COMMUNICATION AND DIALOGUE – MUSIC THERAPY WITH PERSONS IN ADVANCED STAGES OF DEMENTIA

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ABSTRACT

Background. Persons with dementia suffer a dialogical degenerative disease. The expression of basic needs, feeling recognized and understood or making simple requests becomes problematic. This can lead to isolation, resulting in serious secondary symptoms to the dementia disease itself. Using songs in a music therapy setting promotes communication – a communication that is adjusted both persons taking part. Singing has many functions; it offers a communicative structure, stimulates, and regulates, and enables dialogue.

Aims. The aim of the research is to propose a non-pharmacological approach intending a higher quality of life and fulfilment of psychosocial needs in persons suffering from dementia in advanced stages.

Method. The method is an explorative case study research using physiological data to validate observational data. Atlas.ti is used as qualitative research software for the analysis and administration of transcribed data. In a flexible design both quantitative and qualitative data collection methods are used as a rich approach to understanding communication. Primary data are video recordings of 6x20 music therapy sessions, 6x30 5-second-interval heart beat measurements, questionnaires, music therapist's log, and medical records. Secondary data are video data transcripts, heart rate (HR) data in session-graphs, HR pre/post data, reduction of video data to 9 minutes for external assessors, and transcripts of external assessors' observations.

Results. Analyses using the computer software Atlas.ti of qualitative observations made by external assessors suggest six primary categories of communicative signals: emotional valence, receptive participation, sociality, active participation, communicative musicality, and dialogue. Presentation of a catalogue of gestural responses indicates that communication is taking place. Physiological data indicate that the songs used in the music therapy have regulative effects on the participants.

Conclusion. Individual music therapy using familiar songs is a valid approach to increase quality of life and to fulfil psychosocial needs in persons with dementia.

1. BACKGROUND

The music therapist in this paper is Hanne Mette Ridder and when she refers to »I« or »my« it is in direct relationship to the therapy situation.

One of my first clients in individual music therapy was Mr G. He lived at a gerontopsychiatric unit with 24 residents where I was employed as music therapist (see Ridder in Wigram et al. 2002b, p. 191). In every session he asked me to sing a certain song called *Altid frejdig, når du går* ("Always cheerful, when you leave", by Chr. Richardt 1868). The song certainly is not cheerful, and Mr G would try to sing the first verses with me, but would then burst into tears. I then sang the song alone, Mr B crying silently. After the song, Mr G would sit for a while in silence, before he started telling stories from his youth or childhood, or I started singing another song. Mr G, who at that time was 77 years old, suffered from Alzheimer's disease. He was not able to put in words what happened to him when we sang this song, but it was clear to me that his emotional reaction to this particular song had a significant meaning. The song might have represented important feelings to him that he could express in a usable, valuable, and socially acceptable form, and singing made it possible for him to share those feelings.

People suffering from primary degenerative dementia at later stages of the disease experience problems in perceiving environmental information and in expressing themselves in verbal language. In general, loss of conversational skills is likely to be an early marker of the dementia syndrome (Orange et al. 1998). In later stages of the dementia, that can take various forms, it seems difficult or even impossible to maintain conversation or dialogue. Language deterioration and communication breakdown are serious problems for patients and carers. Additionally, the growing difficulties in communicating and entering dialogue have as consequences that psychosocial needs are not easily fulfilled (Kitwood 1997). This leads to isolation and serious secondary symptoms of dementia. Considering the severe implications of communication breakdown and possibly secondary symptoms we suggest that dementia is best labelled as a dialogic degenerative disease:

"… rather than neuro-degenerative diseases, we are faced with dialogic-degenerative diseases" (Aldridge 2001).

In the case of Mr G it seems possible to fulfil psychosocial needs (here by expressing certain feelings of loss or sorrow) by adjusting the communication to the person suffering a dialogic-

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degenerative disease. This adjustment consists of an adaptation of environment and stimuli and of the therapist's attitude, expectation, and demands to each other. We refer to this as the ecology of the relationship and setting (see also Aldridge 2001). The use of familiar songs from the past in an individual music therapy setting is suggested as a method offering possibilities of adjusting communication following the principles of person-centred care.

1.2 Singing as therapy

In the 'typical' decline of Alzheimer's disease some skills seem to be spared longer in the degeneration process, e.g. the prosodic aspects of language, abilities related to procedural memory, and skills related to music. Even if the ability to sing progressively is lost in advanced stages of dementia, singing is described in the literature to have beneficial effects on agitation, social behaviour, mood, relaxation, and attention. Singing has a positive influence on oxygen intake, on immune defence (S-IgA levels), and on cortisol concentrations (that are connected with stress symptoms). It offers a strategy for sharing an activity where demands are adapted to levels of functioning and have a positive influence on the feeling of identity and on periods of lucidity. The use of intros (preludes, jingles, greeting songs…) functions as contextual or symbolic cues making it easier for the person with dementia to recognise the setting and show attention to what is going on. In this way songs are indicator of the structure of the setting, and with the use of sedative or stimulative features (e.g. rhythm, tempo, harmony, texture, volume, intensity, and mood) the songs can be used for their regulative effects.

Dialogue and communication is described to be dependent of levels of arousal, and the so-called Yerkes-Dodson law describes performance as optimal at medium levels of arousal. This law, as well as the arousal construct, has certain weaknesses but is convenient to understand extreme states. A person in a hyper-aroused state shows little environmental attention and is unable to communicate effectively with others. At a certain point physical exhaustion leads the person to hypo-arousal until the person again shoots to levels of very high arousal. With no arousal, or only short periods of a 'balanced' arousal level where the person has most possibilities for perceiving environmental stimuli, it is difficult to fulfil psychosocial needs. If we cannot communicate with the environment, which include other people, then we do not enter into dialogue. Achieving a balanced arousal level is possible by using moderate stimuli and contextual or symbolic cues. Moderate stimuli balance between e.g. new and familiar, fast and slow, loud and quiet, and trivial and intense.

Finally, singing old familiar songs gives access to 'the person behind the disease'. Songs can elicit reminiscences and autobiographical or long-term memories. Dwelling in the past, that is often referred to as a negative process, can also be a restorative and wholesome process that strengthens the identity of the person reacting to the song. Songs that have a specific personal meaning offers a valid form of emotional expression.

"Using songs allows people to find an appropriate social form for the expression of strong emotions" (Aldridge 2001a).

When a music therapist sings a song to a person suffering from dementia, and succeeds in finding a song that has a specific emotional meaning to this person, elements of pulse, quality, and narrative – that are described as necessary for joint human expressiveness (Malloch 1999, p. 7-8) – come to the foreground. These elements are intrinsic and basic, and as it seems to be generally accepted that these musical elements are preserved longer in persons with Alzheimer's disease this gives a strong argument for using songs in therapy with a focus on communication and companionship.

2. AIMS

The use of familiar songs in a therapeutical setting with persons suffering from dementia in advanced stages is the focus of a Ph.D.-research carried out at Aalborg University (see Wigram, Pedersen, & Bonde, 2002) and at a gerontopsychiatric unit at the Nursing home Caritas, and ready for defence in June 2003 (Ridder 2003).

The aim of the research is to propose a non-pharmacological approach intending a higher quality of life and fulfilment of psychosocial needs in persons suffering from dementia in advanced stages. In dementia care focus has been on aetiology, diagnosis, and optimal physical nursing, and remarkable steps have been taken in order to improve care. During the last decade, dementia care has been reconsidered and a humanistic, person-centred approach has gained a footing adding new values and qualities to dementia care (Kitwood 1997). Music therapy offers vital qualities of life to persons suffering from dementia (Aldridge 2000). A growing interest in music therapy with persons with dementia is revealed in an increasing demand for literature describing effects, techniques, and methods (Ridder 2002). As a consequence there is a need for documentation and research showing the values of a music therapy approach in dementia care.

3. METHOD

3.1 Clinical method

The clinical method is described in details in Ridder 2003. In order to give an impression of what is going on I will describe the music therapy setting. The participant and the music therapist are sitting in a sofa in a smaller living room. Sometimes we are sitting close together, maybe holding hands or swaying from side to side following the beat of the music. Sometimes sitting with a certain distance if the participant prefers this. I sing songs that I think the participant knows and likes, and observe the reactions to the different songs. Immediately after the session I write down these reactions and responses. Normally, when two people are sitting together, they might confirm the relation by talking or working together. In this setting the talk is replaced by singing and sometimes by silence in-between the songs. The purpose is to create the framework for a safe setting, to focus on remaining abilities and resources, to trace and choose personal meaningful songs, to offer contact, acceptance, and understanding, and finally to enable communication and dialogue. The songs that we/I

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choose generally have appeal to this generation of older persons from a North European, Danish culture where singing together often – but not always – has been an important part of life. The texts of these songs seem to name a richness of dimensions in daily life and to give new perspectives to trivialities, – or to put in words sublime moments. The poetry add essential proportions to the musical elements of the songs, and even with persons suffering a dialogic degenerative disease the poetic and narrative elements of the songs might fascinate and enchant in the way it transforms banalities, simplify the complex and incomprehensible, or present symbols that give meaning to lived experiences.

3.2 Research method

The research is carried out in an *open system* with an understanding that the participants in the study interact with their surroundings and that it is not possible to control variables – in contrast to research in *closed systems* such as laboratory conditions. The method used is an explorative case study approach. In the second edition of "Real World Research" Colin Robson distinguishes between fixed and flexible research designs (Robson 2002). In fixed designs a tight pre-specification of data collection and data processing is needed, which demands thorough preliminary work and has the advantage that the amount of data is reduced to manageable levels right from the beginning. Flexible designs evolve during data collection, which moves the thorough and systematic burden of work to *after* the data collection in the process of data reduction. The data might have various forms; often transcribed words from interviews or observations, that become manageable when focus is put on certain phenomena or when data is sorted in codes or categories. Rather that relying on previously defined tools and instruments as in fixed designs, flexible designs involve the 'researcher-as-instrument' (Robson 2002). In this research a flexible design that integrates both qualitative and quantitative data is implied.

First individual music therapy sessions are carried out with six participants, each taking part in 20 sessions lasting 20-30 minutes. The sessions are carried out as normal everyday practice to retain a 'naturalistic setting'. The participants are chosen according to certain inclusion criteria that include a diagnosis of primary degenerative dementia and vascular dementia at stage 6 (GDS, FAST) with no source of cognitive impairment or communication impairment other than dementia. They show agitated behaviour (as defined by Cohen-Mansfield & Billig 1986) and had no previous participation in individual music therapy. It was NOT considered as an inclusion criterion that participants should be 'suitable' to music therapy and their musical background did not influence inclusion.

Each of the six participants took part in daily (not Saturday and Sunday) music therapy sessions for four weeks, and all 6 music therapy courses took part on different times of the year. Each session was video recorded, and transcripts of video observations focussing on the participant's responses were made to each session. The observations were registered with a precise time indication. As another data source subjective impressions and thoughts made by the music therapist were written down immediately after each session.

A third data source was heart rate measurements that were measured in five-second-intervals during all sessions. Additionally heart rate levels were measured at the same time of the day in the week before music therapy started, and in the week after the music therapy had stopped as comparative data. A fourth data source was questionnaires filled out by staff twice a day. Here number of staff on duty was noted as well as the participant's state of health, changes in daily routines and medication, and observations on agitation.

The video data were reduced to 8 clips all together lasting 9 minutes. These clips were analysed in a semi-structured way by 5 external assessors. The transcripts of these analyses were processed with help of the qualitative research software, Atlas.ti (www.atlasti.de), using coding techniques, which in the end suggested six primary categories of communicative signals. The case studies were analysed by relating video observations, time scale, and heart rate measurements graphically or in matrices, and by using techniques of event-coding and pattern-matching.

4. RESULTS

In the research following results are found:

- Singing has a positive influence on the 6 participants suffering from moderately severe dementia. This influence is defined by degree of compliance, by changes in heart rate levels, and by various ways of taking part in the music therapy.

- The six participants communicated responsively and this communication can be recognised by a system of communicative signs, representing different levels of communication: emotional valence, receptive participation, sociality, active participation, communicative musicality, and dialogue. There exists a relationship between a balanced arousal level and communication at more intensive levels for all six participants.

- In 5 of 6 concrete cases music therapy shows an influence on aspects in residential daily life, defined in a statistical significant decrease in heart rate levels pre/post therapy, for persons with moderately severe dementia showing agitated behaviour.

5. CONCLUSION

6 persons suffering from moderately severe dementia or a dialogic degenerative disease clearly profited from the music therapy sessions. They were able to communicate in spite of severe language problems, and were able to be brought into a state where a communicative dialogue could take place. The songs offered a structure that functioned in focussing attention by mediating stability, as well as social and contextual cues. Additionally the songs were used in regulating the arousal level of the participant towards environmental attention and a state most optimal for entering dialogue.

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The clinical effect of using familiar songs is strong, as the songs function with constitutional, regulative, dialogical, as well as integrative aspects. The narrative and musical elements in the songs make it natural working with para-linguistic elements such as timbre, tempo, volume, pitch, and timing, and create a condition where nonverbal and social elements in a natural way becomes part of the communication. In this sense the individual music therapy setting can be carefully adjusted to the person, which makes it possible to meet psychosocial needs. As a regulative activity music therapy increases quality of life for the person with dementia, and promotes communication at various levels. Music therapy also offers a possibility for working psychodynamically, bringing curative change to secondary symptoms of dementia.

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