

Activity calendars for older adults with dementia: What you see is not what you get

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Abstract:

This paper reports on a two-part study of nursing home recreation. In part one, a retrospective activity calendar and chart review was used in this comparative study of 107 long-term care residents with dementia. Data were collected and documented regarding demographics, cognitive and physical functioning, medications, activities listed on facility activity calendars, leisure preferences, and actual involvement in recreation over a two-week consecutive period during baseline. In part two, this information was compared to opportunities offered during a two-week clinical trial of recreational therapy. The results showed that, during baseline, almost 45 percent of the subjects in the sample received little or no facility activities, 20 percent received occasional activities, and 12 percent received daily activities but they were deemed inappropriate based on the functioning levels or interests of the residents. The clinical trial period demonstrated that small group recreational therapy was successful in engaging residents 84 percent of the time.

Key words: activity calendars, dementia, leisure preferences, recreational therapy, functioning

Article:

The activity staff of the 60-bed special care unit prepared for a Halloween visit from a local elementary school. The staff lined the residents up along the wall of the emptied dining room while a volunteer played the piano. From the center of the ceiling hung a huge parachute so stuffed with balloons that it touched the floor.

When there was no more room along the wall, they formed an inner circle of residents, then a third row. The room became quite warm and many residents fell asleep, unable to see anything except the big yellow parachute. With barely any space to walk into the room, a staff member arrived with ice cream to hand out to all. On her heels squeezed in two volunteers with two large dogs for a pet social visit. A resident screamed as her fingers became pinched by another who was desperate to leave the room. No one heard her because at that moment, 30 pre-k students with four chaperones started to file through in costume. The balloons were released. The children tried to get the balloons, while the residents—those few who were awake or not attempting to flee—tried to touch or catch a glimpse of the children. The dogs were after the ice cream, and the piano player performed a rousing march. Within five minutes it was over as the children filed out, quickly disappearing down a hall, and staff started wheeling residents out. The harried-looking activity director turned to her aide and said, "It was hectic, but we can record all 40 of them for music group, pet therapy, ice cream social, and intergenerational program!"

Actual event observed Oct. 31, 2002, by the research staff

Introduction

Activities structure our lives and, for many older adults, provide a source of satisfaction and meaning. Research shows that activity patterns are highly individualized and based on our early leisure preferences, current abilities, and personality traits,¹ and are stable throughout adulthood.² With functional decline or placement in

long-term care, older individuals, especially those with dementia, experience more and more barriers to staying active and living a meaningful existence.

Activity calendars

In nursing homes throughout the country, activities have been listed on mandated monthly calendars since the Omnibus Reconciliation Act of 1987³ (OBRA '87), and activities providers have been doing their best to include as many clients as possible in these listed programs. It may be time to step back and evaluate if this is an appropriate or legitimate way to provide services to the residents with severe impairments.

Regulations for activity calendars vary from state to state, but most have similar basic requirements. The activity department is responsible for maintaining a monthly calendar of planned activities, which must be posted in a prominent place and should be legible and easily readable for all residents. The activity staff maintains attendance records in activity calendar programs for many reasons, including:

- Residents' goals include attending a certain number of activities each month. For example, "Mrs. Brown will increase her socialization opportunities by attending two social events each month."
- If residents are not attending activity calendar events, this lack of activity might be triggered on the resident's Minimum Data Set assessment.
- Family members like to see numbers, and at team conferences nursing home staff might say, "Mrs. Brown attended 20 social events this month."

Purpose

This article will report on a study of 107 older adults with dementia who reside in five Florida long-term care facilities. The descriptive and comparative analysis examines activity calendar offerings in the facilities, leisure preferences of the subjects, and actual involvement over a two-week period.

Literature review

OBRA '87 states that long-term care recreational programs must meet not only the interests of clients, but also their physical, mental, and psychosocial needs. For older adults with dementia, this is challenging, as their ability to initiate or sustain meaningful activity is limited due to pathological changes associated with cognitive impairments^{4,5}. Nursing home residents with dementia are especially susceptible to boredom and functional decline unless special programs are provided to meet their needs and interests.^{6,7} Unfortunately, this is not routinely occurring as numerous studies have indicated that individuals with the most severe cognitive impairments are offered the least therapeutic options in long-term-care settings.⁸⁻¹⁰

It is imperative to prevent boredom in these residents, as the consequence is often disturbing behavior.¹¹ Disturbing behaviors may be seen as either apathy or agitation, or both. Agitation is defined as inappropriate verbal, vocal, or motor activities¹² and occurs in up to 90 percent of persons with dementia.^{13,14} Apathy is a lack of motivation that is not attributable to diminished level of consciousness, cognitive impairment, or emotional distress. Apathy has several components: lack of initiation and perseverance, lack of emotional expression, and lack of goals. The apathy spectrum includes decreases in interest, motivation, spontaneity, affection, enthusiasm, and emotion.^{15,16} Even if a nursing unit has only a few residents with behavioral problems, these persons can cause pandemonium in the environment, distract caregivers, and increase distress among other residents. There is strong clinical evidence that individuals who are deprived of environmental stimuli or activity are at an increased risk for disturbing behaviors.¹⁷⁻²²

A study by Cohen-Mansfield⁹ revealed that even nursing home staff felt that boredom triggered agitated behavior 55 percent of the time. Buettner²³ found that nursing home residents with dementia often sit for hours with little stimulation or activity within their reach. Another study concluded that in a long-term-care setting, agitation was significantly higher in the evening and also when clients were occupied in the same pursuit for 1.5 hours or longer.²⁴ The authors suggest a need for a balance between sensory stimulating and sensory calming

activities to avoid agitation. Behaviors such as wandering have been linked to boredom and lack of exercise,²⁵ and screaming has been associated with poor social networks and social isolation.¹⁷

In addition to needing a balance of stimulating and calming programs, it was found that the programs should be matched to functional levels of the residents for best results. In fact, the lack of challenging recreational opportunities matched to the functional level of the resident significantly impacts both behaviors and the abilities of the resident with dementia. In a cross-over design study of 36 nursing home residents with dementia, two types of programs were offered for four weeks each to all subjects: a general activity program with traditional new offerings and a recreational therapy program based on assessed needs and interests.²⁶ This study demonstrated that appropriately planned, small group recreational therapy enhanced strength and flexibility and reduced problematic behaviors in only four weeks. A strong relationship was found between functional abilities and behaviors in this study, leading to the conclusion that the recreational therapist could impact functional abilities to improve behaviors. Other studies have also found a correlation between impaired physical functioning and agitation.^{27,28}

It appears from the literature that certain disturbing behaviors are an attempt by residents with dementia to create their own stimulation due to boredom. Despite elaborate activity calendars, skilled nursing facilities often do not provide adequate or appropriate programs to meet the needs of these individuals. Ironically, it is these stimulation-seeking behaviors that often lead to removal of the individual from traditional facility programs, causing increased social isolation and long periods simply doing nothing.⁸ It is clear that older adults with dementia need specialized recreational programs to prevent social isolation, problem behaviors, and functional decline and to meet the minimum requirements of OBRA '87. All of these preventable problem areas are vital to quality of life and general well-being for the majority of nursing home residents.

Method

Research questions

This research attempted the answer six questions:

1. What types of activities/recreation are currently being offered to nursing home residents who have dementia?
2. Are programs offered at a time of day that would help prevent or reduce behavior problems?
3. Are nursing home residents with dementia receiving functionally appropriate activities?
4. Does usage of psychoactive medication impact activity participation?
5. Does cognitive functioning impact activity participation?
6. Does physical functioning impact activity participation?

Research study

The data were extracted from a large research project called therapeutic recreation interventions (TRIs) for need-driven dementia-compromised behaviors in persons with dementia. The study tested the effects of specific TRIs for the treatment of the two major categories of disturbing behaviors of institutionalized elders with dementia. The interventions included individualized recreation therapy programs for calming agitated individuals and/or alerting passive individuals with cognitive impairments. The 110 subjects were recruited from five residential settings; of these, 107 completed the study.

To determine the target behavior of the participants, data were gathered on what types of behavior the participant exhibited throughout the day. This was coded for eight time periods of two-hour blocks, starting at 6 a.m. and ending at 10 p.m. Each time period was coded based on the predominant pattern of activity over a two-week baseline period, as determined by the primary caregiver. Coding was as follows: 1 = sleeping, either in bed or elsewhere; 2 = passive, awake and not doing anything; 3 = alert and engaged; and 4 = agitated. The data were gathered by the unit nurse manager at each site who was provided with detailed instructions by a geriatric nurse practitioner researcher on how to code the various behaviors.

Participants were defined as having apathy only if they were coded for at least one time period with passivity and no time periods of agitation. Participants were coded as having agitation only if they had at least one period of agitation and no time periods of passivity. Participants were determined to have both behaviors if they had at least one time period of passivity and at least one time period of agitation.

Interventions were performed by the research team, which remained consistent throughout the project. The team included a PhD-prepared gerontologist/CTRS, an advanced practice geriatric nurse practitioner with a certificate in recreational therapy, and a gerontology/recreational therapy graduate student to assist. During the intervention periods, data were collected each time an intervention was attempted, for a total of 1,825 intervention attempts. The data were recorded from videotape and direct observation of the participants. Variables included: time involved in minutes, engagement and type of encouragement needed, participation, and mood levels.

The research sites included one nursing home without a special care unit, two nursing homes with special care units, one assisted living with a special care unit, and one assisted living with subjects from a special care unit and regular housing.

Sample

To be included in the sample, individuals had to: be 65 years of age or older; have a diagnosis of dementia in the medical record; have a Mini-Mental State Examination (MMSE) score of 24 or less;²⁹ have signed consent by guardian; be stable on current medications; and be identified by staff as having passive or agitated behaviors. A geriatric nurse practitioner researcher performed all MMSEs, gathered demographic data, and trained professional staff members on charting behavior times. The participants in this study consisted of 23.4 percent males (n = 25) and 76.6 percent females (n = 82) with a mean age of 86.1 years. Dementia types included: unspecified, 40.1 percent; Alzheimer's disease, 38.8 percent; mixed dementias, 10.3 percent; vascular dementia, 6.5 percent; and Parkinson's dementia, 4.7 percent. The subjects' mean cognitive score was 8.39 (range 0-23), which indicated severe cognitive impairment as measured by the MMSE. The subjects lived in several types of long-term-care environments. In this sample, 45.8 percent lived on special care units, 27.1 percent on assisted living special care units, 16.8 percent on general long-term-care units, and 10.3 percent on assisted living units. The research team stayed at each research site for two to three months, depending on the number of participants at the particular site.

Procedures

In the TRI study, each subject served as his or her own control, since interventions were to be individualized and biofeedback data is unique for each older subject. Baseline data were collected for two weeks prior to the prescribed intervention. During that time, activity calendars were collected and subject participation in facility activities was recorded based on retrospective chart review, activity records, and direct observation. During the intervention period, each resident received individually prescribed therapeutic recreation three to five days a week for 1.5 hours per day for two weeks. This therapy was completed in small groups or as one-to-one sessions that were videotaped for behavioral coding.

In the retrospective activity calendar and chart review, the researchers collected data on demographics, medications, diagnoses, and current activity offerings. In addition, each subject was assessed using the Global Deterioration Scale³⁰ for functioning level and the Farrington Leisure Inventory⁶ for leisure interests. This 124-item leisure checklist was used to determine the clients' past leisure and recreational interests. This tool was recommended by a panel of experts to be included in *the American Therapeutic Recreation Association Dementia Practice Guidelines for Treating Disturbing Behaviors*.³¹ The leisure checklist was completed by interviewing both the resident and his or her family members. Each subject was also assessed by a geriatric nurse practitioner for cognitive functioning, physical functioning, depression, agitation, and passivity. These assessments involved interviews with family members, staff, and subjects and observation of the subjects'

behavior throughout the day. These data were used as the basis for examining the activities offered on the facility calendars and determining what the subjects actually participated in during the baseline collection period. Frequencies and chi-square tests were used to describe and compare the information for this article.

To answer research question one regarding the types of activities offered in nursing homes, activity calendars were collected at each research site. From the activity calendars, a simple count was made of the number of times different activities were offered during a one-month period.

A compilation of recreational outlets available was described by site. This information examined the type of unit, space available for recreation, recreational items available by free choice to the residents, attendance in activity calendar events, weekend recreation, and the most common times that programs were offered. Space availability was determined by interview with the activity department staff and from direct observation. Items in the environment were determined by facility policy and by direct observation. Program attendance was determined by direct count from the activity department records. Types of activities, weekend activities and activity times were determined by a simple count from the activity calendars during a one-month period.

To answer question three on the appropriateness of activities, the number of times subjects fully participated in activities posted on the calendars at each site was gathered by direct observation of facility activities. This was recorded during baseline periods to avoid conflicts during the intervention phase of the research, so the subject's participation did not prevent involvement in a favorite facility activity. For a subject to be counted as involved in an appropriate activity, he or she had to be actively engaged in the calendar activity and aware that he or she was in the program. Residents were not counted if sleeping or if the individual just happened to be the room. If an activity lasted five minutes or less, it was considered a quick one-to-one "Hello" visit, not a recreational activity. Any activity that did not include activity staff leadership, such as watching television, was not counted. Activities that were family- or friend-initiated, such as going to a restaurant or out for a walk, were not counted unless the family participated in a scheduled, facility organized activity. Staff providing ice cream or smoothies (Ice Cream Social) was considered a nourishment pass, not an activity. Music being played over the loudspeaker system was not counted as an activity.

Activities considered inappropriate were ones such as reading the newspaper as a part of current events to a very large group. If the residents in the back rows were unable to hear what was being said or see the leader, the activity was not counted. Programs were considered

Table 1. Site recreation evaluation

	Site 1	Site 2	Site 3	Site 4	Site 5
Unit type	Nursing home unit	Nursing home special care unit	Assisted living special care unit	Nursing home special care unit	Assisted living special care unit
Space	Severe lack of space on units. Most activities were held off-unit with time-consuming transport issues.	Severe lack of space on unit. Kitchen available for residents' use, but had never been used. Activities held in dining area when not used for meals, limiting time available. Living-type room on unit reserved for religious services and staff training sessions.	There was space available for programming both on the unit and outdoors; however, most activities were held in another part of the building. Kitchen available but had never been used by residents. Staff used area for charting.	Space was available for programming; however, the room was locked and used as storage for wheelchairs, Merry Walkers, and other equipment. Most calendar activities were held off-unit. Activities on the unit were held in hallway in lines.	Limited space on-unit. Space was available off-unit but required excessive transport. Most calendar activities were held off-unit.
Recreational items in environment	None on unit.	Abundance of recreational items locked in cabinets, many of which had never been opened or used. No recreational items in environment for free selection or self-engagement.	Other than a television, none were available on the unit.	A very small television room held an assortment of unused toddler-type toys.	None.
Program attendance	Repeatedly took the same four residents to activity calendar programs. Frequent inappropriate activities for functioning level of residents, such as reality orientation for residents with MMSE score of 0.	All residents who were up and about were brought to morning programs. Many slept through the programs or wandered away. Afternoon programs were done in smaller groups (3-4 residents), with active engagement by participants.	Only three residents ever left the unit to attend programs.	No resident left unit for activity calendar programs. The on-unit program consisted of 20 minutes of balloon toss to residents lined up in hallway. Afternoon programs consisted of Bible reading to 3-4 residents in the dining room.	One or two residents left the unit for activity calendar programs, two times per week. No on-unit programs were held.
Weekend activities	Approximately half the number of activities were offered on weekends as on weekdays. Emphasis was on religious-type services.	Weekend activities similar to weekdays.	Similar to weekdays.	Calendar activities consisted of religious services or movies.	Calendar activities consisted of religious services or movies.
Activity times	Last program started at 3:30 p.m., or at 2:00 p.m. on days with evening activities. Evening activities offered 3 times per week 6:00-7:00 p.m. off-unit.	Last program started at 3:00 p.m. on all days.	Last program started at 3:30 p.m. on weekdays.	Last program started at 3:30 p.m. on weekdays.	Last program started at 3:30 p.m. on weekdays.

Table 2. Activity calendar offerings in a one-month period

Setting 1	#	Setting 2	#	Setting 3	#	Setting 4	#	Setting 5	#
Chores	27	Religious	19	Exercise	21	Chores	103	Community outing	33
Ambulation	24	Exercise	16	Music	20	Exercise	50	Bingo	23
Cognitive	21	Music	12	Discussion	11	Cognitive	29	Religious	17
Religious	17	Party	10	Bingo	10	Crafts	19	Party	16
Exercise	14	Reminiscing	8	Religious	10	Sports activities	13	Music	12
Current events	14	Current events	8	Coffee	8	Stories	12	Crafts	10
Party	10	Balloon	7	Baking/cooking	6	Music	12	Exercise	8
Music	7	Cognitive	7	Table games	5	Current events	7	Cognitive	5
Community outing	5	Crafts	7	Manicure	4	Party	6	Manicure	4
Painting	4	Community outing	6	Crafts	4	Reminiscing	5	Sports	3

inappropriate if they consisted of the resident watching the staff member do the activity. An example was cooking groups, in which the residents watched the staff prepare an item. Cooking programs can be easily modified for all levels of functioning and were counted only for the residents actively engaged in some way. Other inappropriate participation noted was a resident in a room during a pet visit when the resident had an obvious dislike and fear of animals. It is important to note that all of the descriptions above were documented by the activity staff for programming records.

Research results

As shown in Table 1, the environments in this sample had very little space available for recreational programs. If a facility had space available, it was used for storage or as a space for nursing staff to complete charting. The environments were not conducive to freely selecting recreational items to interact with. Most items that were available in the environments were not appropriate or appealing to the residents. Most programs ended by 4:00 p.m. on weekdays, and few opportunities were available on weekends.

The analysis of the activity calendars collected at the research sites produced a list of the types of activities (question one) offered in nursing homes. Table 2 lists the 10 most frequent activities and how often they were offered each month for each site.

Leisure preferences vs. activity calendar offerings

Table 3 shows the top past and current leisure preferences for the subjects in the study based on the Farrington Leisure Inventory.⁶ The types of recreation listed are limited to those that were mentioned by more than 25 percent of the subjects. Cooking was mentioned by 49 percent of the subjects, yet only one site offered this activity to its residents. Cooking groups have been used in recreational therapy programs to help clients follow simple directions, socialize with each other, and plan and prepare snacks and meals.^{6,23,26,31,32} Chores were listed as the top activity calendar offering in two of the sites (Table 2). A study examining the use of therapeutic

kitchens in long-term-care settings found that residents are more likely to participate in recreational cooking groups than in household chore types of activities, such as setting tables.³³

Downloaded from

Table 3. Leisure interests of subjects		
Leisure interest listed	Number of subjects	Percent of subjects
Music	50	60
Cognitive games	46	55
Cooking/baking	41	49
Reading	39	46
Pets	37	44
Travelling	36	43
Swimming	35	42
Dancing	34	40
Sewing	34	40
Church activities	36	43
Gardening	28	33
Jogging/walking	28	33
Needlework	28	33
Bicycling	24	29
Children	23	27
Socializing	23	27
Golf	22	26

Behavior problems vs. programming times

To determine if activity programs were offered at the time of day that would help prevent disturbing behaviors (question two), caregivers recorded behavior activity times. Time of day of the behaviors was recorded by the nursing staff and is presented in Figure 1. Behavior was coded as: sleeping; passive (sitting doing nothing); alert and engaged (meaning calm and physically or mentally engaged in an activity, which could be activities of daily living); or agitated. Passive behaviors peaked in late morning (10:00 a.m. - 12 noon) and then again in the late afternoon (4:00 p.m. - 6:00 p.m.). Agitated behaviors gradually increased throughout the day, with a peak between 2:00 and 8:00 p.m.. Interestingly, this was the time period when the least number of calendar activities was offered. Most facilities finished programs by 4:00 p.m., except for one that offered one program three times

per week from 6:00 - 7:30 p.m. It appears that calendar activities were not planned with any regard to time of behaviors or resident need for stimulation.

Functional appropriateness of activities

In regard to question three, the data showed that almost 45 percent of the subjects in the sample received little or no activities. Another 20 percent received occasional activities, and 12 percent received daily activities but they were deemed inappropriate based on the functioning levels or interests of the residents. Data revealed that 17 percent received appropriate activities two to three times per month and only 6.5 percent received appropriate activities three times per week. When examining this for specific unit type, the 27 subjects who resided on the special care unit fared the worst, with 25 percent having little or no activity participation; 16 percent, occasional inappropriate activities; 12 percent, daily inappropriate activities; 3 percent, occasional appropriate activities; and less than 2 percent, frequent appropriate activities. From this information, it was concluded that the residents were not receiving appropriate levels of mental, physical, or psychosocial activities in any of the facilities, yet health department surveys did not indicate any problems. These results are similar to a prospective study in 1994, which found that after one year of admission to a nursing home, 50 percent of residents were not participating in any activities.³⁴

Impact of psychotropic medications

Research question four concerned the impact of psychotropic medications on activity participation (Table 4). Psychotropic medication usage for the subjects included 41.8 percent receiving none, 34.6 percent receiving one, and 23.6 percent receiving two or more. In a chi-square analysis of psychotropic medication usage and activity participation (Table 5), it was determined that there were significantly more residents than expected who were on psychoactive medications and inactive. Examining the relationship between facility participation and psychotropic medication usage found the highest percentage of subjects receiving no or few activities were the ones receiving two or more psychotropic medications. The highest percentage of subjects receiving frequent appropriate activities was those on no psychotropic medications.

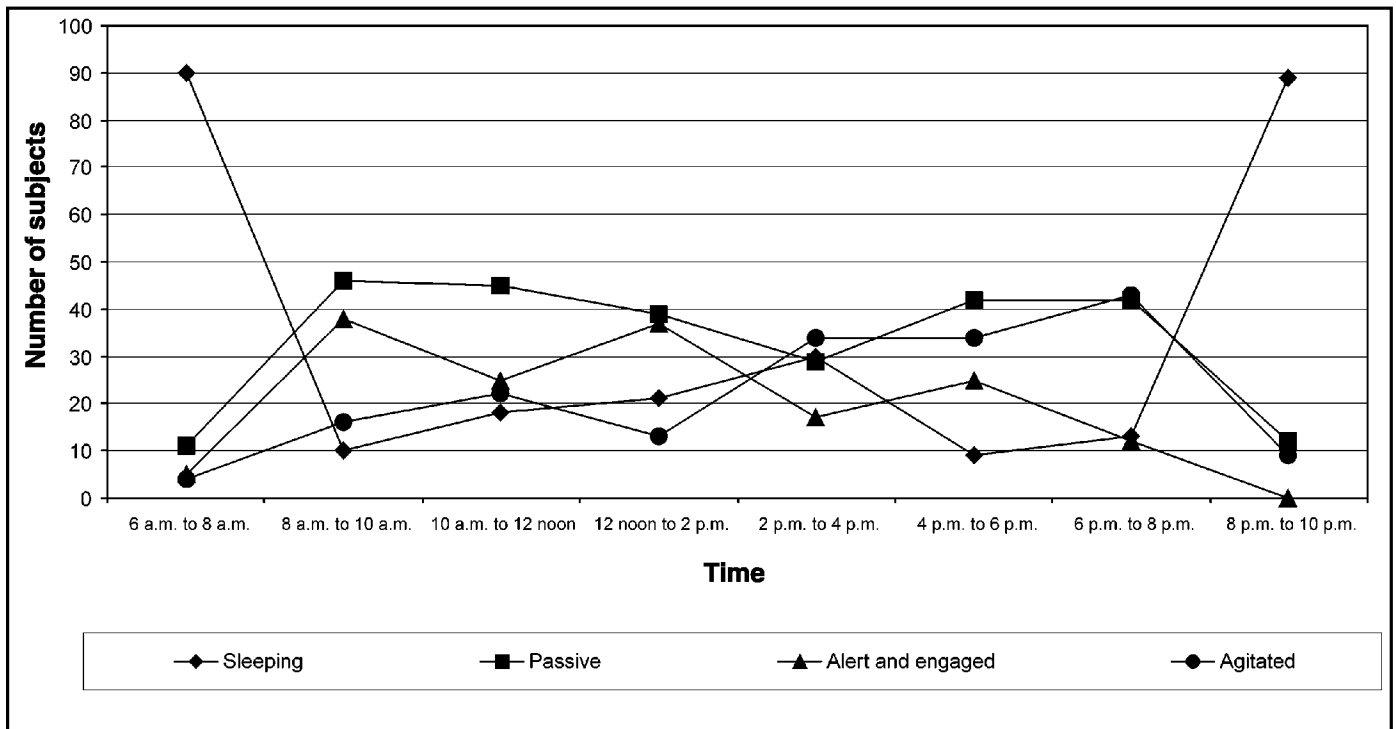


Figure 1. Behavior times of subjects.

Impact of cognitive functioning

Research question five concerned the impact of cognitive status on activity participation (Table 4). Examining activity participation and cognitive status, it was found that 64 percent of the 47 subjects with a MMSE score of nine or less received little or no activity. Of the 31 subjects with an MMSE score of zero, 45 percent received little or no activities. The nine subjects who received frequent appropriate activities had a mean MMSE score of 15.38, which is seven points above the mean for this study. In a chi-square analysis of MMSE score and activity score (Table 5), it was determined that many more subjects than expected with low cognitive functioning received little or no activity.

Impact of physical functioning

Research question six examined the impact of physical functioning and activity participation (Table 4). Of the 110 subjects in the study, nine subjects received frequent appropriate activities. Of those nine, eight were self-ambulatory and one self-propelled in a wheelchair. For this sample, those with high physical functioning received the most activities. Results of the chi-square analysis for physical functioning and activity participation are shown in Table 5.

Preferred activities

During the two-week consecutive intervention period completed by the researchers, data were collected on all 1,825 interventions attempted. The interventions were individualized based on function, need, and past leisure interests. Variables included time involved in minutes, engagement, type of encouragement needed, participation, and mood levels. These were recorded from direct observation of the interventionists. Engagement was determined based on the percentage of time during the intervention that the subject was interested in and focused on the activity. The mean time in minutes spent engaged in the research interventions was 27 minutes, with an overall engagement level of 84 percent. Results for encouragement required were: normal, 66.1 percent; some, 12.7 percent; much, 18.3 percent; and refuse, 2.9 percent. Results for participation were: active, 83.4 percent (n = 1537); passive, 12.9 percent (n = 236); and refused, 2.8 percent (n = 52). Mood data were: enjoyed, 86.2 percent; indifferent, 7.8 percent; did not enjoy, 1.6 percent; suspicious, 0.6 percent; frustrated, 0.2 percent; and weepy, 0.2 percent. Restlessness and/or agitation occurred during 4.6 percent of the interventions. Table 6 shows the top interventions based on engagement percentages, and Table 7 shows the top interventions based on time involved.

Table 4. Impact of test variables and facility activity participation

Variables	Facility activity participation					Totals
	Little or none	Occasional, inappropriate	Daily, many inappropriate	Occasional, appropriate	Frequent, appropriate	
Psychoactive medications						
None	14	13	7	6	6	46
One	16	6	5	10	1	38
Two or more	18	2	2	2	2	26
Totals	48	21	14	18	9	110
MMSE category						
MMSE 20 or over	10		2		4	16
MMSE 10 – 19	8	8	3	10	4	33
MMSE 9 or less	30	13	9	8	1	61
Totals	48	21	14	18	9	110
Ambulation						
Self	21	9	5	14	8	57
1 assist	1	2	1			4
2 assist	1	1	2			4
w/c self	4	2	1	2	1	10
w/c assist	5	3	2	1		11
Non/geri	5	4	2			11
With device	6		1	1		8
With Merry Walker only	5					5
Totals	48	21	14	18	9	110

Drama therapy was a cognitive and expressive arts program that consisted of subjects selecting a play or skit, practicing, making props and flyers, and performing the production for others. Wine and cheese social was a cooking group, which consisted of planning, shopping, inviting others, preparing the food for the social, and cleaning up. The social part of this program consisted of reminiscing about past foods, travel, and other topics. The airmat is a 10-foot by 10-foot sensory airflow mattress that is 18 inches tall and attached to a continuously pumping air compressor. It was used for relaxation and exercise and to provide sensory stimulation. Each program tested can be found in detail in the *American Therapeutic Recreation Association Dementia Practice Guidelines for Treating for Disturbing Behaviors*.³¹

Discussion

The description of the subject's recreational interests and actual activity calendar participation was not originally part of this study. The data was so rich and the findings were so disconcerting that these researchers decided to bring the information forward before the larger study even ended. The current survey practice of simply checking the availability of the activity calendar and the number of activities participated in may not be an accurate gauge of the OBRA '87 requirements for the physical, social, and emotional needs of the residents with dementia. The number of calendar activities participated in does not appear to be a meaningful outcome for the majority of these individuals.

Table 5. Chi-square test results (N = 110)			
Variables	Value	df	Asymp. sig. (2-sided)
Psychoactive medications			
Pearson chi-square	17.093	8	.029
Likelihood ratio	17.332	8	.027
Linear-by-linear association	4.329	1	.037
MMSE category			
Pearson chi-square	25.069	8	.002
Likelihood ratio	29.857	8	.000
Linear-by-linear association	2.863	1	.091
Ambulation			
Pearson chi-square	33.194	28	.229
Likelihood ratio	38.962	28	.082
Linear-by-linear association	11.292	1	.001

While we realize this small sample in one area of the country limits the impact, in this study of 107 long-term-care residents with dementia, individuals were, for the most part, left out of traditional long-term-care calendar activities and offered few options that matched their interests. The activities programs offered were often inappropriate for the functioning levels of the residents. The few residents who attend appropriate programs seem to be repeatedly attending all programs and were usually self-mobile. Those on multiple medications, with the most functional impairments, were the least likely to get any meaningful recreational activity on a regular basis. Unfortunately, this left residents with cognitive impairments with little stimulation, few opportunities for socialization, and little meaning in their lives. Most residents with dementia in this study were able to express their recreational interests when asked, or the information was otherwise attainable through interviews with family. With the interview data in hand, it was possible to prescribe engaging recreational opportunities that reached residents of all ability levels. Positive outcomes were measurable when using the therapeutic recreation process.

These researchers also realize that in the current healthcare environment, long-term-care facilities must deal with many serious problems. Activities and recreation for the residents with dementia are often low priorities for the administrators, staff, and even health department surveyors. Without meaningful activities and therapeutic recreation for the most frail and disabled individuals, life often lacks purpose, friendships, and opportunities for challenge and excitement.¹⁰ This may also lead to isolation, depression, and an unnecessary loss of cognitive and physical functioning.

This article compared what is listed on the long-term-care facility's calendar for residents with dementia to the activities they prefer and the number of calendar activities they actually participated in. Less than seven percent of this sample received appropriate levels of activities or recreation. The findings are startling and unsettling, as it appears long-term-care facilities are providing very few meaningful or relevant recreational outlets for frail older adults with dementia.

In a 1985 national survey by the National Citizens' Coalition for Nursing Home Reform,³⁵ residents stated they wanted more activities than currently offered and that the activities should reflect personal preferences and represent their diverse interests and capabilities. A top priority was taking part in community activities offered within the nursing home and outside in the community.

Table 6. Most engaging interventions		
Our interventions	Number of times	Engagement percent
Drama	21	99
Wine/cheese social	18	99
Garden	73	98
Dancing	17	98
Wheelchair biking	101	97
Crafts	26	97
Poetry	18	97
Fashion	15	97
Ambulation	23	96
Photography	18	96
Sewing	16	96
Singing	112	94
Air mat/relaxation	34	93
Pet	26	93
Cooking	123	92
Memory book	21	92
Reminiscing	20	92

Residents also discussed the need for activities in the evenings and on weekends and the importance of offering all residents choices. American Association of Retired Persons (AARP)³⁶ recently pointed out that the Center for Medicare and Medicaid Services (CMS) Quality Indicators have a glaring omission, that of meaningful recreational activities. It appears that, despite this information, recreation remains a serious quality of life problem 17 years after the original 1985 survey.

So the question remains: Why aren't long-term-care facilities providing the types of recreational programs to meet residents' needs? Many may not have a recreational therapist to meet the full range of needs, or they may not be using the recreational therapist to service hard-to-reach residents. Perhaps education and training is missing and regulatory oversight has not focused on this area. We do know from our study that the activity calendars are hung each month with care, but for residents with dementia, the benefits are not often there!

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Table 7. Most time involved		
Our interventions	Number of times	Time involved
Wine/cheese social	21	46
Cooking	123	44
Air mat/relaxation	34	42
Painting	28	37
Exercise	73	36
5-stage sensory	69	36
Drama	21	35
Wheelchair biking	101	32
Singing	113	29
Music	56	29
Sewing	29	29
Memory tea	13	29
Instruments	72	27
Crafts	26	27
Newsletter	25	27
Poetry	18	27
Nurturing doll	68	26

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