during music-making can channel expressions via the instrument in participants' own ways.

Fifthly, the decline in cognitive function often leads to a loss of verbal abilities. The ability to connect and associate with others is often diminished, and will eventually lead to complete isolation. Music therapy is one of the most effective approaches to enable connections to happen between not only patients with dementia, but also their close families and carers. Close relationships are typically lost as dementia progresses. Hence, one of the main focuses stressed by the 2015 National Dementia Summit is the importance of keeping the patient connected with the family and living at home for as long as possible. Having observed some patients' advancing dementia states, I find that the inability to connect or maintain basic relationships can increase rates of psychological and behavioural complications. Matthews (2015) describes it as a loss of 'morality'.

In this study, a positive response can be as small as eye contact, or as significant as a two-way interaction between me and the participant, or participants with their family members. I explored the use of music methods as new ways of forming relationships and connections with others. Tomaino (1998) supported the idea that participants' verbal responses immediately following a familiar song could be identified as associative memory. As a music facilitator, providing the right retrieval cue with a strong association to target memory can enable reminiscence. Cues and themes can come in various forms such as music, scent, or even a touch on the hand, thus providing a focus and an agency for reminiscence.

In this study, my analysis of the music and non-music strategies that I used to access memory are 'flexible' approaches. As mentioned above, I am conscious of the different ways in which each individual experiences music and processes reminiscence. This modest study is not focused on the effectiveness of these strategies, nor is it a representation of all patients with dementia. This study is a practice-led study based on my clinical experience at one Catholic-founded LTC facility. In the future, a different music therapist or music therapy

student asking the same research questions could have a different interpretation of the findings. This study welcomes more research in the future with detailed approaches on how to use specific music or non-music strategies to enable reminiscence and memory recall for patients with dementia.

Conclusion

Associations with the past may be evoked by several stimuli. The stimuli can be scents, colours, touch, mood, words or sound. This study outlines how music therapy strategies can incorporate, or even to strengthen these stimuli to support memory and enable reminiscence in patients with dementia.

Music is used for its associative power to reach into memories. The aim was to use music therapy strategies to enable reminiscence and 'remembering' of past times to motivate patients with dementia to interact, express, resolve past conflicts, recall identity, confidence, and find new ways to connect with people. In this case, it seemed that familiarity is fundamental in the facilitation of reminiscence.

Music has the unique evocative power to reach into the deepest and most intact memories, and it seems the effect of music can be enhanced when combined with visual or tactile approaches. This qualitative study is based on one music therapists practice, and findings cannot be generalised. However, the findings suggest that careful use of music in a long-term care facility can elicit positive and outcomes with regard to memory and reminiscence.

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Appendix I

An example of the data collection, analysis and coding process.

Raw Data

Week 27 –

His eyes open when I walked in the door singing ‘Good Morning’. He did not move but looked at me. He could not speak nor make a sound, so I quietly arrange my guitar and music, and began by leaning towards his bedside and said:

“Let’s start with some light music, shall we?” I did no wait for his response and started to play Can’t Help Falling in Love with soft $\frac{3}{4}$ waltz beat.

I handed the Polish lyrics and a picture of Polish flag in front of Mike, he looked at it but did not make a move to hold them.

“It’s called Bo-gu-ro-dzi-ca” I said.

“Bo-gu-ro-dzi-ca”, he slowly turned and looked at me as he uttered the words after me with an accurate Polish accent, as if ‘correcting’ my pronunciation. Mike laid very still while I sing.

When I finished, he muttered a Polish word, as if meaning of ‘Bravo’.

“My father...was a brave man. A soldier...Poland did not want war...” Mike said with a slow but firm voice.



Primary Coding

Reminiscence

Primary Coding Description

Use mother tongue for reminiscing. He made association with his identity reinforced by the stylistically familiar melody of his Catholic faith – a monophony chant. Reminiscence happened within the session.



Secondary Coding

Familiar Text

Secondary Coding Description

Hearing his mother tongue sang with a chant of his religion provided the opportunity for association with his early years.
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Primary Themes

Familiarity – Familiar text
OR Access- Reminiscence through familiar text

- ➔ Familiarity is the catalyst to enable reaching into long-term memories. Therefore, I kept 'Familiarity' as the core category.



Category

Familiarity



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How does a Music Therapy Student work to facilitate Memory and Reminiscence in Dementia Patients

INFORMATION SHEET

I am Ichen Sun, a second year Master of Music Therapy student at Victoria University of Wellington. I am undertaking this research as a part of the Master of Music Therapy Programme with regular supervisions by Dr. Daphne Rickson and registered music therapist Helen Ridley.

The purpose is for me to learn from my work as a student music therapist, to improve my own practice in the future, and potentially to provide useful information for other music therapists who work in dementia care settings in New Zealand.

I am writing to you because I would like to use data that was collected as part of my clinical practice, and which relates to you, in my research project. The data will be analyzed along with data from other sources, to answer my research question. My data will include clinical notes, reflective journal and meeting notes with team members.

Anonymity will be protected whenever possible. All of the information that might identify the location or name of St. Joseph's Home of Compassion and any names regarding the people that I have worked with will be removed.

The data I obtain from my clinical notes will be re-used and analysed. I will obtain the information that contribute to my research, thus other irrelevant data will be omitted. Data will be stored in my laptop and protected with passwords. Once the research is completed, the data will be returned to the facility to be destroyed.

Data will belong to St. Joseph's Home of Compassion and thus will be stored there in accordance with the policies of the facility. Staff at the facility will have access to clinical data as per facility policy.

Consent forms will be stored at the New Zealand School of Music, Music Therapy Department, in a locked cupboard or filing cabinet and will be marked "confidential". The research supervisors would have access to the data and would be responsible for its safe-keeping.

How does a Music Therapy Student work to facilitate Memory and Reminiscence in Dementia Patients?

PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to my clinical notes being used for reflection and analysis for research purposes *(if applicable include this statement)*

I agree/do not agree to audio recordings of music from my music therapy sessions being used for reflection and analysis for research purposes *(if applicable include this statement)*

I agree/do not agree to audio recordings of meetings and/or discussions being used for reflection and analysis for research purposes *(if applicable include this statement)*

I agree/do not agree to the researcher's notes from meetings and/or discussions being used for reflection and analysis for research purposes *(if applicable include this statement)*

