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Protocol to Enhance Quality of Life in Nursing Home Residents through Implementation of the Eden Alternative Concepts

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PROTOCOL TO ENHANCE QUALITY OF LIFE IN NURSING HOME RESIDENTS THROUGH IMPLEMENTATION OF THE EDEN ALTERNATIVE CONCEPTS

by

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This Scholarly Project Paper, submitted by Amy Slominski and Megan Briese in partial fulfillment of the requirement for the Degree of Master's of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

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Signature Amy Sorrenti Date 12/10/04

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Chapter 1

INTRODUCTION

The population of the elderly is growing at a fast pace. The number of older Americans (aged 65 and older) has increased nearly eleven times between 1900 and 1990, from 3.1 million to 33.9 million (Hobbs, 2001). Many of these individuals are living in alternative types of facilities such as nursing homes.

Depression is a common problem with the elderly residing in nursing homes. "It has been estimated that at least one-fourth of nursing home residents older than the age of 65 suffer from a depressive disorder" (Perez, 2001, p. 312). However, age itself is not a risk factor for developing depression; rather causes of depression in the elderly may include a decrease in function secondary to a chronic illness, nursing home environments that reinforce negative perceptions and loss of hope. Social isolation, loss of spouse, friends, and autonomy are other factors related to depression.

Occupational therapists have a commitment to client-centered care, the promotion of health and wellbeing, and the prevention of long-term disability resulting from illness. Occupational therapists can implement components of the Eden Alternative as they plan interventions suitable for residents in the nursing homes. Client-centered, motivational interventions based on the Eden Alternative include: gardening, pet therapy, and social interactions with children. These interventions allow the residents to maximize functioning, promote wellness, and increase quality of life.
The purpose of this project was to develop a protocol for occupational therapists to use aspects of the Eden Alternative in designing therapeutic interventions. Chapter two provides a comprehensive literature review of depression, promoting quality of life, the benefits of engagement in occupation, strategies to promote participation, issues of thriving in the elderly, and the implementation of the Eden Alternative in nursing home facilities. Chapter three describes the process followed while designing the protocol for occupational therapists. An overview of the product may be found in chapter four with the specific protocol found in Appendix A. Chapter five summarizes the process and outlines areas of future research needed to determine the effectiveness of occupational therapy interventions using components of the Eden Alternative.
Chapter II

REVIEW OF LITERATURE

The literature review addresses the promotion of quality of life for elderly residents residing in nursing homes. Specific areas addressed include: depression in the elderly, promoting quality of life, benefits of engagement in occupation, strategies to promote participation, and the implications of the Eden Alternative.

Depression is a major public health problem in the elderly population. Depression has an impact on one’s wellbeing and performance. “The criteria for a diagnosis of major depressive disorder include the presence of at least five of the following symptoms: depressed or sad mood, decreased interest of pleasure in activities, feelings of excessive guilt or worthlessness, apathy or lack of motivation change (increase or decrease) in sleep, appetite, weight, energy, sexual desire, decline in attention, concentration, memory, and/or thoughts of death or suicide” (Perez, 2001, p. 306). These symptoms must be present for at least two weeks and significantly impair one’s daily functioning. Some of the symptoms of depression may be more prominent than others in older individuals. For example, themes of loss and hopelessness related to perceived and real losses are commonly seen in older individuals. Although hopelessness and perceived losses are also present among the young people, these symptoms tend to be more realistic in older adults (Perez). This is due to older adults having little chances of replacing or restoring that which he or she has lost, such as a spouse of 50 years or the occupational achievements of years past. Apathy, withdrawal, self-depreciating behavior, and
psychomotor retardation also may be prominent features of depression in older adults (Perez).

The prevalence of depressive disorders is the highest in hospitalized subjects and nursing home residents (Perez, 2001). “It has been estimated that at least one-fourth of nursing home residents older than the age of 65 suffer from a depressive disorder” (Perez, p.312). According to Jones, Marcantonio, and Rabinowitz (2003), age, sex, race, marital status, cognition, length of stay, and medical comorbidity were significantly and independently associated with the prevalence of depression. It was found that Caucasian residents were about 5 times more likely to be diagnosed with depression than African American residents. “Depression is associated with a higher prevalence and risk of disability and is projected to become the second-leading cause of disability by 2020” (Kennedy, 1991, p.174).

Depression presents a significant threat to the well-being and life satisfaction of the elderly population in the nursing home setting. Depression can detach an individual from his or her own active lifestyle and can demonstrate difficulty finding ultimate meaning. It is often because of the feelings of hopelessness and powerlessness associated with depression that individuals may appear to lack motivation. Nursing home environments that reinforce passive, apathetic, and dependent behaviors by not providing client-centered opportunities can worsen the motivational and emotional problems of one’s health (Perez, 2001). “Having this lack of access to pleasurable or instrumental activities, lack of ability to engage in these activities due to physical or mental deficits, or lack of motivation can increase loneliness, boredom, helplessness, and a decrease in function with the elderly residents living in nursing homes” (Perez, p.312).
“Depression in nursing homes is often unrecognized; however, when diagnosed it is often treated inadequately or inappropriately” (Jones et al., 2003, p. 1404). The Eden Alternative is one approach suitable for preventing and reducing depressive disorders in nursing homes residents. It is a powerful tool for improving quality of life and, in turn, preventing and reducing the onset of depression with elderly residents. The Eden Alternative’s mission is to improve the well-being of elders and those who care for them by transforming the communities in which they live. The vision is to eliminate loneliness, helplessness, and boredom. Loneliness can be replaced with companionship, helplessness can be replaced with hope, and boredom can be replaced with spontaneity. This can be accomplished by bringing in other living creatures, revitalizing the surrounding environment, and providing daily spontaneity (Eden Alternative, 2002). It is beneficial to encourage and create opportunities promoting the residents participation with the environment. By improving the social and physical environment for the elderly population, the quality of life in the nursing home is enhanced. Mee and Sumsion (2001) stated that people need to be engaged in ‘doing’ something purposeful. This purposeful activity was directly associated with increasing meaningfulness of their day and improving the quality of life. Residents can become more satisfied with their lives and positively influence both health and sense of self by having more meaningful activities that emphasize doing rather than only thinking.

Improving one’s quality of life is related to one’s wellbeing. Quality of life is one’s personal satisfaction (or dissatisfaction) with the cultural or intellectual conditions under which one lives (Hyperdictionary, 2003). This satisfaction can be accomplished in
nursing homes by creating a natural, safe, supportive, motivating, and client-centered environment.

The interface between the environment and the occupational needs of residents in nursing homes needs to be addressed. Close examinations of occupational and environmental influences are beneficial to providing an optimal quality of life and encouraging occupational participation (Green & Cooper, 2000; Mee & Sumsion, 2001).

Mee and Sumsion (2001) found the environmental influences also appeared to play an important role in generating intrinsic motivation. Promoting a welcoming, friendly, and sociable atmosphere is essential in motivating the elderly to participate in occupations and meaningful activities despite the presence of any disabilities. The importance of creating this type of environment is illustrated by one individual’s response to the following question: “Have you any idea what you might be doing if this place didn’t exist?” the participant replied, “Hanging from a tree with a rope around my neck.” (Mee & Sumsion, p. 591). Creating an environment that meets the physical, mental and spiritual needs of the residents, respecting the residents’ dignity, and providing residents with choices related to daily activities increases the residents’ quality of life.

Green and Cooper (2000) found the meaning of occupation to be a quality of life factor for elderly people living in a nursing home. The recognition of informal and non-traditional activities as acceptable occupations was an essential factor to continuation of satisfaction of the residents at the nursing home. Respecting the residents’ preference is an important connection between quality of life, choice, and personal control.

Institutional procedures often dictate where, when, and how residents spend their waking hours (Taft & Nehrke, 1990), resulting in a custodial rather than a therapeutic
environment. Duncan-Meyer and Huebner (2000) reported that when the ratings of personal choices increased, perceptions of quality of life also increased. For example, one of the items on the questionnaire was to rate how much choice residents have when determining with whom they want to eat with. This topic was significantly correlated with interpersonal attachment, leisure, and basic needs suggesting that a choice is important to many aspects of quality of life. Taken as a whole, this study confirmed that enhancing personal control of nursing home residents could be done through emphasizing self-responsibility, providing opportunities for decision making, and giving back to others. This resulted in increased activity, alertness, happiness, improved quality of life, and decreased mortality of residents one year later (Duncan-Meyer & Huebner).

In the nursing home setting work is often structured as a task-based system. The system is designed to get the work done, often resulting in depersonalized routines that lack goal direction for the resident. The resident then begins to become dependent on care providers because of the emphasis on task completion and efficiency (Nolan, Grant, & Nolan, 1995). In contrast, increased independence can be functional for a resident and also decreases costs in the nursing home facility. Brigette et al. (1996) found a one-point change in improved ADL performance on the Functional Independence Measure (FIM) was equal to saving an average of 3.38 minutes of help provided by a care giver per day. By decreasing the amount of time spent with each resident this can positively affect the financial status of the facility.

Providing individualized client-centered care can increase the quality of life of elderly nursing home residents (Flesner & Rantz, 2004). By providing this type of care, residents are able to make decisions concerning their daily schedule and routines based
upon their current function. Flesner and Rantz identified six components that assist in creating optimum independence in the environment. These include a philosophical shift to support satisfaction of residents, creating individualized living spaces, empowerment of staff as individual resident advocates, respect for residents’ routines, preferences, and individual needs, the opportunity for personal growth and community involvement.

Residents are able to make personal decisions about their care and create home like environments by decorating their rooms to decrease the institutionalized feel. Around the clock food and visitation by family and friends is available to residents. Outcomes of implementation of these six aspects of care include improved morale and attitudes of staff and residents and decrease in pressure sores, weight loss, falls and restraint usage. Operating costs were also found to decrease. This type of care promotes home like environments with a purpose of providing quality care as well as increasing the quality of life of nursing home residents (Flesner & Rantz).

It is both a right and a benefit for residents to be involved in their own program planning. The Commission on Accreditation of Health Care Organizations (1989) requires “the patient and the family participate as appropriate in the development and implementation of the treatment plan.” (as cited in Nelson & Payton, 1991, p. 753). Occupational therapists include “client-centered goals that are clear, measurable, behavioral, functional, contextually relevant, and appropriate to the client’s needs, desires, and expected outcomes” as part of the intervention plan and standards of practice (American Occupational Therapy Association [AOTA], 1998, Standard V, para. 3).
Opportunities to engage in occupation are a strong motivational force in creating satisfaction with one's lifestyle (Mee & Sumsion, 2001). Participation in meaningful occupations results in time passing more quickly and a decrease in boredom. Being involved throughout the day provides the elderly with a sense of purpose and structure to their day. They benefit from having a project to work on. Engagement in occupations allows people to attach symbolic meanings to their day, leading to social, cultural, and spiritual significance. It is through occupation that people organize their time, discover meaning and engage in occupations that lead to pleasure, fulfillment and control over their environments (Mee & Sumsion).

Bona (2001) reported the following benefits of participating in occupations: an increase in self-confidence, a sense of accomplishment, an increase about one's knowledge about things around them, opportunities to try new things, increasing social interaction with others, feel more relaxed, contribute to one's emotional well-being, and feel healthier overall. These benefits address many areas in an individual such as psychological, educational, social, relaxation, physiological, and environmental influences.

Leisure is of central importance in many people's lives. Leisure activities are defined as "non-work activities in which you have free choice as to whether or not to participate. These activities take place in your free time and there is no obligation as to what is chosen or to what extent you participate. Leisure choices can be relatively active or inactive, such as sports or other outdoor activities, reading, television viewing, cultural activities, social activities or hobbies" (Bona, 2001, p. 425). A number of benefits come from participating in leisure activities. It is important to remember the therapeutic use of
carefully selected activities to meet individual needs. Individuals perceive that certain personal needs are met or satisfied through leisure activities, and passive activities, such as reading or watching television, are less satisfying than more active activities (Bona).

Reynolds (2001) identified strategies effective in assisting individuals to take on a more active, healthy lifestyle to enhance physical and mental health. The term physical exercise has been replaced with physical activity because this term includes everyday occupations, such as gardening, as well as actions such as walking to the greenhouse and back to the room. This term promotes the physically active lifestyles rather than exercise and sport carried out specifically for fitness.

The first strategy is educating the clients about the benefits of participating in the opportunities offered to them at the facility. Many individuals have limited awareness of the many health benefits of physical activity and this lack of knowledge may account in part for inactive behaviors. Inactivity can lead to an increase risk of a number of conditions such as hypertension, stroke, diabetes, pressure sores, depression, etc. There is evidence that falls among elderly people can be prevented or reduced by enhancing strength, fitness and self-confidence through exercise programs (Reynolds, 2001). “It is also evident that physical activity can challenge depressed mood, alleviate anxiety and stress, increase self-esteem and enhance a sense of control or mastery” (Reynolds, p. 634). Establishing a social network may also reduce loneliness and depressed mood, enhancing a meaningful life.

The second strategy identified by Reynolds (2001) is to consider the client’s diagnoses, needs, and lifestyle; this would make it a client-centered approach. Addressing
the client's wants and needs will in turn aid in providing the clients with a clear explanation of the benefits of exercise for specific conditions.

The last strategy is having the participant make realistic goals to decrease the feeling of failure and the chance of quitting. Participants need to be encouraged to make both short and long term goals in order to experience success and have a sense of accomplishment; this in turn will encourage future participation in the physical activities. Overall, applying these strategies would be beneficial in reframing an individual's identity from an 'inactive' person to an 'active' person to promote individuals' wellbeing.

"Many of the elderly in the nursing home experience major life changes due to an illness, disability, loss of identity, or to losses such as their independence or death of a spouse" (Spencer, Davidson, & White, 1997, p. 191). Therefore, the client's future may lead to despair and a decrease in hope for the future. However, when staff and therapists are able to engage clients in dealing with uncertainties about the future, development of hopes and confirming a meaningful and purposeful future can be established.

Spencer et al. (1997) described three clinical approaches that have been used in to engage clients in development of hopes for the future and decreasing the possibility of an onset of depression and hopelessness. These approaches are goal setting and goal attainment, examination of change in a client's occupational configuration over time, and qualitative interviews about life history or narratives. Goal setting is defined as establishing expected future outcomes by making the goals realistic to ensure success and creating an increase of hope for one's future (Spencer et al.). Goal attainment can enhance one's motivation toward other goals and pursuing future goals for themselves. The second clinical approach is to identify how daily occupations are performed and
problem solving to identify ways performance of these occupations can be continued or modified in the future. Modifying important occupations can aid in continuation and satisfaction with the completion of the occupations and generate an increase of hope with one’s future. The last approach is recognizing the clients’ life history. This approach provides ways in which hopes for the future can come about in a connected way from a person’s past. The therapist and the client collaborate in identifying goals through one’s life history. Overall, this qualitative interview on life history aims to express changing hopes and use these in making decisions about their future.

Today a majority of skilled nursing facilities follow the traditional medical model. The “medical model focuses on treatment of physiological problems using medical interventions, failing to attend to psychological factors such as loneliness, helplessness, and boredom” (Tesh, McNutt, Courts, & Barba, 2002, p.8). Many believe that by creating a human habitat model and transforming a resident’s environment it may result in feelings of belonging, self worth, and meaning, which in turn can promote and improve quality of life and physical health for individuals living in skilled nursing facilities.

The Eden Alternative follows the human habitat model. The Eden Alternative is a model for transforming skilled care facilities based on a medical model of care into human habitats that promote human growth. This model includes decentralizing the institutional organizational structure of the traditional nursing home setting to empower the residents and employees by incorporating plants, resident animals, and children’s activities into the daily lives of the residents and staff members (Tesh et al., 2002). The Eden Alternative addresses the physical, psychosocial, administrative, and spiritual
aspects of care by addressing quality of life of both residents and employees and developing relationships of the facility with the community.

The Eden Alternative outlines a mission, a vision, and ten principals that guide the care provided. The mission is to improve the well being of elders and those who care for them by transforming the communities, in which they live and work. The vision of the model is to eliminate loneliness, helplessness, and boredom. The Ten Principals are as follows:

1.) The three plagues of loneliness, helplessness and boredom account for the bulk of suffering among our elders.
2.) An elder-centered community commits to creating a Human Habitat where life revolves around close and continuing contact with plants, animals and children. It is these relationships that provide the young and old alike with a pathway to a life worth living.
3.) Loving companionship is the antidote to loneliness. Elders deserve easy access to human and animal companionship.
4.) An elder-centered community creates opportunity to give as well as receive care. This is the antidote to helplessness.
5.) An elder-centered community imbues daily life with variety and spontaneity by creating an environment in which unexpected and unpredictable interactions and happenings can take place. This is the antidote to boredom.
6.) Meaningless activity corrodes the human spirit. The opportunity to do things that we find meaningful is essential to human health.
7.) Medical treatment should be the servant of genuine human caring, never its master.

8.) An elder-centered community honors its elders by de-emphasizing top-down bureaucratic authority, seeking instead to place the maximum possible decision-making authority into the hands of the elders or into the hands of those closest to them.

9.) Creating an elder-centered community is a never-ending process. Human growth must never be separated from human life.

10.) Wise leadership is the lifeblood of any struggle against the three plagues. For it, there can be no substitute. (Eden Alternative, 2002, p.1)

By following these ten principals caregivers focus on promoting well being and quality care for the resident. The Eden Alternative is also concerned about the employee’s wellbeing. Fundamental to the process is staff members who feel valued and appreciated will then value and provide quality care for the residents.

An ongoing problem in many nursing homes today is decreased staffing rates as well as an increase in staff turnover rates due to burn out. Residents are not getting quality care they deserve due to poor working conditions and many facilities focus on efficiency. “Factors such as low pay, overwhelming workloads, lack of respect from other nursing colleagues, and lack of administrative support lead to stressful” working conditions (Flesner & Rantz, 2004, p. 193). Higher staffing ratios improved resident outcomes such as increased function, reduced medication and restraint usage, increased survival rates and improved quality of life of their elderly residents (Flesner & Rantz).

Staff empowerment occurs when staff members have more responsibility for managing
daily assignments and schedules, collaborating with other staff members about important decisions and by being involved in various committees. This empowerment improves self-esteem and job satisfaction thereby decreasing staff turnover rates and absenteeism (Anderson, Aird, & Haslam, 1991).

Resident animals, activities involving children, and caring for plants and gardens provide residents with a sense of responsibility, value, and self worth (Jorgenson, 1997; Tesh et al. 2002). “Animals have been shown to decrease stress, improve mood, increase communication skills and sociability, and decrease loneliness and depression” (Tesh et al., p. 9). Pet visitation and Animal Assisted Therapy are just a couple examples health care workers are using to improve the quality of life of their clients.

Pet visitation is an intervention in which the animal initiates contact with patients and the direction of the visit is determined by a patient’s needs at that particular time. The purpose of this intervention is to facilitate rapport and to initiate communication with the client. Using the animal as a topic of conversation increases the social interaction between healthcare worker and client. This type of intervention is widely used in skilled nursing facilities (Jorgenson, 1997).

Animal Assisted Therapy (AAT) is a slightly different intervention that focuses on goal directed activities in which the animal is used as part of the treatment process. AAT promotes improvement in the client’s physical, social, emotional, and cognitive functioning. AAT exercises are purposeful, individually goal oriented, and can provide multiple benefits such as fine and gross motor skills, communication skills, tactile, and auditory stimulation, ambulating and equilibrium, instruction following and decision
making, memory recall, and concentrated and extended attention span (Jorgenson, 1997; McQuillen, 1985).

Nursing home residents may be isolated from the community due to their age, capabilities, and living situation; children may also be isolated well due to their age and capabilities. These two populations can benefit from contact with one another. Incorporating children into the daily lives of nursing home residents provides opportunities for residents to interact with others in a variety of ways. Such things as onsite child care for employees, after school day care, summer camp, exchange students, community groups, pen pals, and younger volunteers can foster social opportunities. The residents interact by reading, playing games, helping children with their homework, construct crafts, tell stories and reminisce about old times. The interaction and involvement with the children helps the residents feel useful, alleviates boredom as well as brings meaning to their lives (Thomas, 1996).

The non-human environment is important in improving the quality of life of nursing home residents. Gardens and indoor plants create a more home like environment and improve the air quality, increase humidity, and decrease air born bacteria (Thomas, 1996). Caring for plants and gardens provide many social, emotional, and physical benefits for the residents. Theoretically, the “biophilia framework suggests that human’s survival and ability to thrive and gain personal fulfillment is dependent on our interactions with the natural environment” (Jones & Haight, 2002, p.24). Therapeutic intervention using gardens and plants include planting, plant maintenance, plant propagation, flower arranging, containerized and backyard gardening, garden club meetings, and participation in garden-related events (Jones & Haight). Programs have
been introduced that transform environments to provide people with opportunities to interact within the natural environment.

This literature review covered current research regarding depression in the elderly, enhancing engagement in occupation, quality of life, and aspects of the Eden Alternative. Chapter three provides a description of the process used to develop a treatment protocol based on the Eden Alternative. The protocol provides occupational therapists with guidelines and activities to use in planning interventions for nursing home residents.
Chapter III

ACTIVITIES & METHODOLOGY

Depression is a common problem with the elderly residing in nursing homes. It is estimated that one-fourth of nursing home residents suffer from a depressive disorder (Perez, 2001). Depression is an illness that can be prevented and, if already diagnosed, it can be treated. Occupational therapists have the skills and the training in providing a client-centered approach in a natural environment; therefore, preventing the onset of depression and increasing one's quality of life in the nursing home setting. This is accomplished through implementing the concepts of the Eden Alternative in conjunction with therapeutic interventions. Based on the need for additional attention to the aspects of the Eden Alternative, a Model of Human Occupation (MOHO) based treatment protocol with guidelines for the specific areas to evaluate, assessments to utilize, Eden Alternative interventions, and the occupational therapists' roles was developed. The MOHO was used in the development of the protocol because it addresses a person's inner characteristic and interactions with the environment in order to influence a person's motivation, actions, and performance. It also addresses the individual's values, habits, and performance capacity. The approach is client-centered and focuses on incorporating a natural environment to offer opportunities and resources for individual growth and development.

With the supervision of our advisor, a topic proposal was developed and approved by the University of North Dakota Graduate School. The proposal summarized the
arising elderly population that live in nursing homes and the number of elderly individuals experiencing loneliness, helplessness, and boredom which in turn can lead to depression. The proposal also introduced the Eden Alternative and how implementing aspects of the Eden Alternative in a nursing home facility can create better social and physical environments by implementing the use of companion animals, children and plants.

An extensive literature review was the first step in the process for this project. The purpose of the literature review was to address depression in the elderly, promoting quality of life, benefits through engagement in occupation, strategies to promote participation, and the implications of the Eden Alternative.

The literature review served as a guide for developing a MOHO based treatment protocol with guidelines for the occupational therapist to address the aspects of the Eden Alternative in combination with interventions. The protocol was critiqued to determine its ease of use and modifications to the structure were made. This protocol will be discussed in further detail in Chapter four.
Chapter IV

PRODUCT

Based on the information found in the literature review a treatment/intervention protocol was developed. This protocol was designed for occupational therapists working in a nursing home facility that has adopted the Eden Alternative principals. Occupational therapists promote the use of the natural environment to provide meaningful occupations. Occupations assist in maintaining the health and quality of life of nursing home residents.

The protocol uses aspects of the Eden Alternative for occupational therapy intervention to maintain, restore, reorganize, and create a client-centered environment. One of the main goals of this protocol was for residents of nursing homes to report and demonstrate an increase in satisfaction and quality of life. The protocol provides an overview of depression in the elderly, the role of the occupational therapist, and aspects of the Eden Alternative. Aspects of the Eden Alternative include addressing physical, psychosocial and functional outcomes. Implementation of this protocol in the nursing home environment emphasizes a client-centered natural environment. See appendix A for the complete protocol.

The Model of Human Occupation (MOHO) provides the basis for planning interventions paralleling the principles of the Eden Alternative. MOHO specifically addresses a person’s inner characteristic and interactions with the environment in order to
influence a person’s motivation, actions, and performance. It also addresses the individual’s values, habits, and performance capacity. The approach is client-centered and focuses on incorporating a natural environment parallel to the Eden Alternative. In turn the models can offer opportunities and resources for individual growth and development.

To address the aspects which are pertinent to nursing home residents such as physical, psychosocial, and environment issues, selected assessment tool are described. These tools are selected based on the clients’ needs. Suggested goals and intervention strategies are provided specific to such needs. Supplemental references to support the occupational therapy intervention are located following the protocol. These references include: evaluation forms, informational books, journals and web sites.

Chapter five provides a summary of the process, suggestion for implementing and measuring the outcomes of the program. Areas of further research are also described.
Chapter V

SUMMARY

Depression is prevalent in the elderly population residing in nursing home settings secondary to passive environments non-meaningful opportunities and a decrease in function relating to age related disabilities (Perez, 2001). This disability may have an effect on one’s well being, performance, and quality of life. A treatment protocol was designed to address depression, the issues related to depression and age related disabilities, and increase the residents’ quality of life. The Eden Alternative and Model of Human Occupation were used as guidance for the treatment plan to incorporate a natural and client-centered environment.

One of the major limitations of existing literature was the lack of long term outcomes of the implementation of the Eden Alternative and Animal Assisted Therapy (AAT). Another limitation was the lack of evaluation tools specifically designed for nursing home residents. Excluding the Canadian Occupational Performance Measure, there is a lack of strategies that address the resident’s personal choices with everyday occupations. Staff training to ensure the continuity of the Eden Alternative is also needed.

This project was designed to provide occupational therapists with guidelines, activities, and goals to incorporate concepts of the Eden Alternative. Incorporating aspects of the Eden Alternative and client-centered care promotes an increase in the
satisfaction and the quality of life in the elderly population residing in nursing homes. Future research is needed to determine the effectiveness of this protocol in developing occupational therapy interventions that are meaningful and purposeful for the resident and improve functional outcomes.
References:


APPENDIX A
Occupational Therapy Protocol: Planning Interventions using the Eden Alternative

The rate of growth of the elderly population (persons 65 years old and over) in nursing home settings has greatly increased throughout the past ten years (Hobbs, 2001). The elderly population residing in nursing home settings have a potential of becoming diagnosed with depression secondary to passive environments, non-meaningful opportunities, and a decrease in function relating to age-related disabilities. According to Perez (2001), the prevalence of depressive disorders is the highest in hospitalized subjects and nursing home residents. Depression can have an impact on one’s wellbeing and performance. It can detach an individual from his or her own active lifestyle and increase the chance of decline in health.

The Eden Alternative is one approach suitable for preventing and reducing depressive disorders in nursing homes residents. This model includes decentralizing the institutional organizational structure of the traditional nursing home setting to empower the residents and employees by incorporating plants, resident animals, and children’s activities into the daily lives of the residents and staff members (Tesh, McNutt, Courts, & Barba, 2002). It is a beneficial approach for improving quality of life and, in turn, preventing or reducing the onset of depression with elderly residents.

Occupational therapists promote the responsibility of creating a natural environment and providing meaningful occupations in maintaining nursing home residents’ health and enhancing their quality of life. This is the intention of implementing the Eden Alternative with the occupational therapy intervention, to maintain, restore, reorganize, and create a client centered environment to increase one’s quality of life. The following protocol includes the theoretical base that will guide occupational therapy practice. The goals and objectives, areas to evaluate and selected assessment tools are included in this protocol. The protocol provides an overview of the treatment process, including suggested treatment interventions, treatment precautions/contraindications, and measurable outcomes.

Theoretical Base

The Model of Human Occupation (MOHO) was used in the development of the protocol. MOHO addresses a person’s inner characteristic and interactions with the environment in order to influence a person’s motivation, actions, and performance. It also addresses the individual’s values, habits, and performance capacity. The approach is client-centered and focuses on incorporating a natural environment to offer opportunities and resources for individual growth and development. MOHO outlines characteristics of the environment that are important and impact the behaviors of persons within them. MOHO envisions occupational therapy as engaging people in occupation, which helps maintain, restore, or reorganize their occupational lives (Forsyth & Kielhofner, 2003).
**Goals**

The Eden Alternative and MOHO provide a framework for planning and implementing occupational therapy interventions. Overall goals of the occupational therapy protocol include the following: The residents will:

1. report and demonstrate better satisfaction with their quality of life in the nursing home.
2. demonstrate an improvement in their physical health through an increase in ROM, strength, endurance, and functional mobility.
3. demonstrate an improvement in psychosocial aspects of health through an increase of occupational, social, and leisure participation.
4. interact within a client-centered natural environment using the Eden Alternative principles.

**Evaluation**

Areas to evaluate in order to plan effective client-centered interventions include the following:

1. Resident's past and current medical history as well as presenting medical issues relating to need for OT services.
2. Psychosocial concerns
3. Physical concerns
4. Leisure interests
5. Allergies to animals and plants
6. Environmental and staff issues

**Selected Assessment Tools**

The following are assessments for the occupational therapist to use in the nursing home. Specific assessments should be selected based on the client's needs. The assessments are MOHO based in that they are client-centered, assess the natural environment and address the individual's values, habits, and performance capacity.

- **Sheltered Care Environment Multiphasic Environmental Assessment Procedure (MEAP)**
  To evaluate and measure environmental factors/context in a nursing home setting MEAP is suggested. This evaluation describes and evaluates the physical and social environment. The focus of this evaluation is the environmental factors including the physical, social, cultural, economic and institutional environment. This evaluation consists of five instruments including the Resident Staff Information Form (RESIF), the Physical Architectural Features checklist (PAF), the Policy Program Information Form (POLIF), the Sheltered Care Environment Scale (SCES) and the Rating scale. This evaluation could be administered at the start of this intervention process and would be beneficial to track changes (Moos & Lemke, 1996).
• **Functional Independence Measure (FIM)**
  To identify the level of assistance needed with self care skills, sphincter management, transfers, locomotion, communication, and social cognition. Scores are recorded on a seven point scale and provide information related to the residents’ well being in a nursing home setting as well as creating an intake baseline for ADL's and a method to track changes in individuals’ abilities. Reassessment can be done every two months to identify outcomes of occupational therapy interventions. The FIM score also contributes to predictions of the level of the individuals’ satisfaction with life (Granger, Cotter, Hamilton, & Fiedler, 1993).

• **The Canadian Occupational Performance Measure (COPM)**
  The COPM is beneficial in evaluating of the resident’s perception of his/her occupational performance in the areas of self-care, productivity, and leisure activities. This evaluation aides with aspects of client centered activities by involving the resident in the treatment planning process. This creates the evaluation process as being individualized, purposeful, and meaningful for the residents in identifying his/her perceived goals (Baptiste et al., 1998).

• **Activity Index: Activity Patterns and Leisure Concepts among the Elderly**
  The Activity Index provides information regarding the meaning and interests of leisure for elderly individuals living in a nursing home setting. This is an interview, which collects information on activity, leisure, the meaning of leisure, the individuals’ degree of participation, as well as their ideal leisure preferences. In turn the therapist is able to use this information to create meaningful and client-centered therapeutic activities for elderly individuals (Nystrom, 1974).

• **Geriatric Depression Scale**
  The Geriatric Depression Scale consists of fifteen items addressing the signs and symptoms of depression. This assessment is a self-report scale where the individual is asked to read the fifteen questions and circle yes or no. This assessment is beneficial to administer to every resident in the nursing home because it may identify early signs of depression and therefore treatment can begin before the depression worsens (Alden, Austin, & Sturgeon, 1989).

• **Mini Mental State Exam**
  The Mini Mental State Exam (MMSE) assesses orientation, the ability to follow verbal and written directions, attention, recall, language, reading, writing, and copying. MMSE is a tool that is beneficial to use in distinguishing patients with cognitive impairments from those without. This assessment is beneficial to administer to every resident because it can also distinguish patients with dementia and depression with cognitive impairments.
from persons that only suffer from depression. (Folstein, Folstein, & McHugh, 1975)

**Treatment Process/Suggested Treatment Interventions**

Intervention should be client-centered and focus on incorporating aspects of the Eden Alternative in order to maximize functional outcomes. Animals, children, and plants provide therapeutic physical and psychosocial benefits to elderly adults. Provided are examples of treatment interventions and goals for each of these. Each intervention can be graded, and adapted depending upon the client’s situation and disability.

**Animals**

Pet visitation and Animal Assisted Therapy are two types of interventions that provide multiple benefits to residents residing in a nursing home. Such benefits include improved communication, socialization skills, fine and gross motor skills, communication skills, tactile and auditory stimulation, ambulating and equilibrium, following instructions, decision making, memory recall, and concentrated and extended attention span.

**Interventions for physical disabilities.**

1. **Dynamic standing/sitting balance:** Resident stands at a table or sits on edge of mat brushing or petting a dog or a cat. Attention of the resident is diverted from keeping their balance while they participate in a motivational and meaningful activity.
   - Resident will increase dynamic standing balance to 3 minutes for increased independence with grooming while standing at the sink.
   - Resident will increase dynamic sitting balance to 10 minutes while seated at the edge of a mat.

2. **U/E ROM, endurance, and strength:** Resident sits or stands while participating in grooming or playing with one of the resident animals. The therapist may grade the activity by adding weights to wrists or add additional minutes to the task at hand.
   - Resident will be able to complete a functional activity U/E exercise with 2lb. weight to increase U/B endurance for maximum independence with dressing.
   - Resident will increase U/E ROM in order to become independent with U/B bathing.

3. **Functional mobility:** Resident participates in walking a dog on a leash throughout the hallways or outside, weather permitting. The resident is able to be exposed to uneven terrain and should be aware of all surroundings to prevent falls.
   - Resident will demonstrate the ability to safely ambulate from room to dining room with use of a walker.
• Resident will demonstrate an increase in functional mobility by completing all functional transfers independently.

4. **Sensory stimulation**: Resident with sensory deficits relating to tactile system, visual or auditory systems can participate in various activities using the animals or relating to the animals on the unit. Activities include petting animals, scanning the room from visual stimulation, and listening to sounds within the environment.
• Resident will participate in sensory stimulation activities for 6 min. 5x/week to decrease tactile defensiveness.
• Resident will scan the bathroom and locate 5 items needed for personal grooming.

**Interventions for psychosocial disabilities**

5. **Depression**: The resident will participate and complete activities with the resident animals or participate in activities that relate to animals to increase self-esteem, feelings of self worth, as well as decreasing loneliness and overall depression.
• Resident will identify 3 positive things about themselves to increase their self-esteem.
• Resident will identify feelings of self-worth upon completion of a functional activity.

6. **Cognitive**: The resident can participate in numerous activities working on cognitive skills that are pertinent to them such as sequencing and memory.
   A. **Sequencing**: The resident can participate in activities involving animal care writing down steps needed to walk the dog, feed or groom the cat or dog working on sequencing skills to the task at hand. These tasks can improve sequencing skills needed to complete all aspects of self-cares.
   • Resident will sequence 5 steps needed to complete a functional task.
   • Resident will demonstrate an increase in sequencing skills needing 2 verbal cues for completion of bathing.
   B. **Memory**: The resident can increase their memory by participating in activities involving the animals as well as daily assignments with the animals such as care giving by grooming and feeding the cat, dog or birds and by letting the dog out for walks and bathroom breaks.
   • Resident will be able to complete daily tasks with the assistance of an external memory aide.
   • Resident will be able to independently remember and complete all self-cares, demonstrating an increase in his/her memorization skills.

7. **Socialization**: The resident can improve their social skills as well as decrease social isolation by participating in group activities with other residents involving
the resident animals as well as initiating a conversation with another person about an animal.

- Resident will initiate a minimum of 2 conversations with other residents daily to decrease social isolation.
- Resident will complete a five minute conversation with a staff member about satisfaction with living arrangements.

**Children**

By incorporating children into the daily lives of nursing home residents, it provides opportunities for residents to interact with children in a variety of ways. The residents interact by reading, playing games, helping children with their homework, construct crafts, tell stories and reminisce about old times. The interaction and involvement with the children helps the residents feel useful, alleviates boredom as well as brings meaning to their lives.

**Interventions for physical disabilities**

1. **Dynamic standing/sitting balance:** The resident can participate in various activities involving children such as table top exercises, rolling a ball back and forth with the child, standing and bouncing a ball back and forth. All these activities work on dynamic standing/sitting balance.
   - Resident will demonstrate an upright dynamic sitting balance for 10 minutes while participating in functional tabletop exercises.
   - Resident will need minimal assistance for standing balance while participating in functional kitchen activities.

2. **Functional mobility:** The resident can participate in activities where they are ambulating inside or outside the facility with the children.
   - Resident will ambulate to and from their room to the dining room needing SBA for safety concerns.
   - Resident will ambulate to and from therapy independently and safely using a walker.

3. **U/E ROM, endurance, and strength:** The resident can participate in various activities with the children to increase ROM, endurance and strength. Holding/rocking a child to increase U/E endurance and strength, playing balloon volleyball to increase U/E ROM are a few examples of the many activities to be completed.
   - Resident will participate in therapeutic U/B exercises to increase R U/E functional endurance for U/B dressing.
   - Resident will increase U/E AROM for U/B grooming and dressing by participating U/B exercises for 5 minutes reaching in various planes of motion.
Interventions for psychosocial disabilities

4. **Depression:** Residents can participate in many activities of their choice with the children to decrease levels of depression. Things such as reading with a child, playing or watching the child play; baking cookies, participating in a music activity group can be completed.
   - Resident will participate in social and leisure activities and will identify 3 positive aspects of his/her life 1x/day to a staff member.
   - Resident will identify increased feelings of self-worth upon completion of purposeful tasks.

5. **Cognitive:** The resident can work on various aspects of cognition while completing activities while they are interacting with a child. Such things as reading, any task where they have to sequence, or complete a task associated with memory can be completed.
   
   A. **Sequencing:** Sequencing tasks can be completed such as making recipe lists for a cooking activity to be completed with the child such as baking cookies, as well as sequencing out the steps while completing the cooking activity.
   - Resident will be able to sequence a 3 step activity with minimal assistance.
   - Resident will independently complete a functional cooking activity.

   B. **Memory:** The resident can participate in activities involving a child while working on memory skills. Activities can include such things as memorizing steps needed to play a game, cooking, recalling childhood experiences, and telling favorite stories to a child.
   - Resident will need minimal cueing for completion of chosen leisure activity.
   - Resident will demonstrate improved memory by identifying steps needed to complete morning ADL’s.

6. **Socialization:** The resident can decrease levels of social isolation as well as improve social skills by participating in activities with children.
   - Resident will initiate and complete a 5-minute conversation with another person to increase social skills.
   - Resident will participate in three social activities per week to decrease social isolation.

**Plants**

The non-human environment is important in improving the quality of life of nursing home residents. Caring for plants and gardens provide many social, emotional, and physical benefits for the residents. Therapeutic interventions using gardens and plants include planting, plant maintenance, plant propagation, flower arranging, container and outdoor gardening, garden club meetings, and participation in garden-related events. Two different types of gardens can be used such as a built up garden and an in-ground garden. A built-up is a raised garden and an in-ground garden is a typical garden level with the ground.
Interventions for physical disabilities

1. **Dynamic standing/sitting balance:** The resident can complete dynamic sitting balance activities participating in indoor gardening activities, flower arranging, or other activities relating to plants. Dynamic standing balance activities can be completed while the resident is outdoors participating in gardening.
   - Resident will be able to maintain standing balance for 10 minutes with only stand by assistance.
   - Resident will participate in a dynamic sitting balance activity completing tabletop exercises demonstrating proper head/neck/hip alignment.

2. **U/E ROM, endurance, and strength:** The resident can complete U/E ROM, endurance, and strength while participating in numerous activities involving indoor outdoor gardening, flower arranging, and other plant related activities.
   - Resident will increase ROM by 10 degrees in order to independently complete leisure activities
   - Resident will increase U/E strength by 5lbs in order to complete completing functional activities.

3. **Functional mobility:** Resident can participate in activities where they are ambulating around the garden or propelling to the garden or around the indoor garden to increase their functional mobility.
   - Resident will be able to ambulate 30 feet with no more than 2 rest breaks.
   - Resident will be able to safely ambulate in the facility dining room.

4. **Sensory stimulation:** Resident with sensory deficits relating to tactile system or the olfactory system can participate in various activities using plants and flowers. Systems can be aroused by having the resident touch different types of plants that have different textures as well as smell various plants and flowers.
   - Resident will be able to tolerate sensory stimulation activities for 5 minutes to decrease tactile defensiveness.
   - Residents will be able to independently bathe and lotion affected extremities demonstrating a decrease in tactile defensiveness.

Interventions for psychosocial disabilities

5. **Depression:** The resident can decrease their level of depression by participating in activities of their choice involving plants or gardening activities.
   - Resident will recognize and identify feelings of self-worth upon completion of leisure activities.
   - Resident will report an increase in life satisfaction by completing meaningful and purposeful activities relating to their interests.

6. **Cognitive:** The resident can work on various aspects of cognition while completing activities involving plants, flowers, and gardening. Such things
include sequencing steps needed for plant care and planting as well as memory to complete the task at hand.

A. **Sequencing**
   - Resident will sequence 5 steps needed for completion of independent stretching program.
   - Resident will complete morning dressing routine needing minimal cues for sequencing.

B. **Memory**
   - Resident will be able to complete morning BADL’s with the use of an external memory aide.
   - Resident will remember 3 tasks.

7. **Socialization:** The resident can improve their social skills as well as decrease social isolation by participating in group activities with other residents involving indoor-outdoor gardening, flower arranging, and any activity associated with plants or flowers, as well as initiating a conversation with another person about plants or flowers.
   - Resident will attend 2 group activities per week to decrease social isolation.
   - Resident will initiate conversation with another person 2 times during a leisure activity.

**Treatment Precautions/Contraindications**

In implementing any new program, it is important to consider treatment precautions and contraindications. With the Eden Alternative it is important to consider such things as allergies, injuries, and illness. Not only should these precautions and contraindications be known by the occupational therapists, risk management, nursing and others are responsible for ensuring the safety of the residents.

**Allergies**
- Residents who may be allergic to animals as well as specific plants are advised to not participate in activities which may hinder their health. Therapists need to complete chart reviews in order to make sure the individual is not allergic to plants or animals used through therapeutic interventions.

**Injuries**
- Careful planning minimizes residents from items in the environment, which may cause an injury secondary to a fall. It is important to educate staff, children, and family members of ways to prevent falls.
- Careful planning is also needed when considering the companion/therapy animals on the unit to prevent falls. Specific placement of food/water containers as well as attaching bells on animal collars can increase the residents awareness of the animals to decreases falls.
• Open sores should also be considered when selecting a gardening activity for the resident. Open sores can potentially increase infection secondary to dirt entering the site. Proper wound care and gardening gloves are advised.
• Non sharp gardening tools should be used to prevent skin tears and wounds. Elderly persons skin becomes fragile and is easily susceptible to skin tears.

**Illness**

• Older adults have a more difficult time responding to foreign antigens brought in by staff, family, and children. Teaching the benefits of hand washing to all those who come into contact with the elderly individuals can easily prevent illness. Illness can also be prevented by proper selection of indoor and outdoor plants, checking to make sure the animals are free from parasites as well as keeping up with current immunizations.

**Outcome Measures**

Outcome measures include tracking resident’s performance on areas assessed by the FIM. The COPM will be used to assure the resident’s perceptions regarding satisfaction and performance with identified problem areas are being addressed. It will be important to do ongoing screens of depression using the Geriatric Depression Scale. Program evaluation measures will assist the therapist in ensuring resident satisfaction with the overall programming.
Reference:


Supplemental References

**Geriatric Depression Scale**


**The Canadian Occupational Performance Measure (COPM)**


**Mini Mental State Exam**


**Functional Independence Measure (FIM)**


**Sheltered Care Environment Multiphasic Environmental Assessment Procedure (MEAP)**


**Activity Index: Activity Patterns and Leisure Concepts among the Elderly**

The Eden Alternative

www.edenalt.com

Book:
- Life Worth Living, How Someone You Love can.....
- Animal Welfare Guidelines
- Growing With Care: Using Greenery, Gardens, and Nature with the Aging and Special Populations

Animal Assisted Therapy

Delta Society provides instructors or training materials to teach the skills needed to visit safely with an animal in hospitals, nursing homes, classrooms, and other facilities. Regular publications keep participants up to date on emerging issues, research, and a wide variety of information on the human-animal relationship. With successful completion of the registration requirements you get liability insurance, referrals to facilities, newsletters and continuing education opportunities as well as networking support.

www.deltasociety.org

Therapet Animal Assisted Therapy Foundation is a non-profit organization whose mission is to facilitate the use of animals in the healing and rehabilitation of acute and chronically ill individuals.

www.therapet.com