

FOCUS AND EFFECTIVENESS OF PSYCHOSOCIAL INTERVENTIONS FOR PEOPLE WITH DEMENTIA IN INSTITUTIONAL CARE SETTINGS FROM THE PERSPECTIVE OF COPING WITH THE DISEASE*

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ABSTRACT

Introduction: The care for persons with dementia with chronic diseases has changed much in the past decades. This counts for the care for people with dementia as well. The care presently offered is not merely aimed at improving or stabilizing the medical condition of the person, but also at improving their quality of life by supporting the person in accepting his disease and coping with the consequences of it. Based on this perspective, many psychosocial interventions were developed in the past decades. The aim of this study was to get insight in the effectiveness of these interventions in the different adaptation areas.

Method: Several literature reviews into psychosocial interventions offered in institutional care to people with dementia were analysed. The reviews covered the period from 1970 until 2007. The interventions were categorised according to their aim to support people in coping with one or more adaptive tasks, as described in the Adaptation-coping model (Dröes, 1991; Finnema et al., 2000).

Results: Most of the investigated psychosocial interventions were aimed at supporting people with dementia in Maintaining an emotional balance and Coping with disabilities. Regarding *Maintaining an emotional balance* psychomotor therapy, music therapy, adapting the living environment, validation, snoezelen en pet therapy are most frequently investigated and have shown to be able to positively influence behaviour

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symptoms, such as: aggression, apathy, restlessness, depressive and anxious behavior. In the area of *Coping with own disabilities* interventions such as reality orientation, activity groups, normalising living pattern and structuring daily activities have shown to be effective in improving cognitive functioning and conducting daily activities. Also relatively many studies are conducted into *Maintaining social relationships* and *Coping with the care environment* (e.g. homely environment with enough privacy and normal living pattern). Few studies investigated interventions to help people *Develop an adequate care relationship with professional carers* and to *Preserve a positive self-image*. No studies were found into interventions to help people *Cope with an uncertain future*. The most broad effects were found with pet therapy, snoezelen, psychomotor therapy, normal living pattern and creating a homely environment.

Conclusion: Psychosocial interventions can be utilised for adaptation problems in several areas. For each area several interventions are available. Choices for individual treatment need to be based on the individual needs, personal characteristics, preferences and goal behaviour of the person with dementia.

Future research should focus on better designed studies (RCT's) and predictors of effective psychosocial interventions for the treatment of different adaptation problems.

Keywords: psychosocial interventions, persons with dementia, Adaptation-coping model.

INTRODUCTION

The perspective on care for chronic persons with dementia, and therefore also the care for chronic *psychogeriatric* persons with dementia, such as people with Alzheimer's disease and other types of dementia, has changed profoundly over the last 40 years. Today, the emphasis is no longer only on medical-hygienic issues, but also on psychosocial aspects such as: guiding the person in accepting his disease, coping with the consequences of the disease, and ultimately on the quality of life. The setting of new goals in care has led to the development of a range of new care and treatment methods.

In this paper the different perspectives on care and treatment are outlined. The perspective of the person with dementia is addressed as well: what does dementia mean to him, what are the problems he encounters, and what does he have to do to maintain a certain balance. Subsequently it is examined what psychosocial treatment methods are used to support people with dementia in coping with the consequences of dementia (in order to maintain a balance in mood and behaviour), and what results these methods have had so far. And finally, some conclusions are drawn and recommendations are made.

Changing Insights into Care and Treatment

Until forty years ago aid to people with dementia was based almost exclusively on the *medical model* (see Figure 1; Dröes, 1991). The aid from this medical perspective focuses on treating, and if possible curing the disease, and so for a long time there was a therapeutic nihilism regarding people with dementia. For as long as the cause of dementia was unknown, and as long as the degeneration of the brain tissue could not be influenced, the dementia process could not be turned around or brought to a halt. The treatment of people with

dementia therefore consisted mainly, apart from professional care, of symptomatic and social measures (like psychopharmacological therapy and occupational therapy).

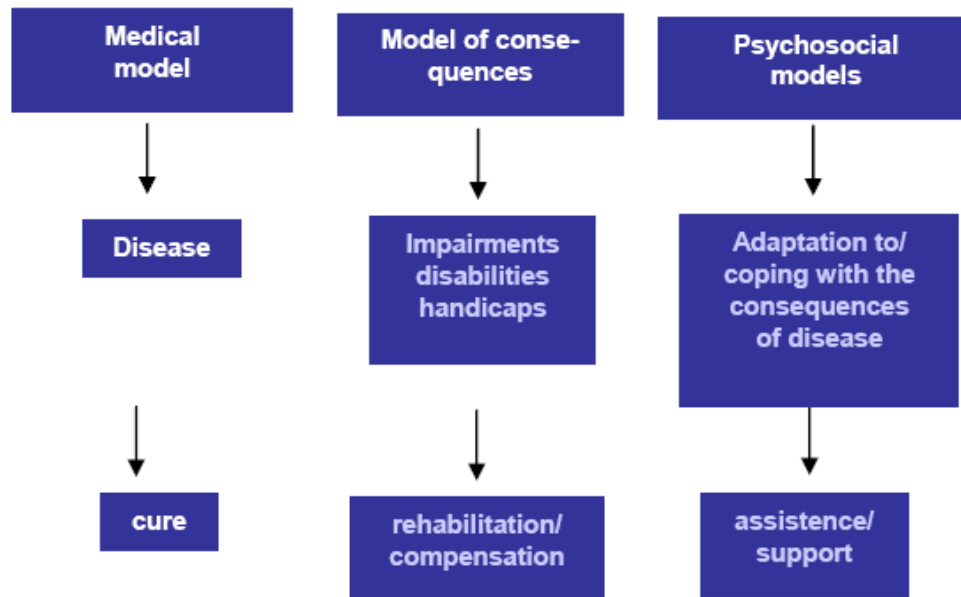


Figure 1. Perspectives in care and treatment.

Starting from about 1970 the emphasis in the treatment shifts to reactivation, partly because of the development of the rehabilitation function in the nursing home where people with dementia often reside. The objective of the treatment at that time is (apart from nursing, care and if necessary medical assistance) the reactivation of the patient to the maximum attainable level of physical, psychological, and social functioning. Not the disease, but the *consequences* of disease (impairments, disabilities, handicaps; ICIDH, 1980), are central in the rehabilitation model. This is why this model is also referred to as the *Model of consequences* (Bangma, 1988). For the person with dementia this meant that the treatment was aimed at preventing, or slowing down the further deterioration of his level of functioning. The emphasis was on *(re)activating* cognitive functions (for example memory training and reality orientation training (ROT)), and on *functional compensation* (for example signposts in the corridors of the nursing home, a photograph of the resident near his own bedroom, and functional colours, each department or functional service or door having its own colour). In this context the term *prosthetic environment* is frequently used.

As a result of this shift in interest from 'disease' to 'the consequences of disease' over the course of the 1980s, there is a gradual increase in interest in the *psychosocial* consequences of dementia. Attention gradually shifts from *functional thinking* to *the experiences* of the person with dementia (Dröes, 1991). Do the cognitive activation strategies actually benefit this person psychologically? Do they enhance the quality of life? Memory training has not yielded the anticipated or hoped-for effect. In some cases the confrontation with their own disabilities actually prove to *demotivate* rather than stimulate the person with dementia. Gradually the care sector is becoming more sensitive to the emotions and experiences of the person with dementia, and develops more understanding for his behaviour, and also how this behaviour is

affected by the interaction with the environment (Dröes, 2007). Based on this understanding the sector has endeavoured, since the 1990s, to develop and offer *emotion-oriented care*: care that is actually in line with the emotional world, experiences and the needs of individuals (APA, 1997; Van der Kooij, 2003).

The theoretical models used to describe and explain the experiences, behaviour and mood of psychogeriatric residents, originate in clinical psychology, developmental psychology, social psychology and psychiatry. We call them *emotion-oriented or psychosocial models* because they focus on the emotions and experiences of the person with dementia and the psychosocial consequences of the disease. Examples of these models are:

- The Developmental Stage Model of Erikson (1963). This model was applied for the first time in the psychogeriatric field by Naomi Feil (1989), founder of the Validation approach. Erikson distinguished various stages in human development, and the last stage before death is: finding ego integrity. During this final stage conflicts of the past are thought to be resolved through reminiscing. According to Feil this final stage is difficult to successfully complete if you are suffering from dementia, because of the cognitive disorders. However, elderly people with dementia will also sometimes be troubled by unresolved conflicts from the past. By giving them the opportunity to express their feelings they also, according to Feil, can experience a certain degree of relief, which she calls 'resolution'.
- The Dialectical Frame work of Kitwood (1992): Kitwood, an English social psychologist, viewed the behaviour of people with dementia and the process of dementia not merely as the consequence of increasing neurological damage, but as the result of the interplay of many factors, such as: personality, life history, physical health, and the social-psychological environment. He points specifically at the impact (both positive and negative) that the *environment* can have on people with dementia. Kitwood has strongly influenced dementia care in the United Kingdom, especially with the method he developed called 'Dementia Care Mapping'. This is a method of observing the (positive and negative) behaviour of nursing home residents and how this relates with the behaviour of the (professional) caregiver.
- The Attachment Theory of Bowlby (1969, 1973, 1980): This theory was introduced in the psychogeriatric field in the Netherlands by Bère Miesen (1990). According to Miesen a part of the behaviour of elderly people with dementia (namely their being fixated on their own parents, thinking they are alive, and feeling the constant need to be near them) can be explained by the absence of attachment figures in the immediate environment, e.g. in the nursing home, and the anxiety this induces. The person with dementia will only feel safe again when he starts to attach to the new environment and the persons in it. Miesen tested the attachment theory in a study among psychogeriatric nursing home residents (N=40) and found that two thirds of these residents showed parent-fixation. The degree and the way in which parent fixation existed appeared to be related to the stage of dementia. It was especially exhibited by people with dementia who had a low level of cognitive functioning.
- The Adaptation-coping model (Dröes, 1991; Finnema et al, 2000a): This model, that is based on the stress-appraisal-coping model of Lazarus en Folkman (1984) and the crisis model of Moos and Tsu (1977), is a conceptual explanation model to understand the behaviour of people with dementia and the adaptation and coping

processes people with dementia go through. Central in the model are a set of adaptive tasks that people with dementia encounter as a consequence of their illness (such as 'coping with own disabilities' and 'preserving an emotional balance'; see Psychosocial treatment). The degree to which each adaptive task is experienced as stressful depends on the individual cognitive appraisal of the task. According to the model behaviour and mood dysregulations in people with dementia can be partly explained as difficulties people have with coping with these adaptive tasks. The model is also intended as a broad framework based on which all aspects of the psychosocial care can be organized (see Psychosocial treatment). The model was tested and validated in research into the effectiveness of Psychomotor therapy in nursing home residents with probable Alzheimer's disease in which a confirmatory factor analysis on the applied outcome instruments showed outcome clusters that could be identified as outcomes on different adaptive tasks (Dröes, 1991) and by means of qualitative observational research in nursing homes, in which observation data were collected in four of the adaptive tasks areas, which resulted in operationalization of the behaviour in each of these areas; De Lange, 2004). The usefulness of the model was also tested in care practice as a base for a comprehensive support programme for people with dementia and their carers, the Meeting Centers Support Programme (MCSP). To support people in coping with the different adaptive tasks, in the MCSP different treatment strategies are applied (reactivation, resocialization, optimizing emotional functioning) and support activities offered (e.g. recreational activities, a social club, discussion groups and psychomotor therapy) (Dröes et al., 2000, 2004; Finnema et al., 2000a)

Other examples of stress-coping models are the Progressively Lowered Stress Threshold model (Hall and Buckwalter, 1987; Smith et al., 2004) that shows that the threshold at which people with dementia experience stress becomes lower when the dementia progresses and the Hagberg Psychodynamic model (1997), which is based on coping in a life span perspective.

The development of new, emotion-oriented models naturally does not mean that the medical model and the Model of Consequences have become worthless. In general one could say that the use of a particular theoretical framework must be guided by the patient's care request or needs. For many requests for assistance a combination of the various perspectives will be preferable. In psychosocial care the starting point is a psychosocial request for assistance, or expressed or observed need.

THE PSYCHOSOCIAL AID REQUEST: THE PERSPECTIVE OF THE PERSON WITH DEMENTIA

What are the requests for assistance and needs of people with dementia? Apart from the cognitive impairments that occur in dementia, that can be viewed as direct consequences of the degeneration of the brain, making people more or less dependent in activities of daily living, we also almost always see in people with dementia *other* types of dysregulation in mental functioning, behaviour and mood. Examples are depressed, anxious, aggressive

and rebellious behaviour, agitation, wandering, suspicious behaviour, delusions and hallucinations.

In the past these behaviour and mood disorders were viewed as resulting more or less directly from the brain degeneration. Today the prevailing view is that, in addition to organic or biological factors, psychological and social factors can play an important role in the disruption of the balance.

For example it is very possible that a person with dementia becomes disregulated partly because he has difficulty coping with the changes he goes through in the dementia process (Cohen, 1991; Dröes, 1991; Cotrell and Schulz, 1993; Cotrell and Lein, 1993; Reisberg, 1996; Hagberg, 1997; Clare et al., 2002; Dröes et al., 2006; De Boer et al., 2007). These, usually far-reaching, changes, from ‘not knowing your way home when you leave the supermarket’ up to and including ‘admission into a nursing home’ can lead to huge stress. The individual tries to cope with this, consciously or subconsciously. In this way, it is thought, he attempts to regain a sense of control and balance. This adaptation process is not equally smooth and adequate in all cases, mainly because of differences in specific cognitive impairments, in the personality of individuals and their interaction with the environment.

The fact that people with dementia experience a lot of stress is also well known from neuro-biological research: different stress-regulating systems in the brain are shown to be highly activated in Alzheimer’s Disease (Hoogendijk et al., 1999). Intervention studies, in which group discussions are conducted with people with dementia, also confirm the stress-coping concept (Labarge and Trtanj, 1995; Moore, 1997): the problems people with dementia reported experiencing were linked on the one hand to their own cognitive decline and the disabling consequences this has for their everyday functioning, on the other hand with the emotionally challenging adaptation demands the disease brings for them and for their environment (Cohen, 1991; Dröes, 1991; Kiyak and Borson, 1992; Cotrell and Schulz, 1993; Cotrell and Lein, 1993; Clare, 2002). We are also increasingly hearing similar testimonies in the Alzheimer’s Cafes (Miesen and Jones, 1997) and Meeting Centres for people with dementia and their primary carers (Dröes et al, 2003). Recent research among people with dementia and informal carers by Van der Roest et al. (2009) shows that some 30% of community dwelling people with dementia experience psychological distress.

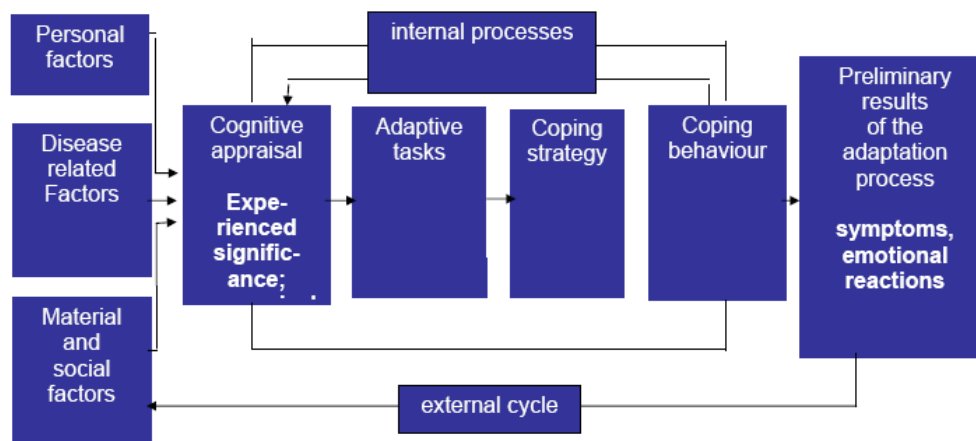


Figure 2. The adaptation-coping model (Dröes, 1991; Finnema et al., 2000).

In the past forty years a range of psychosocial treatment methods have been developed that aim to reduce these problems and that have also partly proven effective (Dröes, 1997; Finnema et al, 2000b; Smits et al., 2007; Moniz-Cook and Manthorpe, 2008). Before describing the areas on which those treatments were targeted and their effects, a definition of 'psychosocial treatment' is presented.

Psychosocial Treatment

Psychosocial treatment can be described as the aid or care that is offered to reduce or prevent the mental and behavioural problems that occur in the process of adaptation to the consequences of dementia. In other words, offering assistance in coping with various consequences of dementia. From a theoretical perspective psychosocial aid must be viewed as the action that results from the psychosocial models, for instance the Adaptation-coping model (Dröes, 1991, 1996; Finnema et al., 2000a; see Figure 2). The essence of this model is that dementia causes changes in the life of the person with dementia that he will have to cope with in order to preserve a balance. In other words, an adaptation process takes place. The individual is faced with disability, this threatens his emotional balance, interaction with friends changes, etcetera. Coping with these indirect consequences of the dementia is operationalized in this model with the term *adaptive tasks* or assignments. The way in which the individual copes with the different adaptive tasks is influenced by his own life history, his mental and physical health, and his social and material circumstances (on the left of the model). What we ultimately see is the result of the adaptation process, namely the behaviour, emotional reactions and symptoms (on the right of the model).

The adaptation-coping model distinguishes seven general adaptive tasks, following Moos and Tsu's crisis model (1977):

- coping with one's own disability
- preserving an emotional balance
- preserving a positive self-image
- preparing for an uncertain future
- dealing with the day care, the care home or nursing home environment and procedures
- developing an adequate care relationship with staff
- developing and maintaining social relations.

If a person with dementia develops behavioural problems, for example very passive, restless or aggressive behaviour, then according to the model this may indicate he or she has problems with one or more of the listed adaptive tasks. In addition the way in which the person with dementia copes with the different adaptive tasks may be influenced by the way in which he is treated by his environment. Does this environment, for example, show understanding for the emotions of the person with dementia and does it actually offer security, social contact and practical assistance? Or does the environment confront the individual with his disability and lack attention for the emotions this causes?

These are the questions that are asked in psychosocial care and that form the starting point for the treatment. The key is to gain insight into the experiences of the person with dementia (as far as possible) and the way in which he/she, in interaction with his/her environment, copes with the consequences of his/her dementia, and subsequently to offer assistance to help him/her.

Examples of psychosocial treatment methods that have been applied in psychogeriatric care in the past 40 years, and are still used today (see e.g. Dröes, 1997; Finnema et al., 2000b; Moniz-Cook and Manthorpe, 2008), are:

- Supportive psychotherapy
- Psychomotor therapy
- Behaviour therapy
- Normalising living pattern and living environment
- Activity groups
- Reality orientation
- Music therapy
- Reminiscence
- Validation
- Integrated emotion-oriented care
- Snoezelen
- Aroma therapy
- Simulated presence therapy,
- Pet therapy.

Focus and Effects of Psychosocial Treatment Methods in Institutional Care Settings: An Analysis of the Literature

Based on three previous literature reviews (Dröes, 1991; Dröes et al., 1997; Finnema et al., 2000b) and a recent literature study into the relationship between personal characteristics of people with dementia and effectiveness of psychosocial treatment (Van Mierlo et al., 2009), we analysed the literature on psychosocial intervention studies with positive outcomes from 1970-2007 to get insight in their focus and effects in the different adaptation areas as defined in the Adaptation-coping model.

METHODS

For this analysis we used the following inclusion criteria: We included all studies that were reported on in the four mentioned reviews of Dröes (1991), Dröes et al. (1997), Finnema et al. (2000b) and Van Mierlo et al. (2009), that investigated the effect of psychosocial treatment methods in people with the diagnosis Alzheimer's Disease and Dementia (not otherwise specified) residing in institutional care settings, and that reported positive treatment outcomes. We made no restrictions regarding study design. Studies with no positive effect(s)

were excluded from our analysis. In the mentioned reviews used for this analyses the following databases and key words were used in the literature searches:

- Dröes (1991) and Dröes et al (1997) searched the following electronic databases in the period of 1970-1996: Social Science Citation Index, International bibliography of Alzheimers Disease and senile dementia (Biosciences Information Services), Dissertation Abstracts on line, Excerpta Medica, Mental Health Abstracts, Sociological Abstracts, Index Medicus, Psychological Abstract and a series of professional journals in the field of Aging, Psychiatry, Psychology, Gerontology, Physical activity and Rehabilitation. They used the following keywords: aging, movements, psychogeriatric, psychomotor, psychosocial, therapy, dementia, effect(s), elderly, evaluation, SDAT, senile dementia, behavio(u)r therapy/treatment, movement therapy, activity therapy, psychotherapy, group therapy, dance therapy, music therapy, occupational therapy, play therapy, drama therapy, validation therapy, reminiscence, and reality orientation training.
- Finnema et al. (2000b), that focused their review on psychosocial methods that could be integrated in 24-hour care, searched the following electronic databases in the period of 1990-1998: Medline, PsycLit, Embase, Sociofile and Current Contents. In the search the terms dementia and Alzheimer's Disease were coupled separately with the following search terms: emotion-oriented, validation (therapy), sensory integration/sensory stimulation/snoezelen/multi-sensory environment/multi-sensory enhancement, simulated presence therapy and reminiscence (therapy)/life review. The snowball effect furthermore enabled the researchers to retrieve other publications based on the references in the publications initially found.
- In the literature study of Van Mierlo et al. (2009) the search was performed through the electronic databases of PubMed, PsycINFO and Cinahl (from January 1990 to February 2008). The aim of this search was to find studies in which psychosocial interventions had been proven to be effective for subgroups of people with dementia. To structure the literature search, firstly reviews were searched on three key categories: "dementia", "person with dementia", and "effective care and support". Within each category, a search strategy was made, based on keywords (Mesh, Thesaurus and Tree) and free text words (intervention studies, outcome studies). The reviews were analyzed for studies that met the inclusion criteria (effects reported on subgroups of people with dementia, such as Alzheimer dementia and female participants), as well as on living situation (at home or in an institutional care setting)

We found 92 studies in these reviews in which positive effects were reported. To get insight in the areas in which the psychosocial treatments have been effective and the type of effects found, we categorized all studies and outcomes based on the earlier mentioned adaptive tasks (see Table 1). We furthermore inventoried for each treatment method in which adaptation area and in which stage(s) of dementia they had reported positive outcomes (see Table 2).

Table 1. Psychosocial treatments and positive outcomes categorized into adaptive task areas on which the treatments focused

Adaptive task	a. Publication reference / total number of publications b. Outcomes
Coping with one's own disability Treatments focused on maintaining functional abilities by activating and decreasing excess disabilities	<p>a. Arkin, 2003; Bergert and Jacobson, 1976; Biernacki and Barrat, 2001; Casby and Holm, 1994; Edwards and Beck, 2002; Francese et al., 1997; Friedman and Tappen, 1991; Gerdner et al., 1993; Gerdner, 2000; Gibson, 1994b; Gorissen, 1985; Greene et al., 1983; Gustafsson, 1976; Hanley et al, 1981; Hanley and Lusty, 1984; Hopman-Rock et al., 1999; Karlsson et al., 1985; Lord and Garner, 1993; Lund et al., 1995; Mayers and Griffin, 1990; Melin and Götestam, 1981; Namazi and Hayes, 1994; Namazi and Johnson, 1992a,b; Nooren-Staal et al., 1995; Norberg, 1986; Reeve and Ivison, 1985; Rogers et al., 1991; Tabourne, 1995; Williams et al., 1987; Yesavage, 1981. Total 31</p> <p>b. (+) Improved cognition: memory performance, orientation, recall, recognition of names and faces, learning abilities, attention span, language, communication, attention, biographical knowledge; improved awareness, improved ability to stay engaged in activities; improved functioning on ADL, selfcare, independent dressing, improved eating behaviour, increased appetite, increased physical strength. (-) less incontinence.</p>
Preserving an emotional balance Treatments frequently focused on improving affective functioning and decreasing e.g. apathetic, paranoid, aggressive, agitated and disruptive behaviour, and anxiety	<p>a. Arno and Frank, 1994; Arkin, 2003; Bellelli et al., 1998; Bianchetti et al., 1997; Birchmore and Clague, 1983; Buettner et al., 1996; Camberg et al., 1999; Casby and Holm, 1994; Churchill et al., 1999; Clark et al., 1998; Cleary et al., 1988; DeYoung et al., 2002; Dröes et al., 1991, 1996; Edwards and Beck, 2002; Fine and Rouse-Bane, 1995; Finnema et al., 2005; Gerdner and Swanson, 1993; Gibson, 1994a,b; Goddaer and Abraham, 1994; Greene et al., 1983; Haffmans et al, 2001; Holm et al.; 1999; Holmberg et al, 1997; Holtkamp et al., 1997; Karlsson et al., 1985; Kim and Bushmann, 1999; Lord and Garner, 1993; Lovell et al., 1995; Lund et al., 1995; McCabe et al. 2002; McCallion et al., 1999; McMinn and Hinton, 2000; Mishima et al., 1994; Moffat et al, 1993; Namazi and Hayes, 1994; Namazi et al., 1994; Norberg et al., 1986; Okawa et al., 1991; Opie et al., 2002; Pinkston and Linsk, 1988; Rasneskog et al., 1996a,b; Romero and Wenz, 2001; Rovner et al., 1996; Spaul and Leach, 1998; Toseland et al., 1997; Van Weert et al., 2005 ; Volicer et al., 1994; Watson, 1998; Welden and Yesavage, 1982; Whall et al., 1997; Witucki and Twibell, 1997; Woods and Ashley, 1995. Total 54</p> <p>b. (+) Improved mood, cheerfulness, affect, happy facial expression, lively, expression of emotions, improved sleeping. (-) decreased depression, agitation, screaming, aggression, anxiety, restless behaviour, repetitive behaviour, rebellious behaviour, hyperactivity, restlessness at night, apathy, boredom, discomfort, hallucinations; less physical restraints; less behavioural problems, less disruptive vocalisations, paranoid expressions, less fidgeting; less dangerous behaviour, less psychotropic drugs, less antipsychotics, less antianxiety agents.</p>

Adaptive task	a. Publication reference / total number of publications b. Outcomes
Developing and maintaining social relations Treatment focused on developing or maintaining social contacts and decreasing symptoms caused by social isolation	a. ArnoandFrank, 1994; Ballard et al., 2002; Camberg et al., 1999; Churchill et al., 1999; Dröes, 1991, 1996; Gibson, 1994a; Gustafsson, 1976; Head et al., 1990; Lord and Garner, 1993; Hopman-Rock et al., 1999; McCabe et al., 2002; Melin and Götestam, 1981; Morton and Bleathman, 1991; Moss et al., 2002; Okawa et al., 1991; Olderog-Millard and Smith, 1989; Pollack and Namazi, 1992; Rovner et al., 1996; Sloane et al., 2004; Spaul and Leach, 1998; Tabourne, 1995; Van Weert et al., 2005; Williams et al., 1987; Woods and McKiernan, 1995. Total 24 b. (+) Improved communication, social contacts, social interaction, speech, verbal and nonverbal expression, word fluency, discourse pattern, interest, group cohesion, touching each other. (-) less social inappropriate behaviour, less talking to oneself, less withdrawn behaviour.
Dealing with day care, care home or nursing home environment Treatment focused at promoting meaningful daytime activities and feeling at home	a. Burton, 1980; Churchill et al., 1999; Edwards and Beck, 2002; Götestam, 1987; Götestam and Melin, 1990; Greene and Jamieson, 1979; Groene, 1993; Gustafsson, 1976; Hanley, 1981 (report of two studies); Hanley et al., 1981; Hussian, 1988; Jenkins, 1977; Reeve and Ivison, 1985; Rovner et al., 1996; Sloane et al., 2004; Williams et al., 1987. Total 17 b. (+) Increased activity level, orientation in place, participation in activities, appetite; (-) decreased sleeping during day time, less passive behaviour, disruptive behaviour, screaming, physical aggression, wandering.
Developing an adequate care relationship with staff Treatment focused on promoting desired autonomy and decreasing excessive dependent behaviour	a. Blackman, 1979; Clark et al., 1998; De Lange, 2004; Haffmans et al., 2001; Sandman, 1988 Total 5 b. (+) Improved eating behaviour, initiative and social behaviour during meals, cooperative behaviour, more adequate care relationship (wanted dependency and desired autonomy); (-) decreased rebellious behaviour, aggression
Preserving a positive self-image Treatment focused at promoting self esteem and life satisfaction	a. Dröes, 1991, 1996; Camberg et al., 1999, Finnema et al., 2005; Van Weert et al., 2005; Woods and Ashley, 1995 Total 5 b. Increased satisfaction, self confidence, self esteem, improved decorum
Preparing for an uncertain future Treatment focused at dealing with feelings about the uncertain future and questions on the meaning of life	a. no publications found Total 0 b. --

RESULTS

Looking at the different adaptive tasks (see Table 1) we found that in the past decades studies focused especially on methods that in one way or another attempted to assist the person with dementia in *preserving an emotional balance* and in *coping with one's own disability*. In the last fifteen years in particular there has been a considerable increase in research in this field. Regarding 'preserving an emotional balance', psychomotor therapy, music therapy, adapting the living environment, validation, snoezelen and animal-assisted or

pet therapy were investigated most frequently and they proved to have a positive effect on emotional behavioural symptoms, such as: aggression, apathy, restlessness, depressive, agitated and anxious behaviour.

The studies of methods in support of *coping with the own disability* generally concerned the stimulation of the use of the residual cognitive abilities and acting (e.g. reality orientation, activities groups, normalization of living pattern and structuring activities). Here one can see besides an improved cognition (e.g. memory, orientation, attention span, biographical knowledge) also improved ability to stay engaged in activities, improved functioning on selfcare, and increased physical strength.

Methods for the *improvement of social relationships* and support for *dealing with the nursing home environment* have also been studied relatively often, unlike methods to stimulate an adequate *care relationship with staff*. Remarkable, positive effects have been achieved in the latter two areas with the behavioural therapy approach and reality orientation training. As far as dealing with the living environment is concerned positive outcomes have been achieved by normalisation of the living environment (a homely environment with sufficient privacy and a recognizable living pattern), such as a positive effect on the orientation, social behaviour, and activity level of people with dementia. To date, few studies have addressed methods in support of *preserving a positive self-image*. And finally, no studies were found into methods to address problems with *preparing for an uncertain future*.

Table 2(a). Treatment effects of the different psychosocial interventions categorized into the seven adaptive tasks areas. For each treatment method it is indicated in what stages of dementia it can be applied (L=Light/mild; M=Moderate; MS=Moderate severe; S=Severe; VS=Very severe)

Treatment method severity (number of effect areas)		Adaptive task						
		1 disability	2 emot	3 self image	4 future	5 environm	6 staff	7 relations
Psychomotor therapy	M-MS (5)	X	X	X			X	X
Normal living pattern	M-MS (4)	X	X			X		X
Behaviour therapy	M-S (4)	X	X			X	X	
Activity groups	M-MS (4)	X	X			X		X
Music therapy	M-VS (4)		X	X			X	X
Reality orientation/CS	M-MS (4)	X	X			X		X
Reminiscence	M-MS (3)	X	X					X
Integrated emotion-oriented	MS-S (3)		X	X			X	
Pet therapy	M-MS (3)		X			X		X
Snoezelen	M-VS (3)	X	X	X				
A.G.E. Dementia Care Program	L-S (3)		X			X		X

Most methods showed some efficacy in more than one adaptation area (e.g. psychomotor therapy in 5 areas and reminiscence in 3 areas)(see Table 2). However, it must be underlined that some methods are aimed at people with mild to moderate severe dementia and others at people with severe and very severe dementia. Some methods are mainly aimed at one specific

adaptive area, such as supportive psychotherapy (coping with own disabilities) and bright light therapy (maintaining an emotional balance).

Table 2(b). Treatment effects of the different psychosocial interventions categorized into the seven adaptive tasks areas. For each treatment method it is indicated in what stages of dementia it was investigated (L=Light/mild; M=Moderate; MS=Moderate severe; S=Severe; VS=Very severe)

Treatment method Severity (number of effect areas)	Adaptive task						
	1 disability	2 emot	3 selfimage	4 future	5 environm	6 staff	7 relations
Education family visit MS-S (2)		X					X
Simulated presence therapy S-VS (2)		X					X
Alzheimer Rehab by students L-M (2)	X	X					
Validation M-S (2)		X					X
Person centered showering S-VS (2)		X				X	
Supportive psychotherapy L-M (1)	X						
Structuring activities M-S (1)	X						
Dementia Special Care Unit S-VS (1)		X					
Expressive physical touch M-VS (1)		X					
Nutritional Program L-S (1)	X						
Bright light therapy M-S (1)		X					
Behavioral management unit L-S (1)		X					
Aroma therapy S-VS (1)							X

CONCLUSION

Based on the analysis of the literature we can conclude that in the last four decades the focus of psychosocial intervention studies in institutionalised care settings has been mainly on interventions that aim to support people with dementia to find an *emotional balance* (thus trying to prevent or reduce psychological and behavioural disregulations), and to help them *cope with their disabilities* by stimulating the use of residual cognitive abilities (thus trying to prevent excess disabilities). Much less attention was given to the other areas, such as maintaining social contacts, preserving a positive self-image, coping with the nursing home environment and developing an adequate care relationship with the staff.

Positive outcomes achieved by normalisation of the living environment, such as better orientation, improved social behaviour and activity level of people with dementia, is an argument in favour of letting people with dementia stay in their own familiar living environment as long as possible. That is to say, if this is not experienced as too taxing by the person with dementia and his environment.

Based on the intervention outcomes we may also conclude that the large majority of psychosocial methods applied to people with dementia living in institutions seems to be

effective for more than one adaptive task or area and specific behaviour or mood problem. According to our review of the scientific literature, methods on which the most comprehensive effects regarding 3 or more adaptive tasks were reported, are: *psychomotor therapy* (Norberg et al., 1986; Mayers and Griffin, 1990; Arno and Frank, 1994; Dröes and Van Tilburg, 1997; Francese et al, 1997; Holmberg, 1997; Warson, 1998; Hopman-Rock et al., 1999), *behaviour therapy* (Jenkins, 1977; Blackman, 1979; Burton, 1980; Hussian, 1980; Birchmore and Clague, 1983; Pinkston and Linsk, 1988; Sandman et al., 1988; Götestam and Melin, 1990), *normalising living pattern and living environment* (Gustafsson, 1976; Melin and Götestam, 1981; Cleary, 1988), *activity groups* Panella et al., 1984; Karlsson et al, 1985), *music therapy* (Gerdner and Swanson, 1993; Lord and Garner, 1993; Casby and Holm, 1994; Goddaer and Abraham, 1994; Rasneskog et al., 1996; Clark et al, 1998; Gerdner, 2000), *reminiscence* (Head et al., 1990; Morton and Bleathman, 1991; Gibson, 1994a,b; Namazi and Hayes, 1994, Tabourne, 1995; Woods and McKiernan, 1995), *reality orientaton* (Bergert and Jacobson, 1976; Hanley et al., 1981; Greene et al., 1983; Hanley and Lusty, 1984; Gorissen, 1985; Reeve and Ivison, 1985; Williams et al., 1987; Götestam, 1987), *integrated emotion-oriented care* (Finnema et al., 2005), *pet therapy* (Churchill et al., 1999; McGabe et al, 2002; Edwards and Beck, 2002), *snoezelen* (Arno and Frank, 1994; Holtkamp et al., 1997; Witucki and Twibell, 1997; Spaull and Leach, 1998; Van Weert et al, 2005) and the *A.G.E. Dementia Care Program* (Rovner et al., 1996). This large array of treatments implies that psychosocial treatment methods are widely applicable (for problems in several adaptation areas), though not all methods are applicable in all stages of dementia. This means that the choice of which treatment method to use for which individual depends on the aid question, need(s) or adaptation problem(s), the severity of dementia, person-related factors, preferences and target behaviour. This is important to keep in mind when selecting therapy methods for individual people with dementia.

We would like to emphasize that the distinction we made into the seven adaptive tasks or areas was made from a theoretical perspective with the purpose to get insight into the focus of research in the field of psychosocial interventions in the past decades. This does not mean that the original studies were designed with these specific aims regarding adaptation and coping.

Though the results of the effect studies on psychosocial interventions are very promising, it must be mentioned that the quality of many studies in the past 40 years was quite moderate. Despite the fact that there is a growing tendency to apply stronger research designs in the last two decades, we therefore have to be cautious generalizing the results of individual studies. In future studies better designed, controlled, and preferably randomized clinical trials (RCT), are needed to draw firm conclusions on the effectiveness of the different treatment methods. Comparative research into psychosocial methods for different adaptive tasks is also needed, as well as research into the determinants of effective methods to be able to get answers to the question: for whom and for which problem works what best? (see also Smits et al, 2007; Van Mierlo et al, 2009).

More research is needed as well in the areas in which very little research was done to date, such as interventions aiming to support institutionalized people with dementia to develop an adequate care relationship with care professionals, to preserve a positive self-image, to maintain social relationships and to prepare for an uncertain future. These adaptation areas seem directly linked to important aspects of quality of life as mentioned by people with mild to moderate severe dementia in day care and meeting centers and in nursing homes (Dröes et al., 2006), such as autonomy and freedom, self esteem and feeling useful,

and spirituality. They definitively deserve more attention in research than they received in the past. Types of interventions that in institutionalized care are used in the mild to moderate stages of dementia for these targets are, for example: Integrated emotion-oriented care in which the offered care and activities are person-centered and well attuned to the abilities, experiences and preferences of the person with dementia (Van der Kooij, 2003; Finnema et al. 2005; De Lange, 2004), reminiscence (Gibson, 1994a,b; Tabourne, 1995), pet therapy (Churchill et al., 1999; McCabe et al., 2002) and Validation (individually or in groups; Bleathman and Morton, 1992; Toseland, 1997). Recently also discussion groups are set up to help people get into contact and discuss their experiences with peers, and to support them in their coping with the changes they go through in their life and the uncertain future (Manthorpe and Moniz-Cook, 2009; Cheston, 2009). More research is needed into these type of interventions. In the more severe stages for instance music therapy and snoezelen are applied to add quality to life. However, further research is recommended here as well (Sherratt et al., 2004; Van Weert et al., 2005).

With the growing number of people with dementia, savings in health care and the expected shortage of care personnel in the coming decades psychosocial care in institutional settings comes highly under pressure. We would like to conclude with the statement that our study shows that there are enough arguments to recommend that in future research and care practice substantial attention should be given to the further development and application of psychosocial methods in dementia care. Only this will ensure that there will be less need to rely on psychopharmacotherapy to control behavioural and psychological symptoms in dementia and will accomplish that persons with dementia, at home and in institutions, in all stages of the disease really feel supported in finding and maintaining an emotional balance in the process of coping with the consequences of the disease.

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