PLANNING ACTIVITIES FOR PATIENTS WITH DEMENTIA
A Descriptive Study of Therapeutic Activities on Special Care Units

Nursing is often involved in the development and implementation of therapeutic activities on Special Care Units (SCUs) in nursing homes. Engagement in activity by a person with dementia is assumed to be important for maintenance of functional abilities, social involvement, self-identity, spiritual well-being and self-esteem. There is empirical support for the positive impact of therapeutic activities with demented older adults, specifically, dance (Osgood, Meyers, & Orchowski, 1990); music (Gerdner & Swanson, 1993; Lord & Gardner, 1993; Norberg, Melin, & Asplund, 1986; Wolfe, 1983); plush pet (Banziger & Rousch, 1983; Francis & Baly, 1986), reminiscence (Baines, Saxby & Ehlert, 1987; Ferguson, 1980); video game play (McGuire, 1984); stimulus objects (Mayers & Griffin, 1990); and a visitation program (Beck, 1982). Little, however, is known about the dynamics of participation in therapeutic activity for demented older adults beyond anecdotal reports.

The purpose of the present study was to examine the participation and behavior of people with mid-stage dementia during therapeutic activities. In addition, the notion, based on continuity theory, that activities that are linked to the person's prior history or experience are more attractive to the person than activities that are not linked was examined. Finally, this study examined if participation in activities was related to the person's sleep-wake cycle. The research questions were:

1. What is the type of participation of subjects with mid-stage dementia during therapeutic activities?
2. Can subjects with mid-stage dementia cognitively tie current therapeutic activities to activities they engaged in during the past through reminiscing?
3. Is there a difference in the type of participation in activities when a cognitive tie to the current activity can be made to activities of the past through reminiscing than when it cannot be made?
4. Is there a relationship between the subject's active participation in activities and sleep?

**One of the primary goals when working with people with an irreversible dementia is the maintenance of quality of life and pleasure.**

**LITERATURE REVIEW**

Therapeutic activities may be defined as the use of activity that is goal-directed for persons with health and illness needs. The focus may be...
TABLE 1

Description of Sample

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<th></th>
<th>Female</th>
<th>Male</th>
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<tbody>
<tr>
<td><strong>Sex</strong></td>
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<td>4</td>
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<td>70-93</td>
</tr>
<tr>
<td><strong>Education</strong></td>
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<td>7-16 years</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
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<td>Married</td>
</tr>
<tr>
<td></td>
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<td>6</td>
</tr>
<tr>
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<td>Catholic</td>
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<tr>
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<tr>
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<td>4-24</td>
</tr>
<tr>
<td><strong>Functiona</strong></td>
<td>63.04</td>
<td>41-82</td>
</tr>
<tr>
<td><strong>Profile Scores</strong></td>
<td>11.78</td>
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Preventative, restorative, and/or enabling. For people with dementia, activities are used to prevent behavior problems, to provide some meaningful purpose to the day, and to maintain or restore holistic health and function (Hassellkus, 1992). Activities enable the person to feel a sense of usefulness rather than helplessness (Mace, 1987). Activities are used to promote socialization, pleasure, and a positive sense of self (Zgola, 1987).

Hellen (1992) states that the activities of life are a search for meaning and purpose. Therapeutic activities need to be regarded, not just as a treatment for problems, but as the very framework for bringing together all of life's components. There is formidable evidence that all mammals engage in abundant and complex play behavior in childhood and adulthood (Brown, 1994). Lawton (1985) has emphasized the overwhelming empirical reports that both animals and people will create activity when none exists. One of the primary goals when working with people with an irreversible dementia is the maintenance of quality of life and pleasure (OBRA, 1987). Nursing has had an important role in developing the therapeutic value of self-care activities such as grooming and dressing and nurses actively implement many exercise and cognitive therapies.

Continuity theory states that those who are able to continue their roles, activities, and habits in late life, or find meaningful substitutions are the most satisfied and adjusted (Atchley, 1980). Continuity theory is based on the idea of a basic structure which persists over time. For those individuals with dementia who maintain some intact long-term memory, applying familiar strategies in familiar arenas of life may improve feelings of safety and adaptation. Continuity theory posits that older adults attempt to maintain existing internal and external structures by using strategies tied to their past experiences of themselves and their social world. According to Atchley (1989), continuity in inner psychological characteristics and social behavior are aided by linking change to the person's perceived past.

METHODS

Setting and Sample

The convenience sample consisted of 23 residents from two 12-bed SCUs. The Special Care Units are in a different building from the nursing home but both are located on a large urban campus that provides multiple services and residences for older adults. Written consent was obtained from 23 of the 24 residents’ guardians. Verbal consent was obtained from all residents who participated. The sample (Table 1) was primarily female, widowed, and Jewish, with an average age of 83. Subjects had an average Mini-Mental Status Examination (MMSE) (Folstein, Folstein, & McHugh, 1975) score of 15.39 (SD=5.11, possible range is 0-30) indicating moderate cognitive impairment and a Functional Behavior Profile (Baum, Edwards, & Morrow-Howell, 1993) average of 63.04 (SD=11.78, possible range is 0-108) indicating problem-solving ability is
Music has a steady and constant beat which may provide beneficial structure, organization, and familiarity.

Procedures
Each subject was observed during five types of organized therapeutic activity: music therapy, art therapy, exercise, a cognitive activity (e.g., current events, poetry reading, reminiscence group, discussion of a special topic), and functional household activities (e.g., cooking, dishwashing, or folding towels). Observations were made by one of two research assistants who were graduate students in nursing. Research assistants were trained to observe the person every three minutes for the duration of the organized activity. Participation was coded based on the following categories: a) active participation (defined as physically or verbally engaging in the steps of an activity); b) passive participation (defined as paying attention to the activity, others participating in the activity, or the leader, or commenting on the activity while not directly engaging in the activity); c) null behavior (defined as physically inactive, eyes open but not focused on a particular event or person, no purposeful activity apparent); d) dozing (defined as eyes closed in apparent sleep); and e) unrelated (defined as the person engaging in an activity unrelated to the planned therapeutic activity). These a priori codes were established in individual, independent, but not anonymous consultation with two expert nurses and one music therapist and one art therapist. The codes were further assessed for clarity and content validity by an interdisciplinary team of four dementia experts in a group meeting. Inter-rater reliability estimates, calculated as percentage of agreement was 96% for three assessments.

Ability to make a cognitive tie was assessed by conducting a reminiscence interview with the resident after the activity. Questions were designed to attempt to tie the current activity to personally significant past activities of the subject through reminiscing (e.g., Can you tell me about the foods you liked to cook for the holidays?). Following pilot assessments, the principal investigator instructed the research assistants regarding the types of verbalizations that would constitute ability or lack of ability to make a cognitive tie. If the subject was able to verbalize at least two coherent thoughts regarding a related topic, the person was considered able to make a cognitive tie. A maximum of three reminiscence questions were asked to attempt to have the person reminisce about the topic. Ability to make a cognitive tie through reminiscing was subjectively judged by the research assistant who conducted the reminiscence interview. Inter-rater agreement was 100% based on 10 verbatim transcripts that were chosen using a table of random numbers.

Sleep was assessed by having each shift complete a sleep log for one month for each subject. Dozing, sleeping, and awake states were observed and documented each hour. Staff were provided with the following definitions of states: awake: eyes are open and the person is not sleeping; dozing: eyes are closed in apparent sleep but the person rouses frequently or after a brief period (less than 30 minutes) of apparent light sleep; sleeping: the person is in a state of inactivity with eyes closed for 30 minutes or more.

RESULTS

Participation
Twenty-three subjects were observed during the five types of activity programming studied. Subjects refused to participate in an activity 21 times (22%) leaving observations of residents during 94 therapeutic activity sessions. During these 94 sessions, observations were made every three minutes for as long as the activity continued (usually 20-45 minutes) or as long as the subject remained at the location where the activity occurred. Refusals were most common for functional household activities (N=8), followed by art therapy (N=6), exercise (N=4), music (N=2), and cognitive activities (N=1). Several subjects stated that staff were paid to do household chores and they, therefore, did not want to participate in these activities. Several higher functioning sub-
Figure. Comparison of behaviors during different activity therapies.

Subjects stated that art therapy activities were childlike and “aren’t art” as reasons for refusing to participate.

Overall, the subjects spent the greatest percentage of time actively participating (42%), while 33% of the time was spent passively participating. Subjects spent 14% of the activity therapy time engaged in unrelated activities, 7% of the time null behavior was observed, and 5% of the observations involved dozing.

The Figure provides descriptive data on average percentage of time subjects spent in various behavior states during different types of therapeutic activity. Subjects actively participated most of the time during exercise, music therapy, and art therapy. Cognitive activities were associated with the most dozing and null behaviors.

Cognitive Ties

For the 91 activity observations in which cognitive assessments were able to be made, 48 times (53%) the resident was not able to make a cognitive tie between the current activity and activities of the past through reminiscing. Forty-three times (47%) the resident was able to make a cognitive tie.

Table 2 lists the ability of subjects to make a cognitive tie through reminiscing for the five types of activities. Cognitive ties were made most often regarding exercise and music therapy and least often for art and cognitive activities. There was a statistically significant difference in active participation when a cognitive tie could and could not be made (Friedman test=7.432, p=.024). When a cognitive tie could be made, the median percentage of active participation was 57%, and when a cognitive tie could not be made, the median was 40%.

Sleep

Multiple regression was used to assess the relationship of daytime napping and nighttime continuous sleep to minutes of active participation in therapeutic activities. The R² indicated that 43% of the variance in minutes of active participation in therapeutic activities was associated with amount of daytime napping and nighttime continuous sleep (p=.004). Napping was positively associated with active participation (r=.643, p=.001) indicating that those subjects who spent more time napping during day and early evening hours also spent more time actively participating in activities. Nighttime continuous sleep was not associated with active participation (r=-.029, p=.896).

DISCUSSION

Standards are not available regarding the optimum amount of time people with dementia should be actively or passively participating...
in activities. Active participation may help the person to maintain cognitive, functional, and social interaction abilities for longer periods of time. However, if a person with dementia feels threatened by an activity they have not done before, or if there is a fear of inability to do the activity, passive involvement may allow the person to be a participant in a manner that feels safer and more relaxing. Perhaps both passive and active participation are beneficial and are based on previous lifestyle involvement in activities. Until more research is conducted, nurses should present demented older adults with a variety of activity opportunities, and allow the person to choose the style and pace of participation.

This sample spent most time actively participating in exercise and music therapy. These activities may be less threatening because they are done within a group setting and the individuals within the group can mimic the behavior of the staff and their peers. Music has a steady and constant beat which may provide beneficial structure, organization, and familiarity. Lyric recall was excellent in the music sessions versus remembering a short story or event in history during the cognitive activities. Lord and Gardner (1993) used an experimental design to test the differential effects of 30-minute sessions of music, puzzles, and art activities provided six days per week on people with Alzheimer's disease. Six months after the three groups were formed post-testing was done. The group that received music sessions was more alert, happier, and had higher recall of past personal history than subjects in the other two groups. Paulman (1982) also found that music helped confused and withdrawn older adults become reoriented.

Subjects in this study did spend more time actively participating in an activity when they were able to make a cognitive tie between the current activity and activities of the past through reminiscing. The results suggest that activities may be more beneficial if planned around the resident's remembered history and remembered likes and dislikes. Future research with a comparison group and control of potentially confounding variables is needed to establish this link. The Minimum Data Set includes an assessment of remembered history and remembered activities which were personally pleasurable and significant. As the condition of the person with dementia deteriorates and more memory is lost, it is important to update this evaluation. In addition, future research is needed to determine beneficial effects of reminiscence as an activity for people with dementia. There is some support for a relationship between reminiscence and decreased depression (Goldwasser, Auerbach, & Harkins, 1987); improved cognitive functioning (Hughston & Merriam, 1980); better life satisfaction (Baines, Saxby, & Ehler, 1987) and higher self-concept (Sherman, 1987). Designing activities which evoke reminiscences from the person who retains some long-term memory, may assist the person in maintaining a sense of personhood and continuity. The usefulness of continuity theory in explaining other facets of the life of the demented, as well as the different stages of dementia should be explored further.

People with dementia need a balance between rest and activity and can easily become overwhelmed if their stress threshold is exceeded (Hall & Buckwalter, 1987). In this study, active participation in activities was associated with daytime napping. Unexpectedly, there was no relationship between active participation in activities during the daytime and continuous sleep during the night. A nap may be most beneficial at providing rest but not disrupting diurnal rhythms if the nap is scheduled and time-limited. It is important, then, for nurses to include scheduled naps in the plan of care.

Nursing plays a major role in determining the dynamics of the

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<th>Differences in Ability to Make a Cognitive Tie for the Five Activity Therapies Through Reminiscing</th>
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PATIENTS WITH DEMENTIA

KEY POINTS

1. Therapeutic activities for people with dementia have been used to prevent behavior problems, relieve boredom, and to maintain or restore holistic health and function.

2. This study found that subjects spent more time actively participating in an activity when they were able to make a cognitive tie between the current activity and an event from their past through reminiscing.

3. Active participation in therapeutic activities was associated with increased daytime napping but was not related to continuous sleep at night.

day's events for people with dementia who reside in long-term care facilities or attend adult day care programs. Commitment to providing holistic care and working collaboratively with other disciplines to provide therapeutic activity programs will facilitate optimum quality of life for people with mid-stage dementia.

REFERENCES


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