Is socially integrated community day care for people with dementia associated with higher user satisfaction and a higher job satisfaction of staff compared to nursing home-based day care?

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ABSTRACT

Objectives: To investigate whether community-based (CO) day care with carer support according to the proven effective Meeting Centres Support Programme model is associated with higher satisfaction of people with dementia (PwD) and their informal caregivers (CG) and with a higher job satisfaction among care staff compared to traditional nursing home-based (NH) day care.

Method: Data were collected in 11 NH day care centres and 11 CO day care centres. User satisfaction of PwD and CG was evaluated in the 11 NH day care centres ($n_{PwD} = 41$, $n_{CG} = 39$) and 11 CO day care centres ($n_{PwD} = 28$, $n_{CG} = 36$) with a survey after six months of participation. Job satisfaction was measured only in the six NH day care centres that recently transformed to CO day care, with two standard questionnaires before ($n_{STAFF} = 35$), and six months after the transition ($n_{STAFF} = 33$).

Results: PwD were more positive about the communication and listening skills of staff and the atmosphere and activities at the CO day care centre. Also, CG valued the communication with, and expertise of, staff in CO day care higher, and were more satisfied with the received emotional, social and practical support. After the transition, satisfaction of staff with the work pace increased, but satisfaction with learning opportunities decreased.

Conclusion: PwD and CG were more satisfied about the communication with the staff and the received support in CO day care than in NH day care. Overall job satisfaction was not higher, except satisfaction about work pace.

Introduction

Day care centres for community-dwelling people with dementia are seen as an important service to support people with dementia to live longer in their own home (Manthorpe & Morlarity, 2014). Several studies found a positive impact of day care on neuropsychiatric symptoms (e.g. agitation) and wellbeing of people with dementia (Gaugler et al., 2003; Mossello et al., 2008; Zank & Schacke, 2002). Also, informal carers benefit from day care by receiving respite and support. A review of Tretteteig, Vatne, and Rokstad (2015) showed amongst others decreased burden and increased relief and motivation among carers. There have been psychogeriatric day care centres for community-dwelling people with dementia in the Netherlands for over 35 years. Originally, these day care centres were developed in order to provide care to people with dementia while waiting for admission to a nursing home (de Jong & Boersma, 2009). Over the years however, the function of psychogeriatric day care centres shifted from providing intermittent care towards providing respite care to informal carers and supporting people with dementia to live at home as long as possible by providing meaningful activities. Dutch psychogeriatric day care centres are traditionally located within psychogeriatric nursing homes and provide care to people with mild to severe dementia. If necessary, multidisciplinary treatment is available, offered by an elderly care physician, physiotherapist, psychologist or other health care professional (e.g. speech therapist, occupational therapist or psychomotor therapist). de Jong and Boersma (2009) describe that this type of day care was developed without a substantial involvement of people with dementia and their carers. In general, little research has been performed on needs and wishes of people with dementia and their carers regarding day care activities (Brataas, Bjugan, Wille, & Hellzen, 2010; Van der Roest et al., 2009).

In response to this shortcoming, two decades ago the so-called combined Meeting Centres Support Programme (MCSP) for community-dwelling people with mild to moderately severe dementia and their carers was developed in the Netherlands, based upon an explorative inventory of needs among people with dementia, their informal carers and health care professionals. The MCSP aims to effectively support people with dementia and their carers in the adaptation to, and coping with, the consequences of dementia by providing intensive support to both (Drøes, Breebaart, Ettema, van Tilburg, & Mellenbergh, 2000; Drøes, Breebaart, Meiland, van Tilburg, & Mellenbergh, 2004). Personalizing the support programme to the needs and preferences of participants with dementia and their carers is one of the core features of MCSP. In most of these centres for three days a week, people with...
dementia can participate in an activity programme, which includes among other things recreational and creative activities and psychomotor therapy. Carers are offered a series of informative meetings on dementia and how to deal with the practical, social and emotional consequences of dementia in daily life, can attend on-going peer support groups, and can make use of a weekly individual consultation hour. There are regular centre meetings in which the participants and carers come together and discuss if the support programme meets their expectations and which social activities are planned in the coming period. The support programme is offered in existing community buildings, like socio-cultural community centres. To reduce fragmentation of care, the Meeting Centres organize the support programme in close cooperation with local care and welfare organizations, according to a collaboration protocol. Currently, there are around 125 Meeting Centres in the Netherlands.

Multicentre studies have investigated the effectiveness of the MCSP compared to regular nursing home-based day care (from now: NH day care). Results showed that the MCSP is (cost-)effective compared to NH day care: participants with dementia using the MCSP had less behaviour and mood disturbances and higher self-esteem. Their carers felt less burdened and more competent to care for their relative. Furthermore, there was a delay of nursing home admission (Dröes et al., 2000; Dröes et al., 2004). User satisfaction with MCSP was high to very high among participants with dementia as well as their carers. A reduction of experienced burden proved to be related to the overall satisfaction of carers with the support programme and the perceived support from the informative meetings and contact with other carers (Dröes, Meiland, Schmitz, & van Tilburg, 2011).

Based on the knowledge of the added value of the combined community-based MCSP, several traditional NH day care centres throughout the Netherlands transformed their day care centres into community-based day care centres with carer support (from now: CO day care) by adaptive implementation of the MCSP model. However, the added value of CO day care compared to NH day care was never studied. Recently, six NH day care centres participated in a study in which they were guided to make the transition from NH day care to CO day care (van Haeften-van Dijk, Meiland, Van Mierlo, & Dröes, 2015). The added value of CO day care compared to NH day care on the behaviour and mood of people with dementia and on the sense of competence of their carers was evaluated (van Haeften-van Dijk, Meiland, Hattink, Bakker & Dröes, 2015a, 2015b).

This paper reports on a survey that was conducted within this study on the satisfaction of participants, their informal carers and staff on these two types of day care. The first aim was to investigate if people with dementia and their carers participating in CO day care differed in their satisfaction about the day care from people using NH day care. Participants with dementia participating in CO day care were expected to be more satisfied with the programme than participants of NH day care, because CO day care is offered in a more socially integrated environment, and participants are assisted in a more person-centred, needs-oriented way than in traditional day care. The extra support that CO day care offers carers (e.g. informative meetings and peer support groups) in comparison with NH day care was expected to positively affect the family carers’ satisfaction about how they are supported.

The second aim was to examine the job satisfaction of staff in CO day care versus NH day care. We expected that job satisfaction of care staff would improve after the transition to CO day care, because of the advantages of working in an independent socially integrated location outside the nursing home and having more control over their own work (Ryan, Nolan, Enderby, & Reid, 2004). Also, the training in working based on the vision and theoretical principles of the MCSP approach, and the adoption of the related new work routines like person-centred, need-oriented assistance and psychomotor therapy activities, were expected to add to their job satisfaction (Nolan et al., 2008). By examining the impact on user and staff satisfaction, we will be able to draw conclusions about the potential added value of transforming NH day care to CO day care according to the principles of the MCSP care model.

Methods

Objectives

To investigate whether CO day care with carer support based on the principles of the proven effective MCSP model is associated with higher satisfaction of participants with dementia and their family carers and with a higher job satisfaction among care staff compared to traditional NH day care.

Study design and setting

The survey was part of an implementation study in which CO day care centres (n = 11) were compared with regular NH day care centres (n = 11). Six NH day care centres made the transition to CO day care based on the principles of the MCSP model. Besides, we included five other NH day care centres and five CO day care centres that had worked according to the MCSP model for over 15 years. The MCSP model and the key differences between CO and NH day cares are presented in Figure 1.

One of the new CO day care centres specifically targeted Turkish and Moroccan immigrants. For participant and carer satisfaction, a post-test control group design was used with one measurement after six months among new participants and carers in the NH (n = 11) and CO (n = 11) day care centres.

Job satisfaction of staff was studied only in the six NH day care centres that made the transition to CO day care. We used a within groups design with pre-test and post-test measurements (for staff members who worked in both the old NH day care and the new post-transition CO day care), as well as a post-test control group design (comparison between groups of staff members who worked either in one of the NH day care centres or in one of the new CO day care centres). The measurements among staff in the NH day cares took place before the transition to the CO day care, and in the new CO day cares six months after they started. The Science Committee of the EMGO Institute of Health and Care Research and the Medical Ethics Committee of the VU University Medical Centre Amsterdam approved the study protocol.
The transition from nursing home-based day care centres to CO day care

In the implementation study, six NH day care centres for people with dementia of five different care organizations transitioned to CO day care for people with dementia. The transition process has been described comprehensively by van Haeften-van Dijk, Meiland, Van Mierlo et al. (2015). Staff was trained to work according to the adaptation-coping model (a cornerstone of the MCSP model) in a four-day training with five monthly refresher course meetings. Additionally, a consultant provided training and on-site coaching to support staff in working according to the new model.

|                          | MCSP model | Before transition: NH day care | After transition: CO day care |
|--------------------------|------------|--------------------------------|------------------------------|
| **Target group**         | Person with dementia (PwD) in mild to moderately severe stage + informal carers | PwD in moderate to severe stage in some day cares: acquired brain injury/psychiatric disorders | PwD in mild to severe stage + informal carers in some day cares: acquired brain injury/psychiatric disorders |
| **Person with dementia** | Three days per week offered | Not offered (regularly) | Twice per week to daily |
| **Psychomotor therapy**  | Specifically attuned to abilities and wishes of PwD | Fixed day care programme more or less attuned to abilities and wishes of PwD | Varying from more or less to specifically attuned to abilities and wishes of PwD |
| **Recreational and creative activities** | | | |
| **Informal carers**      | On-going discussion groups for carers | Not offered regularly | On-going discussion groups for carers who want to participate (every 6–8 weeks) |
| **Information**          | Monthly informative meetings and/or joint monthly Alzheimer café visit | Not offered regularly | Half-yearly to monthly informative meetings and/or joint monthly Alzheimer café visit |
| **For both PwD and carer** | Monthly/three monthly ‘centre meetings’ | Not regularly | Varying from not organized (yet) to every three–six months a ‘centre meeting’ |
| **Social activities with all participants (PwD and informal carer)** | Frequency and type of activities discussed during ‘centre meeting’ | Rarely organized | Frequency and type of activities discussed during ‘centre meeting’ |
| **Staff professional caregivers** | Trained in and working according to adaptation-coping model | Not trained in adaptation-coping model | Trained in adaptation-coping model |
| **General**              | Individual care plan based on adaptation-coping model. Care strategy is based on a psychosocial diagnosis regarding adaptation to/coping with dementia | Individual care plan focused on actions to be taken in the physical, environmental, participation and mental domains to improve wellbeing. | Limited to total embedding of adaptation-coping model in care plans of persons with dementia and carers |
| **Location**             | Community building | Nursing home | Community building/ground floor of flat/next to shopping centre/community restaurant |
| **Social integration**   | Regular activities with children, youth, other neighbours | Regular activities with nursing home residents, occasionally with children, youth, other neighbours | Regular activities with children, youth, other neighbours |
| **Cooperation written down in cooperation protocol and signed by the most relevant organizations** | Signed cooperation protocol by relevant organizations | Cooperation with 2–4 organizations, no formal cooperation protocol or agreement | Signed cooperation protocol by 5–6 relevant organizations |

Figure 1. Description of the Meetings Centres Support Programme (MCSP), nursing home-based day care (NH day care), and community day care with carer support (CO day care).
The major changes as a result of the transition were moving from the nursing home to an easily accessible location in the community and providing a support programme for carers, including informative meetings and peer support groups. Also new were the person-centred approach, centre meetings and involving people with dementia and carers in decision-making about the activities in the CO day care. Moreover, psychomotor group therapy became part of the daily routine in the CO day care, as well as a variety of daily activities, such as shopping, cooking together and gardening.

Participants and procedure

(1) People with dementia for whom informed consent to participate in the implementation study was provided by their family carer, and who had participated for six months in CO day care or NH day care were asked if they agreed to be interviewed on their satisfaction with the day care. When they gave oral consent, they were interviewed by trained interviewers.

(2) Informal carers participating in the implementation study on CO day care were sent a questionnaire by mail after six months of participation in the NH day care or the CO day care. They were asked to return this questionnaire in an enclosed return envelope.

(3) All staff of the six NH day cares that made the transition to CO day care were invited to fill in a questionnaire on job satisfaction and work experience before, and six months after the transition to CO day care. They were asked to return the questionnaire in an enclosed return envelope. Because some staff members transferred to another part of the organization after the transition from NH day care to CO day care, and new staff was recruited in the CO day care, not all staff were able to fill in questionnaires before and after the transition. Of the respondents, 24 filled in both questionnaires, while some staff members only filled in the questionnaire regarding working in NH day care (n = 11) or working in CO day care (n = 11). Because of time restrictions of the research, staff of the NH day care centres that did not make the transition to CO day care and staff of the longer existing CO day care centres were not involved in this survey.

Measuring instruments

Socio-demographic data, such as age, gender, marital status and living situation were collected on people with dementia at the day care centre, and informal carers were asked to fill in a questionnaire for this data.

User satisfaction of the participants with dementia and their carers was measured with two questionnaires developed by Dröes et al. (2004) and Dröes et al. (2011) for the evaluation of the MCSP.

User satisfaction of people with dementia was measured with a 13-item questionnaire that focused on, among others, characteristics of the building, communication with staff, activities and a general evaluation of the day care centre. Eight of the 13 items were measured on a four-point Likert scale and three on a three-point scale (see Table 2 for the answering options). One item was measured as a yes or no question, and finally the participants were asked to give a grade for their satisfaction with the day care between 1 and 10.

User satisfaction of informal carers was measured with a questionnaire containing statements about how well they were being involved in the care, the activities in the day care centres, the support programme for carers and experienced support (all measured on a four-point Likert scale, varying from totally disagree to totally agree) and one question to give a general evaluation of the support programme on a scale between 1 and 10. The questionnaire also included questions about participation in the different elements of the support programme (e.g. peer support groups).

Among care staff, a questionnaire was used to collect data on socio-demographic data, such as age, gender, country of birth and education. Additionally, we also collected data concerning the current position and number of years working in elderly care.

Job satisfaction was measured using the Leiden Quality of Work Questionnaire (in Dutch: Leidse Arbeidskwaliteitsschaal, LAKS) (van der Doef & Maes, 1999). This questionnaire consists of 12 subscales that can be measured independently of each other. We used five subscales with a total of 23 four-point scale items: subscales ‘job satisfaction’ (Cronbach’s a = 0.86), ‘perceived workload’ (Cronbach’s a = 0.78), ‘autonomy in work’ (Cronbach’s a = 0.72), ‘support by colleagues’ and ‘support by managers’ (Cronbach’s a 0.82 and 0.90, respectively). Subscale scores are calculated by determining the average score on the respective items.

Work experience was measured with the Questionnaire Experience and Evaluation of Work (QEEW) (in Dutch: Vragenlijst Beleving en Beoordeling Arbeid, VBBA) (Van Veldhoven & Meijman, 1994). This questionnaire consists of 27 subscales that are measured independently of each other. We used the subscales ‘work pace’, ‘variation in work’, ‘learning opportunities’, ‘autonomy in work’ and ‘problems with the task’. Scores for each subscale were determined by summing up the item scores. The subscales of the two questionnaires were selected on the basis of the domains that were expected to differ between NH day care and CO day care.

Analysis

To test for group differences on background characteristics and on user satisfaction of people with dementia, informal carers and staff, we used chi-square (χ²) tests for nominal variables and Mann–Whitney U tests for interval variables. The Student t-test was used to compare overall satisfaction between groups (grade 0–10).

Because of the mixed nature of the sample of care staff, which contained both related samples (participating staff that worked in both the NH day care before the transition and in the CO day care after the transition) and independent samples (participating staff that only worked in NH day care or CO day care), different statistical analyses were performed. In case of related samples, we used the non-parametric Wilcoxon signed rank test. Data of the groups of respondents that filled in a single questionnaire either pre-transition or post-transition were compared with Mann–Whitney U tests.

Pearson’s r effect sizes were calculated for interval variables. For nominal variables, we calculated effect size Phi.

Results

User satisfaction of participants with dementia

A total of 41 of the 46 (89%) eligible participants with dementia visiting NH day care for six months were interviewed about their satisfaction. Reasons for not participating were speech problems as a consequence of aphasia (n = 2), interview too late
Reasons for not being interviewed were person with dementia (42 (67%) eligible participants with dementia were interviewed. (day care just moved to new location and participant could not understand the questions (n = 2), aphasia (n = 2), no consent of informal carer to interview the person with dementia (n = 1) and for nine persons the reason is unknown.

Table 1 gives an overview of the background characteristics of the participants with dementia visiting the NH and CO day care. No significant differences between groups were found except for education level, marital status, and carer relationship. Participants in NH day care had significantly lower education levels (p = 0.03) as well as a higher likelihood of being married and married. There was no difference in carer relationship between groups.

Table 2. User satisfaction of people with dementia participating in nursing home-based (NH) day care (n = 41) versus community-based (CO) day care with carer support (n = 28).

| Outcome measure (range) | NH day care | CO day care | Test statistic, p | Effect size |
|-------------------------|------------|------------|------------------|-------------|
| Aspects of the day care centre | | | | |
| Atmosphere (1−4) (totally not nice — very nice) | 3.0 2−4 27.9 | 3.0 2−4 34.0 | Z = −3.74 | r = −0.46 |
| Location (1−4) (totally not nice — very nice) | 3.0 2−4 27.7 | 3.0 2−4 34.0 | Z = −2.07 | r = −0.27 |
| Staff | | | | |
| Contact (1−4) (very unfriendly — very friendly) | 3.0 2−4 30.2 | 4.0 2−4 39.4 | Z = −2.40 | r = −0.29 |
| Attention (1−3) (insufficient — good) | 2.0 1−3 30.5 | 3.0 1−3 35.5 | Z = −1.18 | r = −0.15 |
| Help of staff (1−3) (insufficient-good) | 3.0 2−5 30.8 | 3.0 1−5 34.8 | Z = −0.88 | r = −0.11 |
| Staff listening (1−3) (insufficient-good) | 2.0 1−3 29.1 | 2.0 1−3 37.4 | Z = −2.12 | r = −0.27 |
| Ambience and activities | | | | |
| Ambience afternoon meal (1−4) (totally not nice — very nice) | 3.0 2−4 26.2 | 3.5 2−4 33.2 | Z = −1.91 | r = −0.25 |
| Can participants do what they like? Yes, n (%) | | | | |
| Overall evaluation activities (1−4) (totally not nice — very nice) | 3.0 2−4 26.4 | 3.0 1−4 34.5 | Z = −2.13 | r = −0.28 |
| Does staff ask which activity to do? (1−4) (never — always) | 1.0 1−4 29.0 | 2.0 1−4 38.6 | Z = −2.24 | r = −0.28 |
| Is that acted upon? (1−4) (never—always) | 3.0 1−4 13.9 | 3.0 1−4 16.6 | Z = −0.87 | r = −0.16 |
| General evaluation | | | | |
| General evaluation (1−4) (totally not nice — very nice) | 3.0 1−4 29.6 | 3.0 2−4 39.5 | Z = −2.25 | r = −0.28 |

Table 1. Background characteristics of people with dementia participating in nursing home-based (NH) day care versus community-based (CO) day care with carer support.

| Gender, n (%) | NH day care (n = 41) | CO day care (n = 28) | Test statistic, p |
|---------------|----------------------|----------------------|------------------|
| Male | 16 (39%) | 12 (43%) | χ² = 0.10 |
| Female | 25 (61%) | 16 (57%) | p = 0.75 |
| Age, years (SD) | 84.7 (5.8) | 80.0 (7.4) | Z = −2.58 |
| Marital status, n (%) | | | |
| Married/living together | 22 (54%) | 15 (54%) | χ² = 3.54 |
| Divorced/widowed/ unmarried/single | 19 (46%) | 13 (46%) | p = 0.47 |
| Independent, alone | 20 (49%) | 14 (50%) | χ² = 0.01 |
| Independent, with others | 21 (51%) | 14 (50%) | p = 0.92 |
| Diagnosis, n (%) | | | |
| Alzheimer | 17 (43%) | 13 (48%) | χ² = 1.94 |
| Vascular dementia | 4 (10%) | 5 (19%) | p = 0.59 |
| Alzheimer and vascular | 8 (20%) | 3 (11%) | |
| Other | 11 (27%) | 6 (22%) | |

Legend: SD = standard deviation, χ² = chi-square, significant differences between groups with p-value < 0.05 are presented in bold.

<sup>1</sup>Underlined scores are more favourable. SD = standard deviation, χ² = chi-square. Pearson Chi-square test was used to test for yes/no answers; independent samples t-test for grade score, Mann–Whitney U test for others. Text printed in bold is significant at p > 0.05. Effect size Pearson’s r and phi: small = 0.10; medium = 0.30; large = 0.50.
found on gender, marital status, living situation and diagnosis. Participants with dementia in CO day care were significantly younger than participants of NH day care (see Table 1).

The results on user satisfaction of people with dementia are presented in Table 2. Among participants of the CO day care day centre, we found a significantly higher satisfaction with the (atmosphere of the) location where the centre was situated (large effect size). Regarding contact with the staff, participants in the CO day care centres indicated they had better contact with the staff; that the staff was more willing to listen to them, and that the staff asked them what they wanted to do more often. Additionally, in the CO day care, participants rated the activities more positively. The overall grade (out of 10, higher is better) participants gave to CO day care centres, was significantly higher when compared to regular NH day care centres: 8.1 compared to 7.6, respectively. These group differences had medium effect sizes.

On other outcome measures, such as the ambiance during lunch, or overall satisfaction with the centre, no significant differences were found.

**User satisfaction of informal carers**
A total of 39 of the 46 (85%) eligible informal carers returned the questionnaire about their satisfaction with the NH day care centre. For CO day care, 36 of the 52 (69%) eligible informal carers returned the questionnaire. Table 3 lists the background characteristics of informal carers involved in the NH day care or CO day care. No significant differences between groups were found on gender, having other (paid or voluntary) work besides caring, relation to participant with dementia or living together with the person with dementia. However, the groups differed significantly on age: informal carers in CO day care were younger than informal carers in NH day care.

The results on user satisfaction among informal carers are presented in Table 4. Moderately significant differences between groups in favour of CO day care were found regarding communication with staff, expertise of staff, being sufficiently involved in the care for their relative with dementia and making new friends among other informal carers. Overall, the informal carers at CO day care are more satisfied with the emotional, social and practical support given compared to NH day care. No significant group differences were found on how the interior of the day care is evaluated, on treatment by staff, staff knowledge of background of participants or adaptation of the activity programme to participants’ preferences and carer burden. Neither were significant differences found regarding the information being offered at the day care and the overall evaluation of the support programme of CO and NH day care.

Because not all additional support activities were offered in every CO day care (yet) within six months after the transition, we have limited information on informal carers’ participation in additional support activities at CO day care. Seven carers in CO day care were asked about their participation in the informative meetings that were organized in their CO day care. Four of these carers reported participation. Ten informal carers were offered an individual consultation hour and three of them reported using them. Participation in a peer support group was reported by 17 of the 32 carers who were offered peer support groups. Ten of the 21 carers invited to one or more centre meeting(s) — in which the support programme was evaluated together with all involved — attended one or more centre meetings.

**Job satisfaction and work experience of care staff**
Before and six months after the transition of the six NH day care centres to CO day care centres, all care staff members (n = 46) completed the questionnaire. Table 5 gives an overview of background characteristics of care staff at both time points (before and after the transition). Care staff that only participated in the pre-transition (n = 11) or post-transition measurement (n = 11) did not differ significantly on background characteristics from care staff who participated in both measurements (n = 24).

The results of participants that took part in both measurements are described in Table 6. Results of the unpaired analysis are described in the text.

Among care staff that participated in both measures, there was a significant moderate improvement (r = −0.54) in satisfaction with work pace after the transition. At the same time, there was a significant reduction in satisfaction with learning opportunities: after transition, care staff were less satisfied with the learning opportunities their work offered them (r = −0.45).

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**Table 3.** Background characteristics of informal carers of people with dementia participating in nursing home-based (NH) day care versus community-based (CO) day care.

|                          | NH day care (n = 39) | CO day care (n = 36) | Test statistic and p-value |
|--------------------------|----------------------|----------------------|---------------------------|
| Gender, n (%)            |                      |                      |                           |
| – Male                   | 11 (28%)             | 11 (31%)             | χ² = 0.05                 |
| – Female                 | 28 (72%)             | 25 (69%)             | p = 0.82                  |
| Age, years (median, range)| 70.5 (42–87)         | 63.0 (24–81)         | Z = −2.2                  |
| Other (paid or voluntary) work besides caring? n (%) |                      |                      | p = 0.03                  |
| – Yes                    | 17 (44%)             | 12 (33%)             | χ² = 0.51                 |
| – No                     | 21 (54%)             | 21 (58%)             | p = 0.47                  |
| – Unknown                | 1 (2%)               | 3 (8%)               |                           |
| Relationship with PwD? n (%) |                      |                      | χ² = 2.56                 |
| – Partner                | 21 (54%)             | 16 (44%)             | p = 0.47                  |
| – Son/daughter           | 17 (44%)             | 17 (47%)             |                           |
| – Other                  | 1 (2%)               | 3 (8%)               |                           |
| Living with the PwD? n (%) |                      |                      | χ² = 0.61                 |
| – Yes                    | 23 (59%)             | 18 (50%)             | p = 0.44                  |
| – No                     | 16 (41%)             | 18 (50%)             |                           |

*PwD = person with dementia.
Table 4. User satisfaction of informal carers of people with dementia participating in nursing home-based (NH) day care (n = 39) versus community-based (CO) day care (n = 36).

| Outcome measure (range) | NH day care | CO day care | Test statistic, p | Effect size r |
|-------------------------|-------------|-------------|-------------------|---------------|
| Staff and support programme day care centre | Median | Range | Mean Rank | Median | Range | Mean Rank | |
| Staff discusses progress sufficiently (1–4) | 3.0 | 1–4 | 32.6 | 3.0 | 2–4 | 43.9 | Z = −2.6 p = 0.01 | −0.30 |
| Staff listens sufficiently (1–4) | 3.0 | 1–4 | 32.2 | 3.0 | 1–4 | 41.6 | Z = −2.2 p = 0.03 | −0.26 |
| I am sufficiently involved in support (1–4) | 3.0 | 1–4 | 31.1 | 3.0 | 2–4 | 41.6 | Z = −2.4 p = 0.02 | −0.28 |
| I am actively informed of daily (1–4) | 3.0 | 1–4 | 31.8 | 3.0 | 2–4 | 40.9 | Z = −2.0 p = 0.05 | −0.26 |
| Staff accepts me as I am (1–4) | 3.0 | 3–4 | 36.4 | 3.0 | 1–4 | 37.6 | Z = −0.3 p = 0.78 | −0.03 |
| Staff is always friendly to the clients (1–4) | 3.5 | 2–4 | 35.1 | 4.0 | 1–4 | 37.9 | Z = −0.7 p = 0.50 | −0.08 |
| Staff genuinely has attention for you (1–4) | 3.0 | 2–4 | 33.1 | 4.0 | 2–4 | 41.3 | Z = −1.9 p = 0.06 | −0.22 |
| Satisfied with expertise (1–4) | 3.0 | 2–4 | 31.4 | 3.0 | 3–4 | 40.8 | Z = −2.3 p = 0.02 | −0.27 |
| Day care nicely furnished (‘gezellig’) (1–4) | 3.0 | 2–4 | 33.5 | 3.0 | 2–4 | 39.5 | Z = −1.4 p = 0.16 | −0.16 |
| Staff needs to know more about my loved one’s background (1–4) | 3.0 | 1–4 | 38.6 | 3.0 | 1–4 | 33.3 | Z = −1.2 p = 0.24 | −0.14 |
| Staff makes me feel I am a burden (1–4) | 3.0 | 1–4 | 31.6 | 4.0 | 1–4 | 42.5 | Z = −2.5 p = 0.01 | −0.29 |
| Thanks to day care I feel less burdened (1–4) | 3.0 | 1–4 | 38.1 | 3.0 | 2–4 | 35.8 | Z = −0.5 p = 0.60 | −0.06 |
| Sufficient activities are offered that are suitable for my loved one (1–4) | 3.0 | 2–4 | 31.1 | 3.0 | 1–4 | 36.8 | Z = −1.4 p = 0.18 | −0.17 |
| I made new acquaintances among other informal carers (1–4) | 2.0 | 1–4 | 32.0 | 2.0 | 1–4 | 41.2 | Z = −2.1 p = 0.04 | −0.17 |
| Experienced support | | | | | | | |
| Sufficient emotional support (1–4) | 3.0 | 1–4 | 29.1 | 3.0 | 2–4 | 39.1 | Z = −2.4 p = 0.01 | −0.29 |
| Sufficient social contacts (1–4) | 3.0 | 1–4 | 25.6 | 3.0 | 1–4 | 34.0 | Z = −2.1 p = 0.04 | −0.27 |
| Sufficient information (1–4) | 3.0 | 2–4 | 30.7 | 3.0 | 3–4 | 37.2 | Z = −1.9 p = 0.06 | −0.23 |
| Sufficient practical support (1–4) | 3.0 | 2–4 | 25.5 | 3.0 | 2–4 | 36.5 | Z = −2.8 p = 0.01 | −0.36 |
| General evaluation | Mean | SD | Mean | SD | Test statistic, p | Effect size r |
| Grade (1–10) | 7.7 | 1.05 | 7.9 | 1.04 | t = −0.9 p = 0.38 | r = −0.10 |

1 Underlined score is more favourable.
Mann–Whitney U used for testing group differences, independent samples t-test used for grade. Text printed in bold is significant at p > 0.05. Effect size Pearson’s r: small = 0.10; medium = 0.30; large = 0.50.

Discussion and conclusion

In this study, we explored if there are differences in satisfaction between users and staff of NH day care centres, as opposed to CO day care centres with carer support that work according to the proven effective MCSP (Dröes et al., 2000; Dröes et al., 2004; Dröes, Meiland, Schmitz, & van Tilburg, 2006). Our study shows that overall participants with dementia of CO day care centres are more satisfied than participants of regular NH day care centres. The atmosphere and location of the CO day care centre were evaluated more positively compared to NH day care centres, as were communication with staff and the activities. In addition, compared to NH day care, informal carers in CO day care were more satisfied with communication and expertise of staff, being involved in care, and the received emotional, practical, and social support.

The transition to CO day care was expected to improve work experience and job satisfaction of the care staff of the CO day centres. In general, no statistically significant effects were found, except on ‘work pace’ and ‘learning opportunities’. Care staff who worked in both the old NH day care and new CO day care experienced a lower work pace after the transition to the CO day care. They indicated having less learning opportunities after the transition, although part of them received training and all received on-the-job coaching in preparation for the transition.
The higher user satisfaction among participants with dementia regarding atmosphere and location of CO day care may be explained by the fact that many CO day care centres are located in lively residential areas which offer more opportunities for social inclusion, as people from the neighbourhood visit these community buildings for other activities. Participants are more easily involved in daily activities in the neighbourhood, such as shopping, gardening or activities with schools close to the centre. Participants also indicated that contact with the staff was better in CO day care, that the staff was more willing to listen to them. They were asked what they wanted to do more often compared to participants staff was more willing to listen to them. They were asked what they wanted to do more often compared to participants.

That CO day care succeeds in facilitating peer support is underlined by the informal carers in CO day care reporting more often that they got to know other informal carers and being more satisfied with the opportunity of initiating social contacts in the day care centre. This is an important result, as a review on the benefits of caregiver support groups pointed out that peer support results in increased psychological wellbeing and reduced depression (Chien et al., 2011).

The finding that care staff who worked in both the regular NH day care and the new CO day care experienced a lower work pace after the transition to CO day care might be explained by the fact that the transition, including the move to another location, led to a new discussion about day schedules and how care staff could complete their different tasks. The reduced work pace can be considered beneficial since Maurits, de Veer, van der Hoek, and Francke (2015) found that reduced work pressure correlates with the self-perceived ability to continue working until retirement. A surprising result is that care staff who worked in the old and the new situation reported less learning opportunities after the transition, although they received training and on-the-job coaching in preparation for the transition. Surprising also because many staff members had not followed any training or course in a long time. A plausible explanation for this result is the decision of most day care centres to only let the manager of the day care participate in the full training (four days and follow-up meetings), and let the other care staff members do one or two specific training modules. This might have led to the dissatisfaction about learning opportunities of some of the other staff members. Another explanation for this result is that the staff became more aware of learning opportunities in dementia care innovation, resulting in a greater interest and the wish to receive training. The small effects of the transition on work experience of care staff need further consideration. One possible explanation is that most staff members worked in the traditional NH day care centre for many years, which initially made it difficult for them to adapt to the new situation and to adopt the new way of working according to the person-centred and demand-oriented method of the MCSP. A later follow-up measurement might provide more insight into the benefits for care staff working in the new CO day cares.

Second, at the time of data collection in the CO day care, many of Dutch day care centres created a lot of uncertainty about the upcoming legislative changes and major cuts in the financing of Dutch day care centres created a lot of uncertainty about

| Outcome measure (range) | Before transition | After transition | Z   | p     | Effect size r |
|-------------------------|-------------------|-----------------|-----|-------|---------------|
| LAKS²                   |                   |                 |     |       |               |
| Work demands (1–4)      | 2.6 (1.8–3.0)     | 2.8 (2.0–3.4)   | −1.2 | 0.22  | −0.26         |
| Autonomy (1–4)          | 3.0 (2.3–4.0)     | 3.0 (2.5–3.5)   | −0.2 | 0.86  | −0.04         |
| Support of manager (1–4)| 3.0 (2.0–4.0)     | 3.0 (2.5–4.0)   | −0.7 | 0.50  | −0.15         |
| Support of colleagues (1–4)| 3.3 (2.8–4.0) | 3.6 (2.5–4.0)   | −0.2 | 0.82  | −0.05         |
| Job satisfaction (1–4)  | 3.0 (2.2–3.5)     | 3.0 (2.2–3.7)   | −0.8 | 0.43  | −0.16         |
| VBB/QEEW²               |                   |                 |     |       |               |
| Work pace (0–33)        | 11.0 (7.0–21.0)   | 10.0 (4.0–20.0) | −2.6 | 0.01  | −0.54         |
| Variation in work (0–18)| 5.0 (0.0–10.0)    | 5.0 (2.0–10.0)  | −1.1 | 0.29  | −0.22         |
| Learning opportunities (0–12)| 4.0 (0.0–8.0) | 5.0 (1.0–8.0)   | −2.1 | 0.03  | −0.45         |
| Independence (0–33)     | 12.0 (0.0–22.0)   | 14.5 (2.0–22.0) | −0.7 | 0.48  | −0.15         |
| Problems with task (0–18)| 4.0 (0.0–7.0)    | 3.5 (0.0–10.0)  | −0.7 | 0.50  | −0.14         |

¹Underlined score is more favourable in the questionnaire. ²LAKS: Leiden Quality of Work Questionnaire. ³VBB/QEEW: Questionnaire Experience Evaluation of Work. Wilcoxon Signed Rank Test used for testing group differences. Text printed in bold is significant at p > 0.05. Effect size Pearson’s r: small = 0.10; medium = 0.30; large = 0.50.
the future and job security, which may have affected the outcomes on job satisfaction.

A strength of this study is that we conducted interviews with people with dementia themselves. Studies in which people with dementia actively participate are still scarce (Clare, 2002; de Boer et al., 2007; Steeman, Godderis, Grypdonck, De Bal, & Dierckx de Casterle, 2007). Our study showed that a great majority of the participants with dementia was able to give their opinion about the day care. Only a limited number was unable to participate because of severe dementia or aphasia.

A risk of satisfaction surveys is that respondents tend to give socially desirable answers (Edwards, Staniszewkska, & Crichton, 2004). We tried to reduce this risk by asking questions on a variety of subjects and by employing independent interviewers not connected to the day care centre. At the start of the interview, the interviewers emphasized their independent status and explained that all collected information would be processed anonymously.

This study had several limitations. First, a disadvantage of our study design is that we included a limited number of respondents. A large part of day care participants were not included in our study, because they left the day care centre before the post-test measurement at six months of participation could take place. The main reason for drop-out was admission to a nursing home. For future research into user satisfaction of day care participants, we therefore recommend including an extra measurement after three months of participation.

Second, there were differences between people with dementia and informal carers in CO and NH day care regarding age (probably because one CO day care focused specifically on young people with dementia) and on response rate (lower response in CO day cares). This may have influenced our study results and makes it more difficult to draw conclusions about the generalizability of the study results. Therefore, this study should be considered as an explorative study.

Third, not all questions of the survey could be answered by all informal carers due to not participating in parts of the programme for carers (either by choice or because parts of the programme had not been implemented in the data collection period). As a consequence some questions were only answered by a small group of carers. Unfortunately, we have only limited information on carer utilization of the carer support programme (i.e. informative meetings, peer support groups and social activities). Based on the information we have, we can conclude that the peer support groups and centre meetings were used most by informal carers. A possible explanation for the limited utilization of the programme by informal carers in the first six months of CO day care could also be that informal carers experienced a barrier to using support for themselves (in many cases they may feel that the person with dementia is the one who needs help). Another explanation could be that carers were free to choose if they utilized specific support activities. This may have resulted in some of them, especially those who still felt highly burdened after starting CO day care, deciding to take time off instead of participating in (part of) the carer support activities. Obviously, to sufficiently support informal carers, the support that is offered must be flexible and should match their personal needs, wishes and preferences at different stages in the dementia care process. At the same time a relationship of trust must be built before the carer is able to accept help from others (Dröes & Breebaart, 1994).

Fourth, we could not measure staff satisfaction in the NH day cares that did not make the transition and the longer existing CO day care because of time limits. The conclusions regarding job satisfaction are only based on staff working in NH day care that made the transition to CO day care centres. Another limitation of the study is that due to financial constraints, the participating care organizations decided that not all care staff had to receive the full training programme. This may have negatively influenced the job satisfaction of staff that did not follow the full course.

A limitation of the data analysis is that we did not study if user satisfaction was associated with how long the CO day care existed. We decided not to do this because of the small number of study participants.

Finally, although we measured a substantial number of variables in this explorative study, we did not correct for multiple testing.

In earlier research, Dröes et al. (2011) evaluated the user satisfaction on the MCSP by interviewing participants with dementia and their carers in the Meeting Centres (Dröes et al., 2011). A strength of the current study is that we compare the satisfaction of participants and informal carers of the CO day care with a control group from regular NH day care centres. This provides more robust evidence for the added value of CO day care centres working according to the MCSP model compared to NH day care.

Conclusion
For daily practice, this research shows that people with dementia themselves appreciate several aspects of the new model of CO day care, such as the ambience and activities, better than NH day cares. Also, informal carers appeared to be more satisfied with the received support at CO day care. Care staff appeared to appreciate this new type of day care with regards to the work pace, but they also felt the need to improve their knowledge. In addition to the feasibility of NH day care centres successfully making the transition to CO day care, as was reported in another research paper on this project (van Haeften-van Dijk, Meiland, van Mierlo, Dröes, 2015), the present explorative study indicates that it is also beneficial for people with dementia, carers and professionals to make this transition.

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