
Emotional response to social dancing and walks in persons with dementia

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Abstract

The emotional response to social dancing and walks in persons with dementia was studied to better understand the feasibility, popularity, and meaning of these activities from the perspective of the patient. Social dance events and walks were videotaped and analyzed using Husserl's philosophy as a basis for the analysis. Six persons with dementia participated in the study. The results are described in terms of four interrelated themes: 1) the engaged body; 2) the caregivers' understanding, encouragement, and response to patients during the activity; 3) mutual tenderness and communion; and 4) environmental conditions. Results were then synthesized into a general assessment of the emotional states observed and reported in relation to the activities.

Key words: Alzheimer's disease, dementia, nursing home, caregiver intervention, emotional reaction, phenomenology, social dance

Introduction

Cognitive impairment in persons with dementia produces emotional states such as tension, fear, and anxiety,¹ but commonly occurring emotional problems are certainly only partly due to the brain damage. Such problems are also influenced by external environmental factors and caregiver interactions.² Persons with dementia may

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experience more anxiety than they exhibit; findings indicate that personality qualities are more preserved than might be expected considering the level of disability.^{3,4} Several researchers have found that persons with dementia are emotionally sensitive to different caregiver interventions³⁻⁸ and caregiver perceptiveness and understanding in specific situations.^{7,9} Many of the problems are connected with care environments such as group dwellings and nursing homes that can either over- or understimulate the residents.¹⁰

Little research has been carried out to study what kinds of caregiver interventions are beneficial for persons with dementia from the viewpoint of their emotional reaction. Some of the presumptions based on everyday communications may not be accurate in view of the fact that persons with dementia have a rich emotional life.⁶ Caregivers have to understand that psychological defenses, which normally provide emotional stability and protection, may have broken down in persons with dementia, making them emotionally vulnerable in all caregiver interventions. This has resulted in the development of *emotion-oriented* approaches to dementia care, which aim to make the care fit the emotional needs of patients by linking up functional possibilities and subjective experiences in these individuals. An example of the emotion-oriented approach is art therapy in the form of music, dance, or painting.^{11,12}

What we already know about the emotional effects of social dancing has been set forth by Palo-Bengtsson and coauthors in several publications.^{9,13-16} Some of the results show that persons with dementia were emotionally responsive to social dancing, experiencing much joy and amusement. The positive emotions were prominent, although there were also negative ones. Dancing especially seemed to evoke a positive response with regard to communication, with participants experiencing emotional reactions appropriate to their level of dementia.

These results gave rise to the question of whether other interventions could stir positive emotions, such as joy and amusement, in persons with dementia.

Walks were chosen as a caregiver intervention that was a part of the daily life of caring for this population. The logic behind the choice of dancing and walks was the theoretical interdependence between movement and emotion.¹⁷ Unlike standard interventions, these activities offer a chance to move outside the ward, a change that can help stimulate emotional responses. Of course, there are differences between the rhythmic components of walks and dancing. Walking provides a single rhythmic pace, while in dancing, they are many rhythms that are, in turn, supported by music. Either way, rhythm is so basic to survival that it is familiar to all individuals and requires no cognitive processing.¹⁸

Method

Context of the study

The study was carried out in one nursing home in Stockholm, Sweden. The nursing home is comprised of 13 wards, including three wards and one day-care unit specifically for care of persons with dementia. The majority of the staff were recruited and trained in the care of such patients.

Dance events

Different kinds of dance events had been arranged in the nursing home during the preceding years. The dance events discussed here were intended for all residents of the nursing home, their relatives, and caregivers and took place in a large entertainment hall once a month. The number of residents, relatives, and caregivers in attendance varied from about 50 to 100 for each event. Dances took place over a 45-minute period. A local band played popular dance music. The events were arranged as dance-café, with the participants seated at tables and given the opportunity to drink coffee, listen to music, or dance.

Organized walks

Various walks were arranged around the nursing home. They were designed to include only small groups of dementia patients and their caregivers. Some of the participants were transported in wheelchairs. The walks from the day-care unit were systematically planned and structured in accordance with the physical and mental capacity of participants as well as the level of dementia. The aim was that all persons with dementia who came to the day-care unit would take a walk every day.

Participants

Six persons with dementia were chosen for the study

after the first author had discussed the matter and received informal approval from the caregivers and the relatives. The researchers also asked the permission of the patients. In addition, permission to carry out the study was obtained from the Committee for Ethical Research at the Karolinska Institute. Two of the participants were women, and four were men. One of them participated in the day-care program; the remaining five were residents. The average age of the participants was 85 years. The date of admission to the nursing home or the day-care program varied from 1992 to 1997.

All participants were assessed with the Gottfries-Bråne-Steen (GBS) scale, which measures degree of dementia and profiles of dementia.^{19,20} The total GBS points varied from 58 to 112, which means that all the persons in this study fit the criteria for dementia (Table 1).

Data collection

Observational data were gathered by videotaping one social dance session and one walk for each of the six study participants. Videotapes of the dance events were 45 minutes long while those from the walks varied from 20 to 45 minutes. Dance sessions were videotaped using two cameras; walks were videotaped using one camera. As part of the study approval process, participants and their families were promised that the films would not be shown to any persons other than the researchers.

Data analysis

Phenomenology has been used both as a philosophy and as a methodology. Data analysis was inspired by the descriptive phenomenological method developed by Giorgi²¹⁻²⁵ and based on the philosophy of Husserl,²⁶ which makes the assumption that all scientific knowledge is based on lived experiences. Human consciousness is a key concept in Husserl's work. People are able to make choices when their attention is focused on something that has a meaning for them (*intentionality*). The real life-world can be understood only through these individual experiences. Since this study was to be based on the observations of the individual experiences of persons with dementia, the descriptive phenomenological method seemed to be the best option. This method has been used by Palo-Bengtsson and Ekman in additional nursing research^{9,13} that analyzed social dancing.

Despite the fact that phenomenological researchers should avoid all theoretical assumptions regarding the phenomenon under investigation, we do make some clarifications of emotions and emotional reaction. The researchers' own beliefs, ideas, theories, and personal and theoretical knowledge are bracketed—a mathematical metaphor

Table 1. Description of the study participants. Sex, age, date of admission, and results of Gottfries-Bråne-Steen (GBS) scale evaluation in six subjects with dementia

Subjects	A	B	C	D	E	F
Age	76	93	91	80	77	94
Admission	1996	1992	1996	1997	1997	1992
Total GBS points	58	112	109	72	99	73
Sex	M	M	M	M	F	F

introduced into phenomenology by Husserl.²⁶ The researchers do not attempt to classify or measure emotions. Most emotions can be identified as pleasant (joy, love) or unpleasant (anger, fear). By using this method, the “emotional reaction to social dancing and walks” was identified by an inductive approach rather than a classification system of emotional reaction.

Nor, for the purposes of the study, do the researchers attempt to pinpoint where the subjects’ emotions begin on the intensity scale. They try to answer the following question: What is the emotional reaction shown or not shown in subjects during social dancing and walks? Inductive judgments are based on facial expressions, bodily movements, body posture, eye contact, touch, and tone of voice.^{27,28}

Data analysis contained five systematic steps²²:

Step 1. Researchers viewed all the videotapes with an attitude of inquiry, asking themselves how the phenomenon under investigation appeared, what the conditions were, and what meaning it might have regarding patient care. The viewing involved not simply watching the films but also attempting to understand the expressions of emotional reaction in participants. Because there was a risk of presumptions and preconceived expectations of response, the researchers tried as much as possible to bracket their knowledge of the phenomenon.

Step 2. Videotapes were transcribed into a manuscript that contained a systematic, phenomenological description without intentional or conscious interpretation. The transcripts covered each person with dementia and included a report on his or her surroundings during the filming, together with an account of different situations occurring during the activities studied.

Step 3. With the dynamic whole of the film in mind, the manuscript and the videotapes were

subdivided into “meaning units.” The number of meaning units for each participating person depended on the content and length of observed actions during the videotaped sessions. The manuscript together with the video films provided a structure for the analysis.

Step 4. Meaning units were systematically analyzed in the phenomenological reduction by transforming the various emotional reactions of the subjects into distinguishing variations. These variations expressed as widely as possible the phenomenon under investigation. This phase of the analysis served to convert everyday descriptions into constituent themes.

Step 5. The transformed meaning units were synthesized into a general structure measuring the emotional response to social dancing and walks. All of the data were accounted for in this step.

Results

As described earlier, the emotional response of participants to the described activities was gauged in terms of four interrelated themes: 1) the engaged body; 2) the caregivers’ understanding, encouragement, and response to patients during the activity; 3) mutual tenderness and communion; and 4) environmental conditions. Initial observations after viewing the video films indicated that emotional reactions appeared more often during the dance events than during the walks.

Theme 1: The engaged body

Emotional reaction as a response to the engaged body was obvious in all subjects, but particularly so during the dance activity. Participants seemed to forget their frail physical condition and minimal fitness level while dancing, although this was not necessarily the case while walking.

During the walks, body mobility was affected in subjects transported in wheelchairs, particularly when the weather was cold and warm clothes were required. Therefore, the wheelchair transport seemed to inhibit emotional reaction. When participants got out of the wheelchair for a time and walked, however, their emotional reaction was aroused.

Awareness of the body, body posture, and bodily capacity seemed to increase when persons with dementia moved and stretched their bodies. None had difficulty understanding how to execute movements in dancing.

Theme 2: Situational understanding, encouragement, and response from the caregivers

Caregivers purposefully supported the residents during the dance activity. They understood the limitations of movement in the severely physically frail participants. One caregiver kept in constant, close contact with a resident by looking at his face, holding him in her arms, and maintaining the same straight body posture during the dancing. She also constantly kept his hand in her own when they sat and looked at the couples.

In the day-care unit, caregivers prepared and motivated participants for the outside walks. The walks were individually planned and carried out on a daily basis, which required that caregivers take into account situations and circumstances that varied from day to day. A cheerful conversation in the group showed how the caregiver's engagement supported positive emotional reactions among the subjects.

Theme 3: Mutual tenderness and communion

Dancing, more so than walks, created mutuality and communion, which in turn created several emotional reactions. However, during the walks, particularly for the day-care unit, instances of mutual tenderness and intimate contact did occur. For example, the participants walked arm-in-arm and helped each other. They knew each other well and seemed to be good friends. Few signs of mutual tenderness and communion were shown to the subject transported in a wheelchair; the caregivers' active engagement was always required. The wheelchair dancing seemed to be different. For example, one man seemed to enjoy it, as could be seen in his face when he smiled and laughed together with his caregiver.

Theme 4: Environmental conditions

Dance events and walks mean for persons with dementia that they come together with other people. Changes in the day-to-day environment seemed to increase their interest in people and stimulate them to form new social contacts.

Environmental conditions differed between the dancing and the walks, causing variations in emotional response. During the walks, persons with dementia spontaneously commented on occurrences around them in the park. For example, one man, when he saw a horse and carriage pass by, suddenly stood up and exclaimed, "Nice turn-out!" Participants laughed and smiled, exhibiting an increased ability to communicate with other participants.

The environmental stimulation of music was the most important factor creating a positive atmosphere and, therefore, a positive emotional reaction during the dance activity. Persons with dementia responded automatically and directly to the dance music and the rhythm it evoked. Participants who sat in their chairs rocked and tapped their feet. Some participants responded by singing the words, humming the melody, or applauding. Even though they eventually got tired, their emotional response to music and movement was significant.

Discussion

What interrelated occurrences were required to evoke an emotional reaction in the subjects in this study? There were both similarities and differences among the two interventions. Body engagement was the most important and meaningful theme. Awareness of the body and body posture took a natural part in dancing but did not apply when a wheelchair was used during walks. Movement was, in turn, connected with the caregivers' active engagement with participants, their constant encouragement, and their sensitive responses to patient's needs. In dancing as opposed to walking, it was easier for the caregiver to encourage these reactions because of their increased support role, which was connected with environmental conditions such as the dance music.

The synchronous movement in dancing created an easy atmosphere, which in turn created mutual tenderness and communion between persons with dementia and their caregivers. This kind of atmosphere was less easy to achieve during the walks. However, both caregivers and participants in the walks created communion and showed tenderness in communication with each other. This in turn was connected their emotional openness to forming new social contacts.

The most significant result was the emotional reaction shown when persons with dementia moved and their bodies were engaged. These results are in line with research by Hanna.²⁹ Body movements created a positive physical experience, providing an opportunity for participants to forget their somatic impairments. Therefore, it is important that interventions involving body movements become an organized part of the care process to encourage appropriate emotional reaction in persons with dementia.

For wheelchair patients, a short walk outside of the chair

with a supportive caregiver may be better than a long walk confined strictly to the wheelchair to maximize the potential for a positive emotional response. We also recommend organizing musical events accompanied by dance activities more often than those without to provide people with dementia the opportunity to move³⁰ and use their bodies to articulate emotions, which happened automatically in dancing and sometimes during the walks. According to Murphy,³¹ the loss of synchrony between mind and body has little compensation for most disabled people.

The environmental conditions during the dance activity and sometimes during the walks evoked such emotional reactions as happy facial expressions, laughs, and smiles congruent with body movement. Persons with dementia who lose access to valued and enjoyed activities become completely dependent on the caregivers' interpretation of what interventions provide joy, amusement, and flow.³² They are able to participate in fewer and fewer meaningful and purposeful activities as the disease progresses.

The practical implications of this study can be seen in a care-planning light. If caregivers understand the connection between these interventions and the depth and range of emotional reactions they evoke in persons with dementia, they can adapt activity curricula accordingly. When walks are individually prepared and caregivers engaged in the planning, it seems to improve the quality of the emotional reaction for patients. Dance events and walks as valuable caregiver interventions need to be understood at both an organizational and practical level to improve emotional response in persons with dementia in a long-term care environment.

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