Lesson 4: Using music



DaDOM online teacher training

Using music

In the next lesson, we introduce students to how music can be used in a healthcare setting. We use case studies to look at care situations such as behavioural issues and how using music can help as part of the care plan within these situations. Although the focus of DaDOM is integrating music into everyday care, we also explain some of the other ways that music is used within a healthcare context.

Using music in healthcare

In the introduction to this module Philip Curtis describes why music is such a powerful media for us all. Also how music lives within us all individually and how we connect with each other through music.

In this lesson we will look into how musicality and music-making/singing can help care givers when they interact with people living with dementia and how care givers can use music in their daily care of these people, as well as other clients with communication challenges.

In this lesson the Person-attuned musical interactions (PAMI) will be described and will be the main resource in this chapter. This gives good background information for teachers on how to tackle music in daily care. For the students themselves some simplification may be necessary. We also draw attention to the difference between musical interactions and musical activities. The former are the essence of DaDOM and are incorporated in the text.

















PAMI and person-centered care

In Denmark Dr. Hanne Mette O. Ridder and Julie K. Krøier have studied musical interactions in caregiving for people living with dementia. In their book "Stemning. Musikalsk interaktion i demensomsorgen" (2022) they pinpoint four elements that are essential for caregivers when working with clients whose communications skills are becoming increasingly poor. These are:

- person-centred philosophy;
- attunement;
- musicality;
- interaction.

The idea of music therapeutic caregiving has also been studied in Sweden by Eva Götell (Götell et al., 2002, 2003, 2009) and L. Hammar (Hammar et al. 2010) and is defined as caregiver that sings to, or sings together with a person living with dementia in a caregiving situation. Their studies and research have documented fewer conflicts and better interaction with people living with dementia when caregivers sing while giving care to their clients.

In the PAMI method the first element that the caregiver needs to focus on is the person behind the dementia. Ridder and Krøier refer to Kitwood who defined a person as: "to be a person is to live in a world where meanings are shared" (Kitwood,1997).

Kitwood describes people as social beings and thus only exist through acceptance, respect and trust. Kitwood thus emphasizes that even though a person has dementia, they still have psychological needs and should be approached in that manner.

Ridder and Krøier describe how person-centred care not only provides for physical needs but also psychological needs. They refer to Kitwood and Dawn Brooker who argued that unfulfilled psychological needs for a person living with dementia could result in physical problems, like pain and restlessness amongst others. Ridder and Krøier list five elements that person-centred care needs to address for the well-being and fulfilment of psychological needs of a person with dementia.

Apart from love these are:

- 1. Comfort: the need for closeness and calming attitude;
- 2.Identity: be reminded of who one is and be treated as an individual;
- 3. Occupation: engage in meaningful activities;
- 4. Inclusion: be a part of social community and feel acceptance;
- 5. Attachment: get attached to other people via comfortable and accepting relations.

Thus the key to person-centred care is through warm, inclusive and acceptive relationships.



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Attunement

As verbal communication abilities diminish for people living with dementia, attunement or non-verbal communication becomes very important in all interactions between caregivers and their clients. Thus PAMI emphasises attunement as its second element.

Attunement mostly comes naturally to us and we are mostly unconscious of it in our everyday relationships. When working in care it is though necessary to be aware of attunement. This happens when a caregiver communicates by attuning to a person's feelings and takes into account and gives consideration to that persons situation. In daily care of people living with dementia there are many situations where the caregiver needs to have physical contact with the client, as when dressing or washing. These tasks can be intrusive for the person living with dementia. There are two ways of approaching these daily tasks. The work can be carried out in a work orientated way, where the caregivers concentrates on the task at hand i.e. dressing. It can also be done in person-centred way, where the caregiver concentrates on the person who is being assisted to dress and attunes to the persons movements and tempo while dressing.

The caregiver needs to build trust and acceptance through attunement to the person living with dementia, to be allowed to touch and assist them, so that the task at hand can be carried out in a positive and respectful way.

In attunement, empathy plays an important role. Empathy is the ability to be able to understand another person and to be able to harmonize and identify oneself with the other person's feelings and situation.

Ridder and Krøier describe empathic attunement as: 'a constant seeking for acceptance/trust to engage with the person living with dementia. This happens unconsciously as the caregiver is constantly in resonance with the person with dementia, yet always consciously attentive to the reactions of the person with dementia' (Ridder and Krøier p. 46).

Further they see empathic attunement as 'continuous, relational and confidencebuilding dance' (Ridder and Krøier p. 46).

They also pinpoint that attunement in the care of people living with dementia is an interactive process between the caregiver and the client, where the caregiver takes into account the client's perspective. The caregiver is involved on an emotional level and has musical parameters in mind, such as the tempo of the movements and possibly the speech of the person involved, the timing of the activity/communication and that the voice level and tempo of the caregiver is in tune with the emotional state of the person.













Music

How music stimulates the whole brain has been carefully described in chapter 2 'Music and the brain'. Aside from this knowledge, Ridder and Krøier describe other aspects and practical roles of music in PAMI as their third element.

The understanding of music in the PAMI method is not defined by musical genres. Music is defined here as a social practice and something that everybody can engage in. Therefore there are no suggestions about particular music for a particular task and there is strong emphasis on caregivers not needing to have a musical background to use music and singing in their care duties. Rather, Ridder and Krøier encourage caregivers to sing in their own way, as every voice is individual (just like our fingerprints) and our personal way of using our voice is a powerful way of expressing our feelings and supports the words we speak.

Musical terminology is often used to describe non-verbal communication or the emotional state of a person, as when, for example, describing non-verbal communication between a mother and her child (the first 'aah' sounds that babies make are often high pitched and descending). The same is relevant when describing communication with a person living with dementia and/or if the caregiver needs to describe the emotional state of the person. Also musical terminology can be useful when caregivers reflect on their own reactions and the use of their voice in particular care situations. Ridder and Krøier mention in particular three musical parameters which are clear, simple and useful to describe communication and emotional state. These are pitch, volume and tempo. These musical parameters can give useful information about how the person living with dementia is feeling, when the caregiver is carrying out his/her care (a person who is excited often uses a high pitched voice, talks fast and loud etc.).

















If a person enjoys singing it is a beneficial activity in physical, psychological and social ways. Research shows at least 10 points where singing can be beneficial (Kang et al., 2018):

- strengthens lung function.
- stimulates breathing and oxygenation of the blood.
- diminishes blood pressure.
- strengthens the immune system.
- releases oxytocin (bonding).
- releases endorphins (pain-reducing).
- increases vitality.
- creates happiness and euphoria.
- gives opportunity for self-expression.
- connects people together.

Ridder and Krøier do advise that musical taste is personal and not all people enjoy singing or musical activities. Usually adults enjoy music from their younger days. This is also true in most cases with people living with dementia, but not always. Individual preferences depend on many things and taste in music can change when people develop different forms of dementia. Caregivers need to be attentive to the reactions of the person living with dementia when exposing them to music, singing or musical activities. The reasons for change in musical taste can be many and some do relate to the type of dementia, while others to the progress of the sickness.

- In vascular dementia, nerves to the frontal part of the brain get destroyed, so the person with dementia can experience music in a different way than before.
- What musical taste we have depends on age and during a lifetime musical taste can change. Often elderly people enjoy music from their younger years, but not always or solely. Social context and time of day also influences musical taste.
- As the dementia develops perception can get less accurate and thus simple music with few instruments or a capella singing can be more appropriate and appreciated.















In conclusion, Ridder and Krøier describe a psycho/social model of music in care for people with dementia. It is based on research of Orii McDermott who studied the effect of music therapy and musical activities in nursing homes in the UK. Through interviews with people living with dementia, their family members and music therapists, she found out that people with dementia did show better mood and increased attention during and after music therapy. Icelandic research from 2021, using McDermott's Music in Dementia Assessment Scale (MiDAS) with 52 participants with different types of dementia, supports these findings. According to McDermott it is in a 'here and now' situation that a person with dementia can feel their identity and only then is able to be with others and to experience cohesion with others in a group.



Interaction

Interaction is the fourth element that PAMI builds upon, and the importance of approaching care for people with dementia as a relation between the person and the caregiver rather than practical care of physical needs of a person with dementia.

According to Albert Mehrabian, communication depends only 7% on words, but 38% on our voice and 55% body language. It is therefore important to pay attention to the non-verbal part of communication and use the non-verbal part as a tool when verbal communication is diminished or has disappeared.

To facilitate an effective communication with persons with dementia guidelines from the National Centre of Knowledge on Dementia in Denmark advise:

- 1. Having a presence and listening attitude;
- 2. Trying to create comfortable and relaxed atmosphere,
- 3. Communicating with the voice, body language, gestures, eye contact and touch.















They also stress the importance of reading the body language of the person with dementia, as well as the expectation that the person with dementia will read the body language of the caregiver. It is thus important that the caregiver is conscious of the connection between his/hers words, body language and actions.

Ridder and Krøier find that these guidelines harmonise with their ideas on a sensorymotor approach to relating and interacting, where a person uses sounds, movements of face, hands and body in non-verbal communication. These ways of expression are also used in music and when singing. Facial expressions and the voice can express basic emotions such as happiness, anger, sorrow, surprise and disgust. Also laughter and crying are emotional reactions and do not necessarily have a primary, physical cause.

To accommodate the psychological needs of a person living with dementia Ridder and Krøier use Kitwood's ideas on positive interactions which are recognition, negotiation, cooperation, play, sensory-motor approach, celebration, validation, holding and facilitation, creation, giveaway and reminiscence. If the caregiver is aware of these and initiates positive interactions, it is possible that the person with dementia will feel comfortable and safe.

















The role of music in PAMI

The practical role of music in PAMI have been described in three keywords: framing, adjustment/regulation and relation.

Framing

Framing is defined as making a safe and predictable environment for the person with dementia where he/she feels comfortable and able to perceive the inputs that come from the environment without becoming either overwhelmed or withdrawn. Perception of sound can often become impaired with people with dementia and thus sudden, strange or loud sounds can make people with dementia insecure and anxious. Music can help make the environment more pleasant, as it can be both easily recognizable and can create a comfortable atmosphere.

Cueing is used widely in our lives, for instance an advertising jingle or the tune before the news on the radio or television. Music and sound can also be used as cueing in the care of people with dementia. Then the same music or song can be played or sung at particular times, such as before or during meals and during care-situations.

The care-worker needs to be constantly aware of the reactions of each individual in their care to the music or singing, as well as being aware of the sound environment. If there are a lot of unpredictable sounds from the kitchen, then music could just be an extra noise and an unpleasant addition to the meal.

Adjustement

Stimulation is needed in regulating consciousness, attention, and information processing. With people living with dementia there is often impairment in stimulation, which can cause sleep disturbances, anxiety and depression; for example, too much stimulation caused by too many, or too complicated verbal instructions. This can make the person living with dementia hyperactive, anxious, using fast or abrupt movements, or talk loud and fast. To little stimulation can make a client depressed, without motivation, using a low-pitched voice and small movements. The level of stimulation should be adjusted or regulated with the sensory-motor approach, with singing, movement, smell and touch.

As the caregiver tries to adjust the stimulation level of the person living with dementia they have to be aware of how the stimulation level of that person influences themselves, so as not to be carried away with the client's stimulation level of the person with dementia. The caregiver should try not to become either discouraged by the low mood of the client or react overtly happily when trying to stimulate the energy level in a person living with dementia.















BIn musical adjustment Ridder and Krøier advise that the caregiver regulates and matches themselves to the energy level of the person, waiting for a reaction from the person and then regulating the person up or down. For example, this can be done in song, by matching the tempo of a song to the mood of the client, to pause and wait for a reaction, to create contact and then decrease or increase the tempo, so as to adjust the level of energy of the person.



Relationships

As the dementia becomes more severe, contact and relationships can be more and more difficult to establish with the person with dementia. Ridder and Krøier describe an idea that they call relational resonance experience, where you can share and identify an emotion, even though it is not from a shared event. You can thus share the feeling of sorrow or happiness even though you have not experienced the same life events as the other person. Music can give this feeling of resonance between the person living with dementia and the caregiver when the music is chosen from the perspective of the client and thus create a positive relation when words are difficult to find.

Three ways of interaction can be useful when relating to person with dementia according to Ridder and Krøier. These are validation, holding and facilitation.

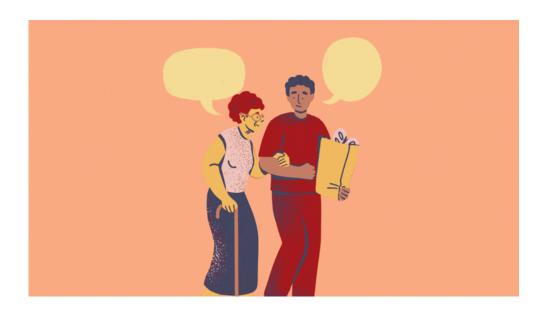
- When validating the caregiver tries to listen to the feelings behind the words and acknowledge the expression and perspective of the person, so as to give their expression a value. In music the caregiver can try to match their singing to the emotional expression of the person with dementia.
- By holding, the caregiver accommodates the feelings expressed by the person with dementia. Music can often accommodate, match and express feelings in a way that the client feels accepted and safe.
- When facilitating, expression can be made easier, for example with cueing.





Ridder and Krøier see these three ways of interaction to be "the foundation for empathic attunement and they believe they can bring positive moments of resonance. In those moments psychological needs of the person with dementia can be met" p.100 Also they do conclude that "with sensitive and attuned use of music the caregiver has a sensorimotor approach to validate and hold the emotional and possibly conflictive expressions of the person living with dementia and thus facilitate a positive change" p.101

At last Ridder and Krøier mention reminiscence and nostalgia as good way of relating to a person with a dementia, as nostalgic memories have been shown to express more feelings of self-esteem than ordinary memories (Ismael et al.,2021). Music and singing can be a strong trigger of nostalgic memories when chosen from the perspective of the person living with dementia.



Research on the effect of use of music and singing in the care for people living with dementia

There have been studies and research carried out on the effect of using music and singing in the caregiving of people with dementia.

I will briefly describe one qualitative analysis from Sweden by Eva Götell (Götell et al., 2002, 2003, 2009). Her team compared morning care sessions of 24 people living with dementia. In the first round all participants had ordinary care, in the second round all participants had morning care with music in the background and in the third round all participants had morning care session where the caregiver sang songs while giving the morning care.















In short, the results were that in the first round where there was no music or singing the communication was disjointed; while the caregiver was lively and in good spirits during the care tasks, the person with dementia was listless, confused and even aggressive.

In the second round, with music playing in the background, the communication improved and became more mutual and the person with dementia seemed more energized and responsive to the caregiver. Positive feelings were dominant and aggressiveness was diminished.

In the third round, where the caregiver sang while delivering the morning care, there was a new layer of reaction, as the person with dementia and the caregiver seemed to have deeper personal connection and feeling of mutual appreciation.

For further reading:

- Eva Götell, S.Brown and S.Ekman: The influence of caregiver singing and background music on vocally expressed emotions and moods in dementia care. https://www.sciencedirect.com/science/article/pii/S0020748907002581#:~:text=In% 20the%20first%20analysis%2C%20G%C3%B6tell%20et%20al.%20%282002%29,were %20no%20longer%20narrating%20or%20instructing%20their%20activities.
- Lena M Hammar, Azita Emami, Eva Götell, Gabriella Engström: The impact of caregivers' singing on expressions of emotion and resistance during morning care situations in persons with dementia: an intervention in dementia care https://pubmed.ncbi.nlm.nih.gov/21309873/
- Anna Swall, Lena Marmstål Hammar, Åsa Gransjön Craftman: Like a bridge over troubled water - a qualitative study of professional caregiver singing and music as a way to enable person-centred care for persons with dementia https://pubmed.ncbi.nlm.nih.gov/32212959/
- Hanne Mette Ochsner Ridder, Julie Kolbe Krøier: Stemning, Musikalsk interaktion i demensomsorgen. Gyldendal, Chopenhagen, Denmark. 2022.
- Ridder, H. M. O., Krøier, J. K., Anderson-Ingstrup, J., & McDermott, O. (2023). Person attuned musical interactions (PAMI) in dementia care. Complex intervention research for constructing a training manual. Frontiers in Medicine, 10, 1-13. https://www.frontiersin.org/articles/10.3389/fmed.2023.1160588/ful
- Waters, B. (2021). Person Attuned Musical Interactions (PAMI) in Dementia Manual UK version. Progress Report. Microsoft Word - MTC PAMI report Jan 2021_IC.docx (musictherapy.org.uk)













Workplace applications: Musical interactions

Person-centred, attuned, musical interactions can be useful in care-situations with people living with medium to severe forms of dementia.

Musical interactions are used in care and are recognised as useful tools by those who use them, but have been little described, researched or put into systematic work at nursing homes. This part will try to explain what these musical interactions might look like. These will only be guidelines, as musical interactions will always need to be individually adapted and/or created for each person who is being cared for, depending on the situation at hand and the character and musical taste of the person involved.

The aim of musical interaction is to make the person living with dementia feel safe and secure in a care-situation; for example, to diminish resistance to care, as well as to create contact and build a relationship with that person, to nourish social and psychological needs.

The examples are thus not a comprehensive list, rather some ideas and guidelines to start from.

Workplace applications: Morning Care

To wake a person in a relaxed way, the care-worker can play their favourite, calm music in a quiet way from a music player, before starting the morning care. When the person is awake the care-worker can enter the person's room humming calmly, with the music if possible.

Music is then used to create a framework to give a feeling of security, using the same, specially chosen, familiar, calm, background music every day. The background music and the humming of the care-worker are used to regulate the arousal of the person so they can awake in a good mood.

When helping with dressing hum and sing the same melody each time, make a text that describes each dressing action (putting socks on, putting the dress on, trousers etc.). Try to match the mood and speed in movements to the person being assisted to your humming/singing.

Here the care-worker uses musical cueing with the same songs every day to explain what is happening i.e. dressing. Also it is important that the care-worker uses their voice and movements in harmony with the energy of the person with the dementia, synchronising the care-workers rhythm, volume and movements when singing/humming to the mood of the person being cared for.















Workplace applications: Inclusion and social contact

- Singing: a person with dementia needs to feel an accepted and valued social being. As verbal communication gets more difficult people can become isolated and frustrated. To meet the need for social contact the care-worker can sing songs with the person with dementia, that they know from earlier years. Working in very small groups can also be useful, as well as accompanying the singing with either movement or small percussion instruments. The songs should be chosen according to the preferences of the person with dementia, the rhythmical accompaniment should match their mood and yet be stable enough to regulate the energy level of the person with dementia.
- **Dancing:** dancing is a valuable form of non-verbal interaction where people can have enjoyable physical and social contact. The music chosen should reflect the interests and mood of the person with dementia and the care-worker needs to adapt to the mood and tempo of the movement of them accordingly.
- Music listening: Listening to a piece of music together can be a platform for shared experience and interactions between the person with dementia and the care-worker. It can inspire conversation or be enjoyed quietly depending on the verbal ability of the person with dementia. The care-worker should take into account the persons musical taste as much as possible. Also make sure that there are no other sounds in the environment, that could interfere with the music and disturb the listening.

















Workplace applications: Musical relationships to prevent restlessness

• Music listening:

To prevent restlessness in the afternoon music-listening with a care-worker can be useful. Small session of 5-10 minutes at the same time in the afternoon everyday can be helpful. First they listen together to the same two opening songs to frame in the activity, then the care-worker chooses a song/piece of music from a playlist that has been created for that person specially. The care-worker chooses song that he/she finds expresses the mood of the person with dementia at that moment and gives time for reflection/reaction afterwards. By this the care-worker tries to regulate the stimulation of the person. Then there is another chosen piece of music for a shared moment of contact before the same ending-song is played.

• Reducing anxiety through breathing and movement:

If a person with dementia is wandering in distress it may be useful for the care-worker to walk along in the same tempo as the person with dementia. The care-worker attunes them self to the person with dementia so as to give them support. While listening to the breathing of the person with dementia, the care-worker can regulate the energy of the person with dementia by breathing clearly and then slowly calming down the tempo of their own breathing. Here musical parameters (rhythms of breathing and walking) are used and not music as such.















