Beyond the Basics
Effects of the Eden Alternative Model on Quality of Life Issues

ABSTRACT
In Life Worth Living, Thomas (1996) proposed that in long-term care facilities for elderly individuals, loneliness, helplessness, and boredom are out of control and are steadily decaying the residents' spirits, adversely affecting quality of life. While Thomas' contention appeals to common sense, no empirical evidence is offered in its support. The purpose of this quasi-experimental study was to assess the impact of implementation of the Eden Alternative model on levels of loneliness, boredom, and helplessness of older residents of a long-term care facility. The model was introduced into the experimental facility on May 1, 1998. The final sample for the experimental group included 21 cognitively intact older adults from a state veterans home (13 men, 8 women, mean age = 76.1). The final control group was composed of 13 residents in a private long-term care facility (11 women, 2 men, mean age = 85.7). A Background Data Sheet, the Geriatric Depression Scale (includes yes or no questions related to helplessness and boredom), and the UCLA Loneliness Scale (Version 3) were administered by an interviewer at baseline and 1-year post-implementation of the Eden Alternative model. Data analysis from the post-implementation phase revealed significant differences between the groups on levels of boredom ($z = -2.6, p = .01$) and helplessness ($z = -2.2, p = .03$). Lower levels of distress were found in the experimental group on both boredom and helplessness, but not loneliness. Findings suggest health care professionals and researchers have an opportunity to take a leading role in impacting services related to quality-of-life issues for this important, but often overlooked, population.

BRENDA BERGMAN-EVANS, PhD, APRN, BC
Don’t put me in a ‘home’!” This is a common lament heard by spouses and children as individuals age. Although nursing homes are seldom the desired residence for older adults, in 1998, more than 1.8 million individuals lived in approximately 16,800 nursing home facilities across the country (Cowles, 1999; Krauss et al., 1997). Nursing homes are also costly. In 1997, Ouslander, Osterweil, and Morley reported that America spent close to $50 billion dollars for nursing home care and that the expenditures were escalating rapidly. Even with this huge investment of resources, few individuals or groups are completely satisfied with the prospect of institutionalization.

The Eden Alternative model arose in response to an observation by its founder that the conditions of loneliness, helplessness, and boredom steadily decay the spirits and adversely affect the quality of life of older adults residing in nursing homes (Thomas, 1996). Since its inception in a single institution in the early 1990s, it has gained momentum and now boasts member nursing homes in 15 multi-state regions in the United States, 2 Multi-territory regions in Canada as well as additional sites in Europe, Australia, and Japan (Eden Alternative, 2004). The Eden Alternative model is based on the principles listed in the Sidebar.

The purpose of the quasi-experimental study presented in this article was to assess the impact of implementation of the Eden Alternative model on levels of loneliness, boredom, and helplessness of residents of a long-term care facility.

BACKGROUND

Loneliness. Loneliness is unpleasant in any setting and one of import for the nursing home resident (Rodgers, 1989). Thomas (1996) associates loneliness with pain exacerbated by companionship that is wanted but not available. Loneliness can be intensified by separation from significant, meaningful individuals or things with a concomitant decrease in number and quality of interactions (Hicks, 2000). There is a high correlation between loneli-
ness and many factors traditionally associated with the nursing home resident such as physical incapacity, perception of poor health, perception of dependence, relocation, role change, pain, and loss of a pet (Rodgers, 1989), as well as social isolation, hopelessness, and inability to perform activities of daily living (Hicks, 2000).

For cognitively intact individuals in nursing homes, the loneliness issue may be twofold. First, social isolation often is exacerbated when the individual is physically separated from friends and family. Then, because the majority of individuals in long-term care facilities exhibit some degree of dementia, the perception of social isolation and being on “one’s own” for persons who are cognitively intact may be heightened even though they are surrounded by many other residents (Slama & Bergman-Evans, 2000).

Helplessness. For the nursing home resident, helplessness is the pain felt when an individual consistently receives care without having the opportunity to give care back (Thomas, 1996). The average person residing in a nursing home has limitations in three or more activities of daily living (Gabriel, 2000). Although intervention studies with older adults who are institutionalized have included goals of enhancing environmental control, researchers have neglected to measure helplessness. Elderly residents in long-term care facilities are often more vulnerable to learned helplessness as a result of the dependent role that is typically expected and assumed on admission (LeSage, Slimmer, Lopez, & Ellor, 1989). The older adult’s passive, dependent behaviors result from an inability to control present life events. Consequently, future life events are also assumed to be beyond control (Barber, Slimmer, & LeSage, 1994).

Maintenance of a level of personal control by nursing home residents has been shown to be beneficial for physical health and psychological well-being (Faucett, Ellis, Underwood, Naqvi, & Wilson, 1990). The need to control the environment is of fundamental importance to human beings. Yet when one enters a nursing home, choice often becomes a thing of the past. Such basic choices as when to eat, what to wear, or when to go to bed are often in the hands of someone else. The result is often a sense of helplessness.

Boredom. Boredom is the pain felt when an individual’s life lacks variety and spontaneity (Thomas, 1996). Little research has linked boredom to the older adult who is institutionalized. Boredom has been significantly associated with certain unpleasant affective conditions associated with nursing home life such as depression, hopelessness, and loneliness (Vodanovich, Verner, & Gilbride, 1991). However, clinical wisdom would suggest boredom is a reality for this group. Daily scenes in nursing homes that include older adults hurried out of bed to wait in wheelchairs for meals, the toilet, and nap time seem the embodiment of boredom.

METHODOLOGY

For this study, a quasi-experimental design was chosen to answer the following question: Are there differences in levels of loneliness, helplessness, and boredom between individuals who are cognitively intact and residing in a nursing home using the Eden Alternative model and those residing in a nursing home using a standard nursing home model?

Although the randomized control trial (RCT) is the “gold standard” design for intervention studies in clinical research, an RCT is often not practical or even possible. Random assignment to intervention and control groups, such as the ones described in this article, is not only unrealistic but nearly impossible.

Sample

Inclusion criteria for the study were that the resident had been in the
TABLE 1
DEMOGRAPHIC AND HEALTH-RELATED CHARACTERISTICS OF THE STUDY GROUPS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Eden Group (n = 21)</th>
<th>Control Group (n = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (follow up)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>76.1</td>
<td>83.1</td>
</tr>
<tr>
<td>Range</td>
<td>51 to 105</td>
<td>75 to 94</td>
</tr>
<tr>
<td>SD</td>
<td>13</td>
<td>5.8</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Male</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Non white</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Number of diagnoses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.9</td>
<td>6.3</td>
</tr>
<tr>
<td>Range</td>
<td>1 to 8</td>
<td>5 to 10</td>
</tr>
<tr>
<td>SD</td>
<td>2.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Total routine meds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>9.0</td>
<td>8.8</td>
</tr>
<tr>
<td>Range</td>
<td>4 to 18</td>
<td>5 to 16</td>
</tr>
<tr>
<td>SD</td>
<td>4.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Self-health ratings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>9.5%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Fair</td>
<td>9.5%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Good</td>
<td>61.9%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Very good</td>
<td>14.3%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Excellent</td>
<td>4.8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow up</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

nursing home for at least 6 months, was cognitively intact, and was able to understand and speak English. Although most nursing home residents have some degree of cognitive impairment, the researchers chose to focus this pilot work on the cognitively intact to establish baseline levels of loneliness, helplessness, and boredom with standardized instruments that require responses from participants. Six months was chosen as a cutoff for residence to allow for the adjustment to the nursing home life and changing living situation.

Cognitive status was determined from the Cognitive Patterns section of the Minimum Data Set (MDS). No age limitations were placed on resident eligibility. The setting for the experimental group was a state veterans home in a city in the Midwestern United States. For this group, a sample of 35 participants completed the baseline interviews and 21 completed the follow up. The setting for the control group was a nonprofit nursing home located in a mid-size Midwestern city. For the control group, 29 completed the baseline interview and 13 completed the follow up.

Methods
The Eden Alternative Intervention. The experimental facility was a certified Eden Alternative facility. Three employees completed the certified associate training course with Dr. William Thomas in New York. Following the formal training, an interdisciplinary Eden group was formed with the charge of planning and implementing the project during a 1-year period of time. This group oversaw the following work teams: plants and vegetation, birds, canine. Another work team focused on the establishment of a day care for children of employees and others. Leadership retreats and staff training were led by the Eden group and attended by all employees. The program design was consistent in all aspects with the Eden Alternative principles of ecology and anthropology. The data collectors were not a part of the Eden Alternative intervention at any time.

Baseline Procedure. Before implementation of the project, Institutional Review Board (IRB) approval and facility permissions were obtained. For both the experimental and the control group, baseline data collection was completed at least 2 months
prior to the final implementation of the Eden Alternative at the experimental facility.

The researchers followed these baseline procedures:
- Reviewed the charts to identify individuals who met the inclusion criteria.
- Personally approached eligible individuals, invited them to participate in the project, and obtained informed consent.
- Administered the study questionnaires: UCLA Loneliness Scale, Geriatric Depression Scale (GDS), and the personal interview form.
- Reviewed the chart for routine medications and diagnoses.

Follow-up Procedure. One year after the Eden Alternative was initiated for the experimental group, the researchers collected follow-up data using the same procedure as outlined for baseline data.

At both baseline and follow up, the informed consent process and completion of the questionnaires took approximately 45 minutes. Although rest periods were offered, none were needed.

Instruments
Loneliness. The UCLA Loneliness Scale (Version 3) was used to measure loneliness (Russell, 1996). It is a 20-item, 4-point scale ranging from never (1) to always (4) with a total score ranging from 20 to 80.

Past personal interview research has successfully used this scale with older individuals. Coefficient alphas have been reported in the range of .89 to .94; concurrent and discriminant validity also has been established (Russell & Cutrona, 1991). The coefficient alphas for this study were .86 to .90. Russell and Cutrona’s (1991) mean testing of the scale with older adults was 31.51. Therefore, a cautious cutoff score of 35 or higher was chosen as an indicator for loneliness.

Helplessness and Boredom. Responses to the questions “Do you often feel helpless?” and “Do you often feel bored?” were extracted from the GDS (Yesavage & Brink, 1983). The GDS is a screening tool designed specifically for use in evaluation of elderly individuals for depression. It consists of 30 items answered either “Yes” or “No.” Reliability coefficients were reported to be .94, and discriminant validity for the items was established (Yesavage & Brink, 1983). Reliability coefficients were .61 to .90 for this study.

A background data sheet developed by the investigators for collecting descriptive data concerning demographics (e.g., age, gender, marital status, and health-related characteristics such as the number of medications) also was completed.

Results of data analysis will only be reported for participants who completed both baseline and follow-up interviews. The Statistical Package for Social Sciences (SPSS Inc., Chicago, IL) was used for data analysis. A significance level of .05 was maintained throughout.

Table 1 presents selected demographic and health-related character-
istics. The Eden group of 21 cognitively intact older adults consisted primarily of men compared to the control group that consisted primarily of women and was more typical of the “usual” nursing home population. The mean age for the Eden group was 76.1 years, which was significantly younger than the mean age of 85.7 years for the control group. There was a 40% attrition rate for the participants in the experimental group bored dropped from a third to less than a quarter. For the control group, there was little change in any of the study variables from baseline to follow up.

Table 3 presents the findings from the Mann-Whitney U test comparing the two groups on levels of loneliness, helplessness, and boredom at the follow-up data collection point (1 year after institution of the Eden Alternative model for the Eden

The Omnibus Budget Reconciliation Act was the federal government's approach to improving quality of nursing home care.

and a 56% attrition rate for the control group. From the baseline to follow-up interviews, participant loss from the study resulted from either death or decreased cognitive ability. No participants who met inclusion criteria at the follow-up point refused to participate.

Both groups used a comparable number of medications at baseline. At the follow-up, the number of medications for the experimental group had increased by 1.6 and for the control group, approximately 2.6. The experimental group had almost 3 additional diagnoses at follow-up, and the control group diagnoses number increased by less than 1.

In the Eden group, from baseline to follow up, participants increased their very good or excellent self-health ratings from 19.1% to more than 40%. For the control group, the very good or excellent ratings had increased modestly from 15.4% to 23.1%.

Table 2 presents data related to the levels of loneliness, helplessness, and boredom for the study groups before and after the intervention. For the Eden group, there was no change in the number of participants classified as lonely, but the percentage classified as helpless dropped from almost 40% to less than 24% while those classified as

Critical medication review is a necessary and important regulation for nursing homes. Thomas (1996) suggests medication often may be used to blunt the symptoms manifested from the pain of loneliness, helplessness, and boredom. The average number of medications for both of these groups exceeded the national norm of 5.85 routine medications (Tobias & Pulliam, 1997). Also, for both groups, the number of medications increased from baseline to follow up. These findings differed from a decrease in medication use noted in Thomas’ pilot study (1996). The most likely factor that may have contributed to this variation was an increase in the number of medical diagnoses listed for both groups (i.e., more actual disease requiring prescription medicine). For the Eden group, the increase was certainly more pronounced and may have been related to a new physician taking the position of medical director between the baseline and follow-up data collection.

Nursing Implications. The findings reinforce the need for health care providers and nursing personnel to be constantly vigilant for opportunities to decrease the number of medications even in nursing home residents with complex needs. For nursing home residents, the first line of attack for any problem should not be medication. In almost every case, medications should be added only as a last resort.

Loneliness

In this study, there was no change in the level of loneliness from baseline to follow up for the Eden group. Loneliness may be more deep-seated and less environmental than boredom or helplessness. Therefore, it may be more resistant to amelioration with environmental interventions. Although a more inviting environment compared to the “usual” nursing home surrounded the individuals in the Eden group, the participants’ level of loneliness
did not decrease. There is little doubt that the risk of loneliness for individuals who enter and reside in a nursing home is significant. However, if the individual was isolated in the community because of decreased functioning, the loneliness may have preceded the move. It is probably naïve to imagine that any intervention is powerful enough to balance the tremendous loss that follows changes in health status as well as the relinquishment of the family home, friends, pets, and self-image.

The perceptions of social isolation and being on one’s own have been suggested as concepts that exert strong effects on levels of loneliness (Hoeffer, 1987). Friends and family may be reluctant or unable to visit the resident after admission. The cascade of loss persists after the person is admitted, when deaths occur among their old friends from the community and new friends from the nursing home. Also, to a certain extent, many individuals entering a nursing home cling to the hope that the stay will only be temporary. For most, there

**Having a sense of the resident’s life history may help to combat loneliness and help with the adjustment process.**

comes a point when the individual realizes the placement is permanent. Another factor that may affect loneliness levels for individuals who are cognitively intact is the seemingly never-ending change of nursing home personnel. In isolation, any of these events are challenging, but in combination, they intensify feelings of loneliness.

**Nursing Implications.** Even if it is not possible to eradicate loneliness, appropriate measures may keep it from intensifying. Having a sense of the resident’s life history may help to combat loneliness and help with the adjustment process. Room

help with adjustment and relationships between staff and family (Hertzberg & Ekman, 2000). This inclusion may increase visiting and, in turn, decrease loneliness.

The sense of loss may extend to inanimate objects, such as furniture and possessions. Residents should be encouraged to bring personal articles from home that help to individualize their own living space. Regular “new resident” teas to introduce facility newcomers to seasoned residents and staff members have been instituted as an intervention to combat loneliness in the study facility. Providing residents with the opportunity to practice their spiritual and religious activities also may help in overcoming feelings of loneliness (Hicks, 1999).

**Helplessness**

The Eden group had decreased feelings of helplessness at the follow-up interview despite the fact they had more medical diagnoses and were taking more medications. The need for assistance with activities of daily living is often what brings individuals to the nursing home, and these self-care deficits frequently drive the care planning process. To actualize the Eden Alternative, personnel throughout the institution are integrated and empowered. First-line staff shift their philosophy from “doing for” to encouraging independence.

Thomas (1996) has suggested that to maintain a sense of contribution when one is a recipient of care is of vital importance to the person who lives in a nursing home. The provision of a Human Habitat model with pets, plants, and children may have contributed to the decreased feelings of helplessness experienced by individuals in the Eden group.
Nursing Implications. Matching staff and residents by interests when possible may allow for increased consistency of care and increased independence. An environment that encourages residents to perform helpful acts, care for plants and animals, and to live up to their highest potential may all aid in decreasing feelings of helplessness and should be fostered.

Boredom
The Eden group also had less boredom at follow up than the control group. Combatting boredom is important for the individual, other residents, and the staff. Individuals who remain active in instrumental, leisure, and social activities have demonstrated fewer disturbing behaviors and require less help with basic self-care (Baum, 1995). By decreasing boredom in residents, the need for behavior interventions may be decreased.

Nursing Implications. Residents need an activity plan, but planned activities need to be meaningful if they are to decrease boredom. To maintain the relevancy of planned activities, regular needs assessments and follow-up evaluations after events by both staff and residents are important. Residents need to have the freedom to choose to participate in activities or spend time alone. Private time for reflection and places for privacy with family members are additional techniques to decrease boredom.

SUMMARY
In a nursing home world of too little time and too much work, professionals are challenged not only to embrace a new paradigm such as the Eden Alternative, but also to sustain the change after it has been implemented. This requires ongoing education of the participants and residents; introduction to the concept and procedures for new employees, residents, and families; and support from administration.

Going “beyond the basics” demands that the foundation of nursing home care models be more than mandated rules or routines. More emphasis must be placed on improving the outcomes of long-term care (Kane, 1995). The Eden Alternative offers an intervention with the potential to improve quality of life by reducing feelings of boredom and helplessness for residents in nursing homes. The time has come to invest in a new way of doing things.

REFERENCES

Archives of Psychiatric Nursing, 1(5), 366-373.

ABOUT THE AUTHOR
Dr. Bergman-Evans is Associate Professor and Chair of Advanced Practice, Creighton University School of Nursing, Omaha, Nebraska.
Address correspondence to Brenda Bergman-Evans, PhD, APRN, BC, Associate Professor and Chair of Advanced Practice, Creighton University School of Nursing, 2500 California Plaza, Omaha, NE 68178.