

# **MOTIVATIONAL NURSING INTERVENTIONS FOR PATIENTS WITH ALZHEIMERS DISEASE LIVING AT HOME**

Guidebook for nurses for Alzheimer's disease patients with home  
care

LAB-AMMATTIKORKEAKOULU  
Bachelor of Health Care  
Degree program in Nursing  
Fall 2020  
Daria Timoshuk  
Qi Zou

## Tiivistelmä

Tekijät Timoshuk, Daria Zou, Qi	Julkaisun laji Opinnäytetyö, AMK Sivumäärä 54 sivua, 18 liitesivua	Valmistumisaika Syksy 2020
Työn nimi <b>SAIRAAHOITAJIEN MOTIVOIVA INTERVENTIO POTILAITA VARTEN JOILLA ON ALZHEIMERIN TAUTI JOTKA ASUVAT KOTONA</b>		
Tutkinto Sosiaali- ja terveystieteiden ammattikorkeakoulututkinto		
<p>Alzheimerin tauti on muistiin vaikuttava, aivoja vähitellen rappeuttava sairaus, joka vaikuttaa ajattelukykyyn sekä jokapäiväisistä askareista selviytymiseen. Suurin osa Alzheimerin tautia sairastavista on vanhuksia, yli 65-vuotiaita, ja sairastuvien ihmisten määrä on jatkuvassa kasvussa. Tästä syystä sairastuneiden potilaiden sekä heidän läheistensä tukeminen on tärkeää.</p> <p>Tämän opinnäytetyön tarkoitus on auttaa säilyttämään ja parantamaan Alzheimer potilaiden hyvinvointia erityisesti kotihoidossa. Tavoitteena on esitellä sairaanhoitajille erilaisia tapoja aktivoida Alzheimer potilaita kotihoidossa. Oppaan avulla potilaalle voidaan luoda yksilöllinen hoitosuunnitelma, johon kuuluu psyykkisiä, kognitiivisia, fyysisiä virikkeitä ja myös ravinto. Sairaanhoitajat voivat käyttää tätä opasta tukena työkennellessään Alzheimerin taudista kärsivien potilaiden parissa. Opas soveltuu myös vanhusten parissa työskenteleville kansainvälisille terveydenhuoltoalan opiskelijoille, sillä siitä on sekä suomenkielinen että englanninkielinen versio. Tämä on toiminnallinen viitekehys, joka perustuu harjoitusperäiseen tutkimustyöhön. Työssä käytetyt tiedot ovat viimeisimpien tutkimusten mukaisia. Opinnäytetyö on toteutettu yhteistyössä Lahden asukasyhdistys ry:n kanssa, ja opas tulee olemaan yrityksen sairaanhoitajien käytössä.</p>		
Asiasanat Alzheimerin tauti, kognitiivinen virike, fyysinen virike, ravinto, yksityinen ja julkinen sektori, kotihoito		

## Abstract

Author(s) Timoshuk, Daria Zou, Qi	Type of publication Bachelor's thesis	Published Fall 2020
	Number of pages 54 pages, 18 appendices	
Title of publication <b>MOTIVATIONAL NURSING INTERVENTIONS FOR PATIENTS WITH ALZHEIMERS DISEASE LIVING AT HOME</b> Educational nursing guideline goaled for Alzheimer's Disease patients with home care		
Name of Degree Bachelor of Health Care		
<p>Alzheimer's disease (AD) is a developmental brain disorder that gradually damages the memory, weakens the thinking ability and additionally, it destroys the ability to self-care in daily life. The majority of people with AD are in the age of 65 or older. In addition, number of people with AD is continuously growing. Owing to the growing incidence of AD, it is essential to attach importance to Alzheimer's disease and to support the patients and their families as well.</p> <p>The purpose of the thesis is to maintain and promote the general wellbeing of patients with Alzheimer's disease in home care. The purpose is also to find out ways for nurses to activate the elderly with Alzheimer's disease in home care. The aim of the thesis is to create a guidebook for nurses to activate patients with Alzheimer's disease professionally in their own homes. Through the guidebook, nurses and family members can obtain an AD patient-oriented care plan including psychological activation, cognitive activation, physical activation as well as nutrition. The guidebook can be applied by nurses in real working life with the elderly patients with Alzheimer's disease. Moreover, the international students will be offered with a guidebook of promoting the wellbeing of elderly patients with AD in English and Finnish version. This is a function framework thesis based on practice-oriented research. The data research is according to the latest data researches. The thesis is cooperating with the home care company Lahden Asukasyhdistys ry. The guidebook will be available for the nurses at Lahden Asukasyhdistys ry.</p>		
Keywords Alzheimer's disease, cognitive activity, physical activity, private and public sector, home care		

## CONTENTS

1	INTRODUCTION.....	1
2	PURPOSE AND AIM.....	3
3	ALZHEIMER'S DISEASE .....	4
3.1	Definition.....	4
3.2	Causes and risks of Alzheimer's disease .....	6
3.3	Stages of Alzheimer's disease.....	7
4	HOME CARE NURSING FOR ALZHEIMER'S DISEASE PATIENTS.....	9
4.1	Nursing role in home care.....	9
4.2	Home care nursing for elderly.....	9
5	NURSING ROLE IN ACTIVATION IN ALZHEIMER'S DISEASE .....	11
5.1	Psychological activation.....	11
5.2	Cognitive activations.....	12
5.3	Physical activities.....	15
5.4	Nutrition .....	17
6	COOPERATING ORGANIZATION .....	18
7	CREATING A GOOD NURSE GUIDEBOOK.....	19
8	METHODOLOGY .....	20
8.1	Data search, review and collection .....	20
8.2	Plan-Do-Study-Act model .....	21
8.3	PDSA model for functional framework thesis .....	22
9	DISCUSSION.....	25
10	ETHICAL CONSIDERATIONS.....	27
11	IMPLICATIONS FOR FURTHER STUDIES.....	28
	REFERENCES.....	29
	APPENDICES .....	35
	ABBREVIATIONS.....	53
	ALALIITTEET .....	54

## 1 INTRODUCTION

With the advances in medical technology, human lifespan has been extending. Population aging is an inevitable global phenomenon. Dementia is one of the primary health issues in elderly people. Alzheimer's disease is the most frequent cause of dementia, which may lead to 60-70 percent of cases. (WHO 2015.) Life expectancy demonstrates the number of years that a newborn would live, if the rate of mortality remains unchanged. In 2013, the population of Finland grew up to about 5.4 million and approximately 19.4% of the population were more than 65 years. By 2030, the population will grow up to 5.8 million, of which 25.6% will be elderly. The life expectancy for women is higher than for men. Life expectancy has risen by about 20 years and will grow according to the good care. (Valkonen 2004.) In addition to Statistics of Finland 2018, the life expectancy at birth was approximately 80 years for males and 84.5 years for females. Compared with 2017, the life expectancy for male increased by 0.2 years and that for females by 0.1 years. Life expectancy is an age-standardized indicator that describes the level of mortality observed during the calculation period. Due to the continuous growth in number of people diagnosed with Alzheimer's disease, it is critical to attach importance to the disease. (Statistics Finland 2019.)

Alzheimer's disease (AD) is an irreversible and progressive brain disease that leads to memory loss and declines the thinking ability, in the end, damages the ability to manage simple tasks. The great majority people with Alzheimer's disease is in their mid-60 age. (NIH) When the people who are turning 85-year-old or older, they have 50 % chance to form Alzheimer's disease. Although it is still unknown what exactly causes Alzheimer's disease, there are several factors which increases the risk of developing Alzheimer's disease, including age, genetics and gender. (Haugen & Sandra 2010, 976.)

Alzheimer's disease (AD) is swiftly becoming a critical global public health challenge. It is significant to find out valid ways to prevent the illness. Otherwise Demographic transition will result in epidemical disease of Alzheimer's disease which will make huge loss of economical, personnel as well as community costs in the next few decades. (Borenstein & Mortimer 2016.)

Care for elderly patients with Alzheimer's disease should be comprehensive and implemented in professional ways, including high effectiveness, patient autonomy, psychological and the guarantee of mental comfort. Nursing care for AD patients is complex, which includes treatment activities, rehabilitation, health development, preventive care and education for AD patients. (Pawluk & Zukow 2011, 139.)

Lahden asukasyhdistys ry is an association providing the service of home care, which is based on the private sector in the city of Lahti, Finland. According to the action report 01.01.2019 – 31.12.2019, the association has continued to operate as a non-partisan non-profit association and a non-profit organization of residents. The organization has striven to organize activities for good and safe housing, as well as diverse home services and a healthy living environment. The association sees its primary opponents as parties and districts that seek to profit and collect profits and accumulate wealth at the expense of residents. Päijät-Häme Joint Authority for Health and Wellbeing guides patients to the association. The association provides service voucher for carers, veterans and those receiving regular home service in Lahti and Hollola areas. The association has cooperated in the development and organization of labor market skills with the Employment and Economic Development Office, the city 's labour force representative. (Lahden Asukasyhdistys ry 2019.)

The purpose of the thesis is to maintain and promote the general wellbeing of patients with Alzheimer's disease in home care. The purpose is also to find out ways for nurses to activate the elderly with Alzheimer's disease in home care.

The aim of the thesis is to create a guidebook for nurses to activate patients with AD professionally in their own homes. Through the guidebook, nurses can obtain an AD patient-oriented care plan including psychological activation, cognitive activation, physical activation as well as nutrition. The guidebook can be applied by nurses in real working life with the elderly patients with Alzheimer's disease. Moreover, the international students will be offered with the guidebook of promoting the wellbeing of elderly patients with AD in English and Finnish version.

## 2 PURPOSE AND AIM

The purpose of the thesis is to maintain and promote the general wellbeing of patients with Alzheimer's disease in home care. The purpose is also to find out ways for nurses to activate the elderly with Alzheimer's disease in home care.

The aim of the thesis is to create a guidebook for nurses to activate patients with Alzheimer's disease professionally in their own homes. Through the guidebook, nurses and family members can obtain an AD patient-oriented care plan including psychological activation, cognitive activation, physical activation as well as nutrition. The guidebook can be applied by nurses in real working life with the elderly patients with Alzheimer's disease. Moreover, the international students will be offered with a guidebook of promoting the wellbeing of elderly patients with AD in English and Finnish version.

### 3 ALZHEIMER'S DISEASE

#### 3.1 Definition

Alzheimer's disease (AD) is a fatal neurodegenerative disorder which does not have known treatment. There is no clear understanding of the AD process itself. The cognitive decline, amyloid plaques and neurofibrillary tangles become signs of the late stage of Alzheimer's disease. It is not known how they were initially generated, and whether they are reasons of representation, effects and the latest stage in the pathology process. Last studies of AD models have found notable dysregulation in calcium signaling and connected downstream pathways which become long before the diagnostic histopathological and cognitive changes. Under normal life situations, calcium signals are coupled to effectors which support a healthy physiological state. Accordingly, sustained up-regulation of calcium can have pathophysiological effects. (Stutzmann 2007.) The etiology and history of Alzheimer's disease are provided below.

*"On November 3, 1906, a clinical psychiatrist and neuroanatomist, Alois Alzheimer, reported "A peculiar severe disease process of the cerebral cortex" to the 37th Meeting of South-West German Psychiatrists in Tübingen. He described a 50-year-old woman whom he had followed from her admission for paranoia, progressive sleep and memory disturbance, aggression, and confusion, until her death 5 years later. His report noted distinctive plaques and neurofibrillary tangles in the brain histology. It excited little interest despite an enthusiastic response from Kraepelin, who promptly included "Alzheimer's disease" in the 8th edition of his text *Psychiatrie* in 1910. Alzheimer published three further cases in 1909 and a "plaque-only" variant in 1911, which reexamination of the original specimens in 1998 showed to be a different stage of the same process. Alzheimer died in 1915, aged 51, soon after gaining the chair of psychiatry in Breslau, and long before his name became a household word." (Hippius, Neundörfer 2003, 101.)*

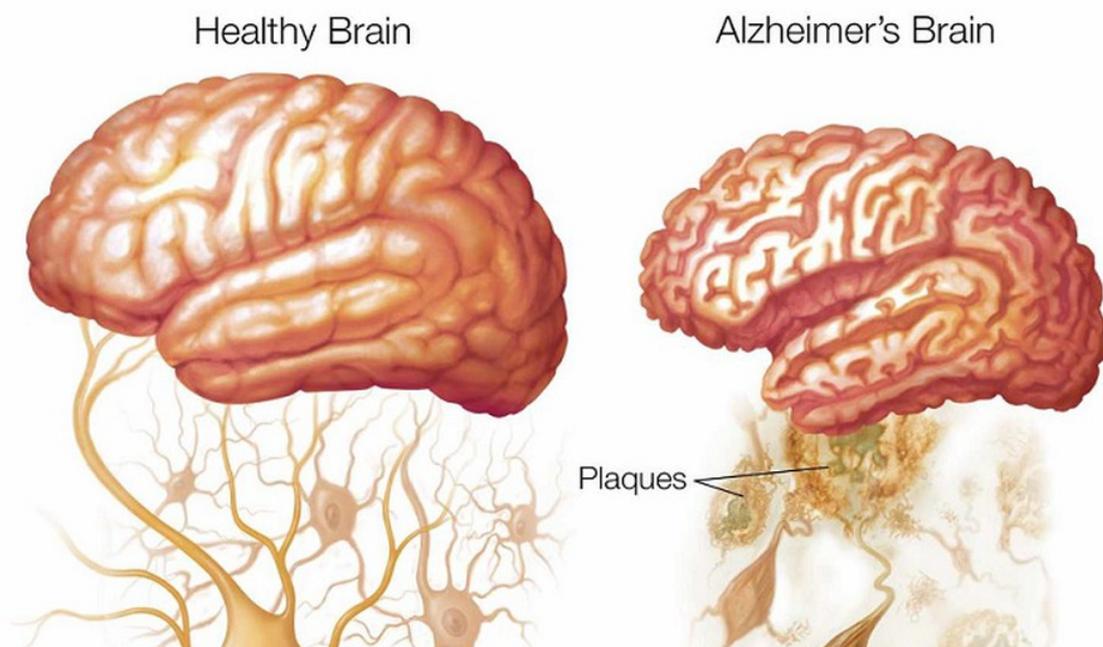
Alzheimer's disease is the most common form of dementia, in which behavioral and cognitive disruption symptoms coexist. For instance, depression, apathy, anxiety, and other conduct disorders are the complaints that were defined by caregivers. Fifty individuals were referred to the Institute with a probable diagnosis of Alzheimer's disease. Cognitive deterioration was equally distributed among them. Neuropsychiatric symptoms are main features of AD, which are also characteristic and represent a main aspect of morbidity, and they are not consistent with the clinical definition of AD. However, the personal and social ramifications of the disease are staggering. The disability that is encountered by patients and families with dementia underline the imperative demand to recognize and treat not only cognition, but also behavioral disruption. Moreover, it has been accepted that neuropsychiatric disturbances have been associated with more rapid cognitive decline and increased caregiver burden.<sup>i</sup> In addition, the economic impact of neuropsychiatric symptoms in AD is significant due to earlier institutionalization. The estimated number of

people institutionalized because of AD is 1.5 million; by 2015, more than 2.6 million people will be institutionalized, with a cost of \$20 billion.5 (Moretti, Torre & Antonello 2002, 338.)

According to WHO in 2010, the global prevalence of dementia in the world determines 35.6 billion of people and it is going to increase two times every 20 years to 65.7 billion in 2030 in addition, 115,4 billion in 2050 year. Especially the number of increasing patients shows of getting the Alzheimer's disease in the countries with middle and low income. The prevalence of the disease starts from the age of 65 and later it will grow two times more every five years. (Bachinskaya 2013, 88. Translated from Russian language by Timoshuk.)

The term for Alzheimer's disease is considered as the most general form of dementia. Nowadays, the disease has affected more than 5,5 million of the United States citizens and the number of patients will increase to 16 million by 2050. It is marked for the disease that cognitive and functional impairment features as well as neuropsychiatric signs are part of increasing the disability. Alzheimer's disease noticeable interfere with the development of life for elderly people and their caregivers. (Alzheimer's Statistics 2019.)

According to Picture 1, during the aging, brains tend to decrease by several degrees on another side it surprisingly does not lose the number of neurons. When the patient is diagnosed with Alzheimer's disease, most of neurons stop continuing working in the brain and lose connections with other neurons, therefore neurons die. Alzheimer's disease degradation processes the vital neurons and neurons system, metabolism of brain and other communication that support brains work. (National Institute of Aging Scientists 2017.)



Picture 1 Alzheimer's disease brain as well as healthy brain. (IAS Study Center 2019)

A research which was published in the journal PLoS One, discovered that Magnetic stimulation of the brain under repetitive transcranial magnetic stimulation (rTMS) treatment can improve the working memory which activates a new therapy for people living with Alzheimer's disease and other forms of dementia (IAS Study Center 2019).

### 3.2 Causes and risks of Alzheimer's disease

There are constant and modifiable risks for Alzheimer's disease, the factors are significant because these figures ensure the conception into the predispositions of the disease progress prior to onset and it allows stratification of each client who can be at increased risk. There are genetic and non-genetic factor risks, in addition to that aging is significant cause of the disease. (Hickman, 2016, 3.)

Alzheimer's disease considers as a degenerative disease of the central nervous system which tends to be slowly and steadily progressing disease. Weakening occurs in a several forms such as intellectual disability. Memory impairment, for instance the difficulties in learning something new and difficulty in recalling what was learned earlier. (Mönkäre, Nukari & Lehto 2013, 714.)

In the changing demographic situation with the predicted aging of the population around the world, the issue of Alzheimer's disease acquires special relevance and socio-economic importance<sup>ii</sup>. In the progressive countries, the Alzheimer's disease perspectively has been considering as a basic health issue in a health care system. This is meant as a

steadily increasing number of people, that might be in a risk of developing the disease, as well as the duration of the disease and severely disabled patients. It is very significant to take into consideration the problem of the disease, because patients will be needed otherwise the patients requiring in some cases life-long hospitalization in special hospitals and other places, such as service houses to stay for rehabilitation. The disease produces both enormous financial difficulties and large social and psychological problems for the family and society<sup>iii</sup>. (Bachinskaya 2013, 88.)

The prevalence and incidence rates may change several folds between different researches. One consistent finding is the dramatic increase with age; prevalence rates are 25-48% for persons over age 85. There has been found two most consistent risk factors for Alzheimer's disease are aging and positive family history. The second one of risk factors may affect the head's trauma. The diagnosis for Alzheimer's disease is almost certainly the impact of heterogeneous causes. (Larson, Kukull & Katzman 1992, 445.)

The risk factors of Alzheimer's disease patients are age, dementing sick, low school presence and social isolation. Important care risk factors include hypertension, high cholesterol, sugar metabolism disorder and overweight. In addition, recurrent head injuries and environmental toxins. There is no cure for the time being. As early as possible medication care significantly slows down the disease progression of symptoms and allows longer work managing at home. The memory disease cannot be cured but the aim is to support the sick and managing with relatives in an everyday life. The rehabilitation proves that the ability to function remains if possible. (Mönkäre et al. 2013, 715.)

### 3.3 Stages of Alzheimer's disease

Alzheimer's disease is mainly divided into three stages, namely, early stage, middle stage and late stage. (Alzheimer's Association 2018) Although the disease is complicated and the progression is slow, researchers have distinguished three stages of Alzheimer's disease to help understand the severity of the symptoms, namely, mild, moderate and severe. (Taft 2013) Stage of the disease can provide the guideline for evaluation of disease patterns, which is beneficial to arrange the continuous care for the purpose of maximizing the patient's competence and dignity. Patients with AD do not all inevitably undergo all stages. (Callone, Vasiloff, Kudlacek, Manternach, Brumback 2010, 6-7.)

#### Early-stage Alzheimer's disease

During the early stage of Alzheimer's disease, it is possible that patients can live independently without function impairment. They can follow their daily routines normally. However, they may have memory problems, such as forgetting words that are frequently used,

forgetting the location where valuable goods are put and so on. They may have difficulties to learn new things, to handle complicated tasks and to make plans. The symptoms may not be easy to notice by others. (Alzheimer's Association 2018.)

#### Middle-stage Alzheimer's disease

Middle stage of Alzheimer's disease is usually regarded as the longest stage which can last many years. The symptoms are more obvious. During this stage, patients may have more serious memory problems that they may have difficulties in their independence and need higher level of care. Owing to the nerve damage in brain, it is difficult for them to express the ideas as well as to carry out regular tasks without assistance. (Alzheimer's Association 2018) According to Taft (2013), people may have confusion, difficulty to identify family members and friends, difficulty to manage multi-step tasks, for instance, dressing up, challenges with new circumstances, hallucination, illusion, paranoia and impetuous action. They may have trouble in controlling the bladder and bowels. It is significant for them to find out the tasks that they can still manage and to find methods to simplify them. Owing to the increasing forgetfulness, they may have repetitious actions, such as repeating the same sentence or questions constantly. They may mix up day and night. Perhaps because they are feeling frustrated or they misunderstand what is going on, or they are feeling unconfident in need of a great deal of support care, some AD patients in this stage may be easily annoyed, upset and aggressive. (Alzheimer's Society 2015, 5-6.)

#### Late-stage Alzheimer's disease

In the late stage of Alzheimer's disease, patients lose the ability to learn, think, remember and behave. (Marlene 2005, 33) To be specific, the patients lose the ability to recognize people, locations and objects, to communicate and to deal with daily self-care without assistance. In addition, muscle function loss, risk of pneumonia, uncontrollable movements are the symptoms of severe Alzheimer's disease. (Town & Hoffman 2015.)

## 4 HOME CARE NURSING FOR ALZHEIMER'S DISEASE PATIENTS

### 4.1 Nursing role in home care

Nurses in home care must function independently in various kinds of unfamiliar home environments and circumstances. Because home is the domain of family, it is different between home care and hospital to provide nursing care in authority and control issues. For instance, nurses in home care should build harmonious and trust relationship that they can get permission to enter the home. (Berman & Snyder 2012, 132.)

Since caregivers are entrusted to carry out tasks complied with required standard, they have considerable responsibilities. Nurses are responsible for providing a variety of nursing practices for patients and play significant leadership roles. Nurses execute various activities in home care, for example, interaction, health education for patients, family members as well as caregivers, implementation of technical procedures, inspections of clinical and administrative aspects. (Andrade, Silva & Seixas 2016.)

In terms of interactive actions among patients, family members and caregivers, nurses should be able to build effective relationship with patients. In addition, nurses should be able to offer support in emotional and psychological well-being of patients, to have good negotiation skills with patients, to build trust in relationship with patients, to respect and listen to patients' concerns as well. Concerning to health education, nurses should be able to offer guidelines for patients, family members and caregivers, to improve teaching strategies, to give training of risk prevention in emergency situations. In terms of clinical actions, nurses should be equipped with professional knowledge of medication management, acute care management, pain management, wound management, prevention in parenteral nutrition, peritoneal dialysis, technical procedures such as monitoring of vital signs, enemas, physical assessment, assistance in daily activities, risk assessment and precautions of complication as well. In the aspect of administration, some homecare nurses are considered to generally execute tasks in home visits under supervision. However, other nurses who are regarded as administrative nurses, mainly carry out clinical and administrative supervision. Furthermore, nurses are considered to arrange the home visits, and they are considered as care coordinator and case administrator in nursing care coordination. (Andrade et al. 2016, 202.)

### 4.2 Home care nursing for elderly

In the early stages of Alzheimer's disease, elderly patients are considered to do activities if possible, participate in social sphere, carry on hobbies and maintenance of cognitive

skills. According to patients' symptoms, the need for the treatment tend to increase because of progression of the disease. (Mönkäre et al. 2013, 715-716.)

The most important goals of The Finnish Elderly Care Law are to support the elderly population's welfare, health, functional capacity and to support old people live independently; to increase and to strengthen the elderly's opportunities to participate in developing services; to improve the elderly's ability to access high-quality social and health services; to give advice for the use of other available services; in addition to receive the services sufficiently in advance and before their functional capability decreases (MSAH 2013a). (Salin, Laaksonen 2018, 21-22.) In order to receive care and treatment, there should be a need of medical reasons to rely on for short and long-term hospitalization. (The Finnish Elderly Care Law 2013).

The Finnish Elderly Care Law (MSAH 2013a), and the national recommendation (MSAH 2013b) provide the foundation for the development of services to meet customer needs.

If an elderly individual needs a help or treatment, the patient will undergo criteria tests for proof. The assessment must be considered out in the relationship with the older person. There are personal views must be taken into consideration. There are methods for assessment in order to get the service of home care. The methods include physical method, psychological method and cognitive method, namely, Barthel Index (BI: ADL, IADL), Geriatric Depression Scale (GDS-15), Cognition Cohen-Mansfield Agitation Inventory (CMAI), MMSE (Mini-Mental State Exam), Center for Epidemiologic Studies Depression Scale (CES-D) and Comprehensive Geriatric Assessment (CGA)

## 5 NURSING ROLE IN ACTIVATION IN ALZHEIMER'S DISEASE

### 5.1 Psychological activation

According to Selye 1950, too much stress can bring about and intensify the disease problems, due to the activation of Hypothalamic-Pituitary-Adrenal (HPA) axis which upgrades the circulating cortisol (Cort) levels.

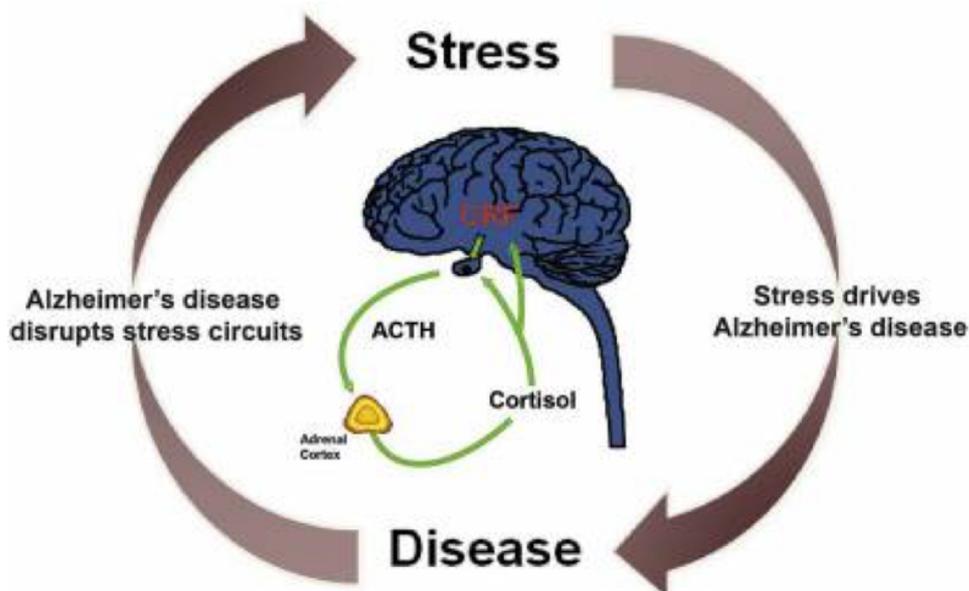


Figure 2 The relationship between stress and Alzheimer's disease (Justice 2018)

In the Figure 2 of the Vicious Cycle of Stress, on the right arc of cycle, increased levels of stress intensify AD, which gives rise to fast development of pathology and impairment in cognitive function. On the left arc of cycle, disease disrupts stress responsive neural circuits, emerging neuropsychiatric comorbidities, involving depression, agitation, and aggressive actions. In Hypothalamic-pituitary-adrenal (HPA) axis, hypothalamic corticotropin-releasing factor (CRF) triggers off adrenocorticotropic hormone release (ACTH) in pituitary gland and consecutive cortisol release by adrenal cortex, which plays a core role in worsening condition of AD by stress and the symptoms associated with stress resulted from continuing neurodegeneration. (Figure 2) Stress can have a disadvantageous effect on AD and other neurodegenerative disease progress. Stress distinctly aggravate the pathogenesis of AD in AD animal models. Lifestyle changes should be supported to safeguard against dementias. Too much stress can worsen depression and anxiety. (Justice 2018.)

Finding out underlying causes of stress and using favorable techniques to minimize stress can contribute to relieve the stress from AD patients and to activate AD patients

psychologically. It is significant to conduct cognition evaluation, such as Mini-Mental State Exam (MMSE); to conduct mood evaluation; to assess performance of daily activities; to check medical status, such as depression, delusions, delirium, pain, constipation, infection and negative effects of medication. (Bonner 2006, 15-20.)

AD patients, since they are likely to have emotional fluctuations and depression, can benefit considerably from a positive state of mind and a healthy body, which can be achieved by encircling AD patient with positive, optimistic, and spiritually supportive people. They can be family members, friends, neighbors or co-workers. What is important is that the patient builds a constant and positive emotional connection with them. (Naheed 2015, 86-87.) Patients with dementia may feel unconfident in themselves and in their abilities. It is important to support the patients to build and maintain self-esteem. For instance, caregivers can give plenty of praise and encouragement. If the patient makes mistakes, they should be understood and be supported by caregivers instead of being given harsh criticism or negative comments. They should be guaranteed to have enough time to do the hobbies or activities. (Alzheimer's society 2020.)

Lifestyle changes are simple but influential ways to treat depression and anxiety, which are an important part of comprehensive treatment methods. Exercise encourages the body to develop to make serotonin and endorphins, which are neurotransmitters in brain that help reduce depression. Lack of sleep has strong mood influence, partially because the neurotransmitters for mood support needs to be supplemented with sleep. Therefore, sufficient sleep is required to maintain the balance in brain and help to reduce depression and anxiety. (Lawson & Towey 2016.)

Elderly with AD manifests the common sign of depression, probably because they undergo considerable isolation. According to American Geriatrics Society, depression which is happening at the same time with dementia is the most common suffering for aging adults in nursing home. Light therapy may help with insomnia and lower the symptoms of depression in patients with Alzheimer's disease. Bright light exposure is regarded as night-time sleep aid and it contributes to extending daytime wakefulness, reducing the agitated as well as aggressive behaviors, and consolidating rest-activity patterns of patients with AD. (Hanford & Figueiro 2012.)

## 5.2 Cognitive activations

According to Canada's Health Care news and best practices 2020, as a healthcare worker with Alzheimer's disease patient, he or she can use games to help stimulate their mind and senses. Since there is no cure, patients with Alzheimer's, as well as their caregivers,

rely on treatment plans that were prescribed by the doctor, plus lifestyle changes to slow the progression of the disease (Activities and games for patients with Alzheimer's disease 2020.)

This part will be included about psychoeducational and psychosocial interventions created for improving cognitive function in patients with Alzheimer's disease. The sections include different activities for elderly that can be used in practical working life. The interventions were already used and researched and proved by researchers. However, in a practical life, they are not always used especially at home care (Cheng, Au, Losada & Gallagher-Thompson 2019, 1).

These activities, in addition, will take care of the senses of engagement, usefulness and other dignities. Alzheimer's disease patients will cut down the wandering behaviours that can cause depression passivity and irritation (Alzheimer's association 2019 Activities at home.)

According to Pointe (2018), puzzles are included as part of the care plan for an AD patient or who has already developed memory loss still has remarkable advantages for the mind as well as spirit. These pleasant activities can make brain work, function and stir pleasant memories from childhood. Researchers have found out that among the benefits of doing puzzles, elderly with dementia can even decrease their rate of cognitive decline. For instance, slower decline of cognitive functioning – few studies proved that elderly with memory problem who worked on puzzles for 45 minutes two times per week had got higher scores on memory tests. These improvements accounted for approximately six to nine months delay in symptoms or decline. Powerful brain workout, such as working on a puzzle exercise can make a stimulation training on both sides of the brain. Increased visual perception and memory – a patient can combine together a jigsaw puzzle, his or her eyes are constantly scanning for a piece that matches a concrete shape or color. It improves recognizing visual shapes and make brain use all the strengthens of patients' short-term memory. Even word puzzles reinforce the memory to strengthen connections through the brain cells. It creates the new connection between subjects. Improved interactions with others – puzzles can be easily be a solo activity. AD patients often have trouble interacting with those around them, especially as their symptoms progress. When seniors spend time together with a puzzle, they can easily engage in conversation, collaboration, shared accomplishments and bonding. Especially, for someone who is non-verbal, completing a visual puzzle gives them a unique chance for connection. It becomes feel-good chemicals – completing a task, such as solving one piece or an entire puzzle, releases dopamine in the brain. Few studies found that these chemical makes them feel enjoyable.

Patients feel the effects of dopamine when they accomplish a goal, complete a project or solve a problem. Dopamine also has the added advantages of improving motor skills, concentration, optimism, confidence and recollection – all beneficial to those with memory loss. (Pointe 2018.)

#### Music therapy

Listening to music is one of the simplest and most effective ways to get along with the elderly patient. The health worker will need as little effort as possible, for instance, turning the radio on or any music app on the device. With the help of their favorite songs, the music will help nurse to set their mood. Music therapy make patients' energy going, as well as cheer them up to enjoy listening it. (Activities and games for patients with Alzheimer's disease 2020.)

Singing as part of cognitive activation for Alzheimer's disease patients. Oostendorp and Montel (2014) found out that singing has the positive impact of active singing for the episodic memory of patients with Alzheimer's disease and mentioned the fact of the baffling stability of their music retention. According to article by Mastnak, Vörösová & Hittinger (2017, 5), Petrovsky, Cacchione & George in (2015), it has described that singing as cognitive activation, is considered as an instrument that is effective in modulating disease-associated anxieties and depression as well as human vitality for patients relative and caregivers to enhance the patients' quality of life resulting in the therapeutic and palliative hope connecting with music and culture.

The American Heritage Dictionary of the English Language, fifth edition (2016) considers music as “the art of arranging sounds in time so as to provide continuous, unified and evocative composition, as through melody, harmony, rhythm, and timbre.” The Oxford Dictionary of Music (Rutherford, Kennedy & Kennedy 2013) identifies few elements which serve as the building blocks of music. For instance, dynamics in music are the changes in sound intensity and volume. There different dynamics can be found in music, it ranges from loudness to softness. The intensity in dynamics can positively affect to our memory with music. If the music is soft and quiet, the music makes a sense of calm, closeness, and intimacy. If the music is loud, it creates a feeling of energy and power.

Music therapists are well versed in taking and implementing the healing elements of music to meet the specific and individualized needs of patients. For instance, in the whole world, music caregivers are employed in a wide variety of healthcare facilities. On another hand, music therapists specialized and educated to use music in various therapeutic ways.

Nurse can implement music intervention by making a patient care plan. (American Association 2014; World Federation of Music Therapy 2014.)

Choosing a patient's music preferences through assessment is important. According to Chlan & Heiderscheit (2009) which detects information on how frequently music is listened to, found out that the type of music selections, artists, groups, and genres preferred. What is more, the patient's own reasons for listening to music. For some individuals, the purpose of listening to music can be to relax, whereas other can prefer listening to music for distracting, stimulates and for invigorating the mood. (Heiderscheit, Breckenridge, Chlan & Savik 2014; Heiderscheit, Chlan & Donley 2011.)

No matter what activities nurse choose to engage in with the AD patient at nurse's care, it is important to remember that every activity should be meaningful but not busywork. The activity should be appropriate to patients' manual dexterity as well as ability to process logic. All the activities and games are to judgement-free and easy to accomplish. (Activities and games for patients with Alzheimer's disease 2020.)

These cognitive abilities have related to the work of brain. The information patients process and how nurse remind the information given. The cognitive activities could influence AD patient's daily life as well. (Bemis 2019.)

### 5.3 Physical activities

According to WHO, physical activity is identified as physical movement created by skeletal muscles that demands spending energy, including the activities done by playing, working, carrying out chores, travelling, and participation in leisure pursuits (WHO 2018).

Physical activity is recognized as the benefits of health and wellbeing. Being aware of the significance of active action for general health in all ages is essential, especially for the elderly who are under threat of AD, on account of the fact that great majority of patients affected by AD are over 65 years old. (Chen et al. 2016) It has been estimated lately that approximately one third of AD cases are probably ascribed to seven modifiable risk factors, namely, diabetes, middle-aged hypertension, middle-aged obesity, lack of exercise, depression, smoking and low educational achievement. Physical activity may thereby be advantageous to prevent and postpone the onset of cognitive impairment as well as AD. Relatively speaking, physical activity is easy to do and is the most effective if done constantly. (Stephen, Hongisto, Solomon & Lönnroos 2017.)

Common consensus is not reached relating to prime physical activities corresponding with AD prevention or improvement, but aerobic exercise and balance training of moderate to vigorous level of intensity is regarded as the most favourable physical activities. Regular practice of walking plays an important role in restoring cognitive function in AD. In order to improve muscle action in posture and develop motor skills, strength training is especially

more beneficial than regular practice of walking. Due to the improvement in muscle mass and strength, strength training lowers the risk of developing AD. (Chen, Zhang & Huang 2016.)

It has been proved that physical therapy treatments throughout Alzheimer's stages can reduce symptoms by means of improving balance, blood supply to the brain, endurance, flexibility and building muscle strength. Aggression and depression can be general characteristics throughout the progress of Alzheimer's disease. According to one study, one hour of physical therapy per week for three months can dramatically relieve depression. People with AD are at the risk of losing their balance, which can lead to increased risk of falls. Regular physical activity can improve the strength of muscle and keep the bones strong with the impaired coordination. Physical therapy is conducive to build muscle memory so as to preventing falls. Physical therapy can maintain and promote independence. Daily activities such as bathing, eating, dressing, moving and toileting can be challenging for AD patients. Physical therapy can provide opportunity to practice and improve the ability of doing daily tasks so that patients with AD can take care of themselves independently. (Crystal 2018) In addition, physical exercise can also be beneficial to mental health. According to Jonathan (2019), the adults who do physical exercise regularly such as several times per week for 30 to 60 minutes, which makes efforts to increased blood supply to the brain, can lower the risk of mild cognitive impairments, for instance, improving memory and thinking skills. It is beneficial to carry out a regular exercise plan three to five times weekly including 30 to 60 minutes of aerobic exercise, such as taking a walk, running, swimming or cycling. Water sports, for instance, swimming or water aerobics are helpful with joint problems. (Town & Hoffman 2019.)

There are some methods for helping the patients with AD to do physical exercises. The patients should know how much exercises they can do at one time. Few ten-minute mini exercises may be the most ideal. They can put music on while doing the exercise and they can dance with the music if possible. They can also watch the exercise videos for old people on TV. The exercise can be broken down into several simple steps. And it is important that the patients wear comfortable clothes and shoes which are made for exercise. They should drink water after exercise to maintain hydration. In addition, they can get around with caregivers every day. If the patients take a walk alone, they should have ID bracelets or wristbands with them which can show the phone numbers. (National Institute on Aging 2014.)

However, some patients with AD may not be able to walk well, which makes it challenging as the disease of AD gets worse. The probable reasons for being not able to walk well

including poor coordination, foot pain, muscle aches, trouble with patience, sickness, depression, anxiety, or lack of interest and so on. Even though some patients with AD have difficulty in walking, they can still do some gentle exercises. For example, they can do simple things, such as dusting and wiping. They can also use the indoor exercise bike to strengthen legs and lower body muscles. According to Town & Hoffman (2019), resistance training such as stretching is beneficial to boost mental acuity of older people. They can use soft rubber exercise ball for stretching or they can throw the soft rubber balls forward and backward. They can use stretching bands to do strengthening exercises. In addition, they can lift weight or household products, such as soup cans. (National Institute on Aging 2014.) Older adults can do easy strength exercise with resistance bands, including chest press, shoulder press, standing biceps curl and arm extension. (Swank 2009, 129).

#### 5.4 Nutrition

Diet and nutrition play a crucial role in effective and evidence-based care of people suffering from cognitive impairment, especially those having dementia and Alzheimer's disease. (Martin & Preedy 2015).

The brain is one of the most metabolically effective body parts that requires a steady stream of nutrients to perform. A poor diet may not offer the nutrients which is needed to make neurotransmitters and may cause the manifestation of anxiety or depression. It is significant to have a healthy diet, including fresh whole foods, lots of water, sufficient calcium, and to keep the trans fats content in meal low. Furthermore, taking supplementary probiotics with two or more live cultures, such as lactobacillus and bifidobacterium, and having fermented food, for instance, yogurt and miso, can contribute to better digestive health. (Lawson & Towey 2016.) According to Boyles (2013), people who drinks sweetened beverages, including normal and diet soda, fruit punch and sugared iced tea are at higher risk of depression. Instead, drinking unsweetened beverages or cutting down on sugary beverages may contributes to lower the risk of depression. However, coffee drinkers with long-term intake of caffeine are associated with anxiety. Unsweetened and decaffeinated coffee drinkers can have less depression than non-coffee drinkers. AD patients with depression should avoid drinking alcohol. Much alcohol consumption can lead to more severe depressive symptoms. Cutting down on alcohol consumption can help with decrease in depression symptoms. (Lawson & Towey 2016.)

## 6 COOPERATING ORGANIZATION

The thesis is carried out in cooperation with Lahden Asukasyhdistys ry, the home care association located in Lahti, Finland. It provides the elderly people with home nursing care and support services. Based on long-term unemployment, the association promotes the employment and it has been working successfully over the years. (Leppänen 2019.)

The responsibilities of registered nurse in Lahden Asukasyhdistys ry include follow-up care arrangement, medication administration, testing, support for the physical functional capacity, and ensuring of adequacy of services. If the patient is suspected of having memory decline, he or she might have cognitive tests such as MMSE and blood tests, which are taken by registered nurse. When administering the medication, the registered nurse ensures the suitable medicines; monitors the side effects of medicines; and assesses the need of dosage changes in medicines. In terms of support for the physical functional capacity, the registered nurse arranges the physical therapy; assesses the assistive devices; and ensures the safety environment for patients by location safety watches, door surveillance and so on. (Olkkonen 2019.)

## 7 CREATING A GOOD NURSE GUIDEBOOK

A good guidebook should provide the materials which are easy to understand. The ways to make the content understandable, including giving the most critical information first, giving tips on the things that people can do and telling the results that they can get by using the materials, and choosing the words carefully. In order to make the text style look good, it is suggested to use front sizes between 12 to 14 points and the headings' size at least 2 points larger than the main body of the text. In addition, avoiding typing in all caps in front style and limiting the use of light text on a dark background should be taken into consideration while styling the text. In content editing process, it is important to use the words and expressions that people are comfortable with. Furthermore, asking for advice from the organization and choosing the right translation instead of literal translation should be also considered while editing the text. (Stanhope & Lancaster 2015, 366.) Clear and convincing writing gives an opportunity to nurses to effectively communicate with patients, families, doctors and other healthcare specialists (Writing Guide for Nurses 2020).

Good design contributes to the effective guides. Using images can help people get much information when they read more than only text. Repetition of the visual style can provide an integral form that gives it a professional standard. (How to Create a Great-Looking Guide 2016.) Furthermore, images can help to attract the attention of people. For the purpose of making the pictures develop the materials, it is important to select the best types of pictures for the materials; to use the pictures that can help emphasize the text; to use the pictures that are uncomplicated to understand. Good layout can make the materials more appealing and understandable. In page layout, white space should be considered to prevent the page from being crowded or unprofessional. In order to make the material easier to read, it is recommended to have 10 to 35 percent empty space per page of printed materials, and to leave at least ½ inch to 1 inch of space between the edges of the page and the text. In addition, using bullet points to break up the text can contribute to the creation of good text structure, which is easy for the eye to follow. (U.S. Department of Health and Human Services 2010.)

## 8 METHODOLOGY

### 8.1 Data search, review and collection

The materials selected for the thesis topic is based on the latest research between the year 2000 and 2020. The information we used to gather the data are reliable and credible. The keywords related to the topic used for data search are:

- Alzheimer's disease
- Physical activation
- Psychological activation
- Cognitive activation
- Home care in Finland
- Nursing interventions for elderly

By means of free accessible web search engine, the reliable databases were collected from Google Search and some information gathered was taken from books. Almost all of the searched data based on reliable databases was available in English language. Only one material we used was written in Russian language which was translated by Timoshuk, and it was free of charge and available on google search engine. The translation to the article was not completed by a professional translator. Therefore, it is possible to notice the structure differences in it. However, the content of the article is similar.

The information used for writing thesis was free of charge. The web based electronic source of databases that we chose included:

- NCBI
- CINAHL
- MSRJ
- E-books
- PubMed
- Google Scholar
- ResearchGate
- SAGE journals

MSRJ Medical student Research Journal (www) is the longest running international academic journal in the United States, which is authored, reviewed, edited, and published by medical students studying at medical school. By using keywords of Alzheimer's disease and nursing interventions, we can find good quality research journals.

Expanded review is written based on the articles, some of the researchers as well as journals. Journals are from Medical Association, World Health organization, Sage journals and books.

The images used in our thesis were selected from Microsoft Office Word 2019 as well as from the Pixabay free pictures platform (<https://pixabay.com/>) in order to attract the readers interest to the point of the written text. In addition to the guidebook (Appendix 1), we also added signs and marks from the Microsoft Office Word.

## 8.2 Plan-Do-Study-Act model

Plan, Do, Study, Act (PDSA) model is used for improvement that provides a framework for progress, testing and executing changes leading to improvement. The PDSA model is based on scientific method, which helps to lessen the urge to act immediately through the wisdom of careful research. By using PDSA model, we can learn from these test cycles in a structured way before wholesale implementation, and we can test changes on a small scale. Stakeholders can have an opportunity to see whether the proposed changes will be successful or not. And PDSA model is a powerful tool for learning from effective ideas. (ACT Academy for their Quality, Service Improvement and redesign suite of programmes.) In many cases, organizations repeat the PDSA cycle many times, as they make modifications to the test in order to know how these modifications affect results (The Essential Guide to PDSA: Models, Worksheets, and Templates 2020).

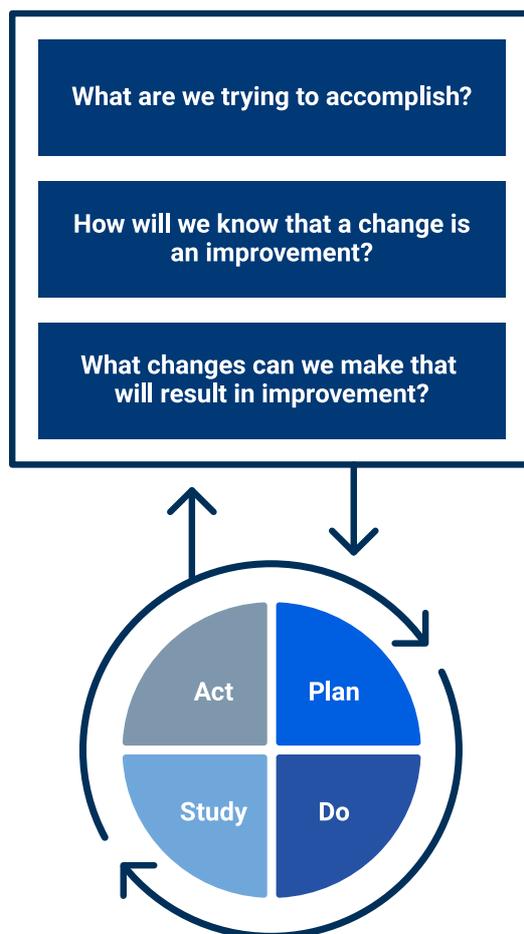


Figure 3 PDSA Model for Improvement (Smartsheet 2020)

According to figure 3, PDSA cycle consists of four stages, namely, planning, doing, studying and acting. In the stage of planning, a plan should be developed to test or to implement the change. In the stage of doing, the test or change should be carried out. In the stage of studying, it is important to collect the data before and after the change and to learn from the outcomes of the change. In the stage of acting, the next change cycle or full implementation should be planned. (ACT Academy for their Quality, Service Improvement and redesign suite of programmes.) Users of PDSA model follow the four stages of circular learning ways to adapt the improvement change. (Taylor, McNicholas, Nicolay, Darzi, Bell & Reed 2013.)

### 8.3 PDSA model for functional framework thesis

According to the Sacred Heart University Library (2020), a theoretical framework is created by concepts, together with their definition, and existing theories that are used for your study. It must indicate an understanding of theories and concepts that are relevant to the

topic of your research paper and that will relate it to the broader fields of theoretical education in the class you are taking.

The functional framework thesis is a project based on theoretical knowledge about Alzheimer's disease and nursing interventions for motivation of elderly people. Moreover, the theoretical knowledge is about elderly with AD living independently at home and its nursing interventions. In order to find out the purpose of the thesis, we have used the Plan, Do, Study, Act (PDSA) cycle. According to the model of PDSA, it provides a framework for developing, testing and implementing changes leading to improvement. The use of PDSA cycle gives an opportunity to test our thesis on patients on a small scale, based on our learning. By the PDSA cycle, it gives us the opportunity to check and make sure whether the learning outcomes will be feasible solution that is safe for the personnel and patients or not. (Plan, Do, Study, Act (PDSA) cycle and the model for improvement 2020.)

The PDSA model was used as structure for our thesis. The aim of our thesis is to create a guidebook for nurses to activate patients with Alzheimer's disease professionally in their own homes. We planned to make an AD patient-orientated brochure consisting of psychological, cognitive, physical activities as well as nutrition to motivate elderly patients with AD. The guidebook used by nurses to help AD patients living at home to maintain health and wellbeing is based on the reliable information from the latest researches composed of theoretical information on AD, nursing interventions for AD patients living at home and the functional results of motivation. The supervisor registered nurse Markus Olkkonen was interviewed to give advices on how to create a good guidebook.

After we created a guidebook (Appendix 1), we created a guide evaluation form (Appendix 2). Final versions of guidebooks were in English and Finnish languages and they were presented to the healthcare members. The final version of the guidebook was done first in English and later translated to Finnish language. The guide evaluation form (Appendix 2) was compiled from the list of questions in both languages. Guidebook assessment questions were selected based on the source of How to Create a Great-Looking Guide 2016. The guidebook was evaluated by registered nurses in home care company, Aurio Hoiva Oy. The design of the cover looked pleasant and realistic images were used to describe small subjects. The guidebook emphasized important points and focused on essential parts. The text was easy to understand, and the information was clearly explained to the target group that could be put into practice. However, two big titles in front page and in the next page should be replaced by one big title in front page. It was good to mention the benefits of following the guide. In addition, it was good that psychological activation was mentioned in the beginning, which was of great importance. According to the feedback

from nurses, we removed the title in the first page, and we corrected the big title in the front page. The motivational guidebook is used by nurses in home care. Nurses and other healthcare providers can use the guidebook as a reminder to activate the AD patients efficiently (Olkkonen 2019). The supervisor registered nurse Markus Olkkonen arranges time for nurses to do motivational activities with AD patients during home visit. Guidebooks in English version as well as in Finnish version and the evaluation form are found in the thesis' appendices.

Lahden Asukasyhdistys ry is the association that we cooperate with, which offers home care services for the elderly. The association has been taking seniors for caring since they are not able to manage independently at their homes. We found out that PDSA model cycle could play an appropriate role in building thesis framework for achieving the results. We have found many motivational nursing methods for geriatric patients with Alzheimer's disease by searching different materials as well as the theories of geriatrics. Many sources, articles, books, e-books and magazines on the subject have been taken into consideration.

## 9 DISCUSSION

Alzheimer's Disease (AD) is a progressive neurodegenerative brain disease that brings about major destruction of normal brain structure and function (Korolev, 2014). AD is the most widespread form of dementia affecting the elderly (Marsh & Alifragis 2018). Alzheimer's disease is characterized by slow progressive brain atrophy. People with AD gradually lose the ability of judgement and cognitive skills. They may become anxious, agitated, restless and delusional. (Evelyn 2008, 8.) During early stage of disease, AD causes synaptic dysfunction, disturbing communication within neural circuits that are critical to memory formation and other cognitive functions, for instance, intellectuality and comprehensive abilities. As AD progresses, the decline occurs in different domains of cognitive functioning, which leads to the total incapacity to behave independently in daily life. (Seynnaeve, Vecchio, Fruhmann, Verelst, Cools, Beckers, Mulvihill, Winderickx & Franssens 2019.)

Home care nursing provides quality nursing care services to patients in their own home. The essential purpose of the care is to promote the patient's self-management. Caregivers and home environment are regarded as significant composition in effective care planning. Through the cooperation of the caregiver and the patient for the most favorable health is significant to achieve self-care management outcomes. Nurses should apply ethics in practice to carry out the care legally. Ethics in working field reflects good intentions to patients instead of malice. (Rice 2006, 11-13.)

Right motivation to make lifestyle changes is advantageous in slowing the progression of AD or even prevention of AD. When brain activity is maintained at a high level, previously dormant parts of the brain can become more active to make up for declines. (Alzheimer's and motivation 2013.) It is significant to encourage the patients with AD to participate in daily activities, such as eating, dressing, walking, bathing, exercising and doing household chores, and to continue doing what they are interested in. Activities can help maintain and improve the cognitive function and can also help promote independence. If the patients keep on doing different activities, they will have less anxiety and depression, and get motivated. Activities carried out by the patients should be carefully arranged and evaluated. Games arranged for the patients with AD should be simple, which can match their mental and physical skills. Patients should participate in the activities, such as gardening, reading, painting, writing, dancing, singing, sorting out and so on that exploit the abilities and hobbies. (Ali 2015, 239.)

Lahden Asukayhdistys ry is an association, which offers home care services to the elderly in Lahti, the city of Finland. Nurses have regular visits to the patient's home to assist the

patients with daily activities. Home care nurses inspect the patients' hygiene; administer the medication; monitor the patients' condition; listen to the concerns of family members; collaborate with healthcare professionals to improve patient care plan. (Ollikainen 2020.)

In Lahden Asukasyhdistys ry, there are many elderly patients with Alzheimer's disease. The guidebook provides nurses with good ways to motivate elderly patients with AD in their own homes. For future development, home care nurses can arrange motivational activities from the guidebook to help seniors slow the progression of AD or even prevent the progress of AD. To be specific, using the guidance, nurses can help the elderly with AD to promote self-esteem, to have enjoyment and pleasure, to maintain and develop abilities and to have social contact.

## 10 ETHICAL CONSIDERATIONS

The ethics in work and research are becoming more important. Therefore, it is necessary that you understand the basis of ethical research and the impact of your future project. This is especially important if your research includes interaction with projects or members of the general community that maintain as participants (i.e., respondents). In your research, there can be many different interactions between people. (Polonski 2004, 53.)

A commissioning contract has been signed between the head of the company and the authors of the thesis. At the beginning of writing the thesis, the agreement has been taken into consideration with the head of the company.

Theses form a part of high education degrees that is publicly evaluated. The public nature of theses can guarantee students objectives as well as fair evaluation. (Lahti University of Applied Sciences 2018.)

## 11 IMPLICATIONS FOR FURTHER STUDIES

Alzheimer's disease is the most common form of dementia among people over the age of 65, and it is expected to cause the major public health crisis as the rapid increase in the number of the elderly in the next three decades. However, there are no therapies currently available to cure Alzheimer's disease. (Musiek & Schindler 2013.) Therefore, it is of great significance to find out effective ways to reduce the risk of developing AD as well as to slow the progression of AD.

During the process of data search, we had difficulties to find out comprehensive and authoritative information about motivational nursing interventions in psychological activation, cognitive activation, physical activation as well as nutrition to activate patients with AD. Many materials indicate general nursing interventions to treat patients with AD. We chose the materials carefully that were related to motivational methods for home care nurses and from reliable sources. The structure of the thesis has been reviewed many times for improvement.

The guidebook can provide normative guidance with scientific evidence for nurses. In future studies, it is important to find out new motivational methods for home care nurses to help the elderly patients prevent or delay the progression of AD. For future development, it is important to find out more stimulating activities to help stimulate patients' mind, senses and desire for pleasant life.

## REFERENCES

- Ali, N. 2015. Understanding Alzheimer's: An Introduction for Patients and Caregivers. [Accessed 23 June 2020]. Available at: <https://books.google.fi/books?id=obqSO6DSt9oC&pg=PA237&lpg=PA237&dq=nurse+motivate+alzheimer%27s+patient&source=bl&ots=IXTKvuKgN8&sig=ACfU3U3Lcb5pBXViau4s51KfwhHadumwwQ&hl=en&sa=X&ved=2ahUKEwii1PPn3J3qAhVSrosKHdiFDocQ6AEwCnoE-CAgQAQ#v=onepage&q=nurse%20motivate%20alzheimer's%20patient&f=false>
- Alzheimer's and motivation. 2013. Motivation and emotion. [Accessed 1 September 2020]. Available at: [https://en.wikiversity.org/wiki/Motivation\\_and\\_emotion/Book/2013/Alzheimer%27s\\_and\\_motivation](https://en.wikiversity.org/wiki/Motivation_and_emotion/Book/2013/Alzheimer%27s_and_motivation)
- Alzheimer's Association. 2018. Stages of Alzheimer's disease. [Accessed 6 April 2020]. Available at: <https://www.alz.org/media/Documents/alzheimers-stages-early-middle-late-ts.pdf>
- Alzheimer's Society. 2015. The progression of Alzheimer's disease and other dementias. [Accessed 3 April 2020]. Available at: [https://www.alzheimers.org.uk/sites/default/files/pdf/factsheet\\_the\\_progression\\_of\\_alzheimers\\_disease\\_and\\_other\\_dementias.pdf](https://www.alzheimers.org.uk/sites/default/files/pdf/factsheet_the_progression_of_alzheimers_disease_and_other_dementias.pdf)
- Alzheimer's Statistics. 2019. [Accessed 1 September 2020]. Available at: <https://www.alzheimers.net/resources/alzheimers-statistics/>
- Andrade, A.M., Silva, K.L., Seixas, C.T. & Braga, P.P. 2016. Nursing practice in home care: an integrative literature review. [Accessed 5 March 2020]. Available at: [http://www.scielo.br/pdf/reben/v70n1/en\\_0034-7167-reben-70-01-0210.pdf](http://www.scielo.br/pdf/reben/v70n1/en_0034-7167-reben-70-01-0210.pdf)
- Bachinskaya, N. 2013. Neurodegenerative health. Alzheimer's disease. 88. PDF.
- Bemis, H. 2019. 6 Best Cognitive Games and Activities for Seniors. [Accessed 7 May 2020]. Available at: <https://www.umh.org/assisted-independent-living-blog/6-best-cognitive-games-and-activities-for-seniors>
- Berma, A., Snyder, S. 2012. Fundamentals of Nursing. 132
- Bonner, C. 2005. Reducing Stress-related Behaviours in People with Dementia. 15-20. Google Books. [Accessed 3 April 2020]. Available at: <https://books.google.fi/books?id=HEfNj->

PPVDsC&pg=PA86&dq=how+to+reduce+stress+for+old+people&hl=en&sa=X&ved=0ahUKEwj4idutkOHOAhXKxIsKHbgHCh4Q6AEIMDAB#v=onepage&q=how%20to%20reduce%20stress%20for%20old%20people&f=false

Callone, P., Vasiloff, B., Manternach, J., Brumback, Roger. 2010. Alzheimer's Disease: The Dignity Within –A Handbook for Caregivers, Family, and Friends. 6-7.

Canada's health care news and best practices. Activities and games for patients with Alzheimer's disease. [Accessed 25 April 2020]. Available at: <https://hospitalnews.com/activities-and-games-for-patients-with-alzheimers-disease/>

Chen, W.W., Zhang, X. & Huang, W.J. 2016. Role of physical exercise in Alzheimer's disease. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4812200/>

Crystal, J. 2018. 4 Ways Physical Therapy Slows the Symptoms of Alzheimer's. [Accessed 8 March 2020]. Available at: <https://www.alzheimers.net/ways-physical-therapy-slows-the-symptoms-of-alzheimers/>

Dementia. 2018. [Accessed 31 August 2020]. Available at: <https://pixabay.com/ru/illustrations/деменция-болезнь-альцгеймера-возраст-3268560/>

Evelyn, B.K. 2008. Alzheimer's Disease. 8

Figure 2. Smartsheet. How to Implement PDSA in Your Organization. Smartsheet. [Accessed 26 April 2020]. Available at: <https://www.smartsheet.com/content/plan-do-study-act-guide>

Hanford, N., Figueiro, M. 2012. Light Therapy and Alzheimer's Disease and Related Dementia: Past, Present, and Future. [Accessed 8 April 2020]. Available at: [https://www.researchgate.net/publication/232705386\\_Light\\_Therapy\\_and\\_Alzheimer's\\_Disease\\_and\\_Related\\_Dementia\\_Past\\_Present\\_and\\_Future](https://www.researchgate.net/publication/232705386_Light_Therapy_and_Alzheimer's_Disease_and_Related_Dementia_Past_Present_and_Future)

Haugen N. Sandra J. Ulrich & Canale's Nursing Care Planning Guides 2010. [Accessed 8 April 2020]. Available at: [https://books.google.fi/books?id=-Apf91c\\_WWYC&pg=PA366&dq=nursing+alzheimer's+disease&hl=en&sa=X&ved=0ahUKEwj-0PC9x7XIAhUNuIsKHUJWDCwQ6AEIYjAI#v=onepage&q=nursing%20alzheimer's%20disease&f=false](https://books.google.fi/books?id=-Apf91c_WWYC&pg=PA366&dq=nursing+alzheimer's+disease&hl=en&sa=X&ved=0ahUKEwj-0PC9x7XIAhUNuIsKHUJWDCwQ6AEIYjAI#v=onepage&q=nursing%20alzheimer's%20disease&f=false)

Hickman, R. A., Faustin, A., Wisnewski, T. 2016. Alzheimer Disease and its Growing Epidemic: Risk Factors, Biomarkers and the Urgent Need for Therapeutics. [Accessed 8 April 2020]. Manuscript. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5116320/pdf/nihms793069.pdf>

Hippius, H., Neudörfer, G. 2003. The discovery of Alzheimer's disease. 101. [Accessed 21 April 2020]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181715/pdf/DialoguesClinNeurosci-5-101.pdf>

How To Create a Great-Looking Guide. 2016. [Accessed 28 April 2020]. Available at: <https://guidebook.com/mobile-guides/how-to-create-a-great-looking-guide/>

IAS Study Center. 2019. Alzheimer's Disease. [Accessed 6 April 2020]. Available at: <https://vajiramias.com/current-affairs/alzheimers-disease/5ce139171d5def69852559ec/>

Information about Alzheimer's disease for patients and their families. 2018. [Accessed 6 April 2020]. Available at: <https://www.ravijuhend.ee/ru/portal-pacientov/rukovodstva/128/informatsiya-o-bolezni-altsgeymera-dlya-bolnykh-i-ikh-blizkikh>

Justice, N. 2018. The relationship between stress and Alzheimer's disease. *Neurobiol Stress*. 8:127-133. [Accessed 21 April 2018]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5991350/>

Korolev, I. 2014. Alzheimer's Disease: A Clinical and Basic Science Review. *Review Article*. 25-26. [Accessed 3 June 2020]. Available at: <http://msrj.chm.msu.edu/wp-content/uploads/2014/12/Fall-2014-Alzheimers-Disease.pdf>

Koskinen, A. 2010. *Esimerkkilähteen nimi*. Ornanet Koulutuksen e-kirjat. Turku: DatumPoint.

Lahden Kotipalvelu. Lahden Asukasyhdistys ry. Available at: <http://www.lahdenkotipalvelu.fi>

Lahti University of Applied Sciences Ltd. 2018. GUIDELINES ON GRADUATION THESES

Larson, E. B., Kukull, W. A., Katzman, R. L. 1992. Cognitive Impairment. *Dementia and Alzheimer's Disease*. 445. [Accessed 1 March 2020]. Available at: <https://www.annualreviews.org/doi/pdf/10.1146/annurev.pu.13.050192.002243>

Lava, N. 2018. Causes of Alzheimer's Disease. [Accessed 6 April 2020]. Available at: <https://www.webmd.com/alzheimers/guide/alzheimers-causes-risk-factors>

Leppänen, H. 2019. Lahden Asukasyhdistys ry. TOIMINTAKERTOMUS 01.01. 2019 ---- 31.12.2019

Lindquist, R., Tracy, M. & Snyder, M. 2018. *Complementary and Alternative Therapies in Nursing*. Eighth edition. SPRINGER PUBLISHING COMPANY.

Marlene, T. 2005. Alzheimer's disease. 33. [Accessed 10 March 2020]. Available at: [https://books.google.fi/books?id=9yNokXBlwdIC&pg=PA33&dq=stages++alzheimer's+disease&hl=en&sa=X&ved=0ahUKEwihoOCEvTIAhWt\\_CoKHdNhDFk4ChDoAQhB-MAM#v=onepage&q=stages%20%20alzheimer's%20disease&f=false](https://books.google.fi/books?id=9yNokXBlwdIC&pg=PA33&dq=stages++alzheimer's+disease&hl=en&sa=X&ved=0ahUKEwihoOCEvTIAhWt_CoKHdNhDFk4ChDoAQhB-MAM#v=onepage&q=stages%20%20alzheimer's%20disease&f=false)

Marsh, J., Alifragis, P. 2018. Synaptic dysfunction in Alzheimer's disease: the effects of amyloid beta on synaptic vesicle dynamics as a novel target for therapeutic intervention. [Accessed 13 June 2020]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5950662/>

Mastnak, W., Vörösová, A., & Hittinger, L. 2017. Singing With People With Dementia. *Today's geriatric medicine.com*. [Accessed 13 April 2020]. Available at: <https://www.today'sgeriatricmedicine.com/archive/JF17p5.shtml>

Memory. 2020. [Accessed 31 August 2020]. Available at: <https://pixabay.com/ru/illustrations/память-polaroid-деменция-затухание-4111092/>

Mönkäre, R., Nukari, T., Lehto, H. 2013. Sairaanhoitajan käsikirja. Alzheimer's diseases treatment for patients. 714. [Accessed 3 February 2020]

Moretti, R., Torre, P., Antonello, R., Cazzato, G. & Bava, A. 2002. Depression and Alzheimer's disease: Symptom or comorbidity?. *American Journal of Alzheimer's Disease & Other Dementias*. 17(6), 338-344. [Accessed 21 April 2020]. Available at: <https://journals.sagepub.com/doi/pdf/10.1177/153331750201700607>

Musiek, E. & Schindler, S. 2013. Alzheimer Disease: Current Concepts & Future Directions. [Accessed 23 July 2020]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6179870/>

National Institute on Aging. 2014. Exercise and Physical Activity. [Accessed 10 March 2020]. Available at: <https://books.google.fi/books?id=VZ3qAgAAQBAJ&printsec=frontcover&dq=physical+activities+and+alzheimer%27s+disease&hl=en&sa=X&ved=0ahUKEwiHrMrqmKHnAhWn-losKHaGwAYkQ6AEIKTAA#v=onepage&q=physical%20activities%20and%20alzheimer's%20disease&f=false>

Pawluk, C., Zukow, W. 2011. Humanities dimension of physiotherapy, rehabilitation, nursing and public health 2011, 139. [Accessed 20 January]. Available at: <https://books.google.fi/books?id=NY81p9dVI70C&pg=PA139&dq=nursing+alzheimer's+disease&hl=en&sa=X&ved=0ahUKEwiZmPOM3rflAhVeAhAIHW9-ASAQ6AEIM-jAB#v=onepage&q=nursing%20alzheimer's%20disease&f=false>

Pointe, C. 2018. Brain-Stimulating Benefits of Puzzles for Seniors with Dementia. [Accessed 7 May 2020]. Available at: <https://www.chesapeakecottage.org/single-post/2018/09/04/Brain-Stimulating-Benefits-of-Puzzles-for-Seniors-with-Dementia>

Polonski. 2004. 5 Ethical Considerations. [Accessed 31 August 2020]. Available at: [https://www.sagepub.com/sites/default/files/upm-binaries/4999\\_Polonski\\_Chapter\\_5.pdf](https://www.sagepub.com/sites/default/files/upm-binaries/4999_Polonski_Chapter_5.pdf)

Puzzles for the Elderly with Dementia and Alzheimer's. [Accessed 6 April 2020]. Available at: <https://www.alzstore.com/puzzles-for-elderly-with-dementia-s/1826.htm>

Rice, R. 2006. Home Care Nursing Practice. 11-13

Salin, S., Laaksonen, H. 2018. Athens Journal of Health. Management of Nursing Homes and Sheltered Housing in Finland. 21-36. [Accessed 26 April 2020]. Available at: <https://www.athensjournals.gr/health/2018-5-1-2-Salin.pdf>

Seynnaeve, D., Vecchio, M., Verelst, J., Beckers, J., Mulvihill, D., Windericks, J. & Franssens, V. 2018. Recent Insights on Alzheimer's Disease Originating from Yeast Models. [Accessed 20 June 2020]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6073265/>

Stanhope, M., Lancaster, J. 2015. Public Health Nursing. 366

Statistics Finland. 2019. Life expectancy. [Accessed 21 April 2020]. Findikaattori.fi Available at: <https://findikaattori.fi/en/46>

Stephen, R., Hongisto, K., Solomon, A. & Lönnroos, E. 2017. Physical Activity and Alzheimer's Disease: A Systematic Review. [Accessed 5 April 2020]. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/28049634>

Swank, A. M. 2009. Resistance Training For Special Populations. 129. [Accessed 9 April 2020]

Taft, L. 2013. Effective Nursing Management: Patients with Alzheimer's On a Medical-Surgical Unit. [Accessed 3 June 2020]. Available at: [https://www.amsn.org/sites/default/files/documents/articles-events/amsn/matters\\_0513\\_taft.pdf](https://www.amsn.org/sites/default/files/documents/articles-events/amsn/matters_0513_taft.pdf)

Taylor, M., McNicholas, C., Nicolay, C., Darzi, A., Bell, D & Reed, J. 2013. Systematic review of the application of the plan-do-study-act method to improve quality in healthcare. [Accessed 20 July 2020]. Available at: [https://www.researchgate.net/publication/256500238\\_Systematic\\_review\\_of\\_the\\_application\\_of\\_the\\_plan-do-study-act\\_method\\_to\\_improve\\_quality\\_in\\_healthcare](https://www.researchgate.net/publication/256500238_Systematic_review_of_the_application_of_the_plan-do-study-act_method_to_improve_quality_in_healthcare)

Town, L. & Hoffman, K. 2019. Dementia, Alzheimer's disease Stages, Treatments, and Other Medical. 10-11. [Accessed 3 February 2020]

Town, L., Hoffman, K., Dementia, Alzheimer's Disease Stages, Treatments, and Other Medical Considerations. [Accessed 10 March 2020]. Available at:

<https://books.google.fi/books?id=dsKWDwAAQBAJ&pg=PT17&dq=alzheimer's+disease+stage&hl=en&sa=X&ved=0ahUKEwjKpY2ryvTIAhUrmIsKHf7CAGQQ6AEINTAC#v=onepage&q=alzheimer's%20disease%20stage&f=false>

Trochim, W. 2006. Organizing Academic Research Papers: Theoretical Framework. Library.sacredheart.edu. [Accessed 14 April 2020]. Available at: <https://library.sacredheart.edu/c.php?g=29803&p=185919>

U.S. Department of Health and Human Services. 2010. Simply Put - A guide for creating easy-to-understand materials. [Accessed 10 May 2020]. Available at:

<https://stacks.cdc.gov/view/cdc/11938>

World Health Organization. 2018. Physical activity. [Accessed 3 April 2020]. Available at: <https://www.who.int/news-room/fact-sheets/detail/physical-activity>

## APPENDICES

## Appendix 1 A Guide in English



***GUIDEBOOK FOR NURSES  
FOR MOTIVATING  
ALZHEIMER'S DISEASE  
PATIENTS IN HOME CARE***

---

*«And in the end it's  
not the years in  
your life that  
count; it's the life  
in your years.»  
Abraham Lincoln*

---

We want to motivate elderly people to enjoy the rest of their life...

The motivational guidebook is addressed to nurses working with Alzheimer's Disease (AD) patients. It consists of psychological, cognitive, physical activities and nutrition parts. These activities nurse can use for motivating and maintain the health of AD patients living in home care.




---

## Content

PSYCHOLOGICAL ACTIVATION:.....	2
COGNITIVE ACTIVATION.....	3
PHYSICAL ACTIVATION .....	4
NUTRITION .....	6

## Psychological activation:



Benefits from the psychological activities:

1. Effective ways to reduce depression and anxiety
2. Bright light therapy can improve quality of sleep at night, increase daytime alertness and reduce symptoms of depression



***Nurses can help to motivate the patients with AD to build better mental health***

- ★ Support the patient to build self-esteem (for example giving plenty of praise and encouragement)
  - ☺ Don't give negative comments or unnecessary criticisms
- ★ Help the patient to keep a positive state of mind (for example surround the patient with positive and mentally supportive people)
- ★ Use of bright light therapy: ensure bright light exposure during daytime (at least 1000 lux at the cornea) and provide daily exposure of full spectrum of white light at 5000 lux to 10,000 lux

## Cognitive activation



Benefits from the cognitive activities:

1. Improving memory abilities
2. Ways to increase concentration
3. Reducing the risk of progressing dementia



***Nurses can help motivate the patients with AD to promote cognitive development***

- ★ Encourage the patient with AD to focus on something concrete by asking questions, such as weather, day and other coming happenings
- ★ Encourage the patient to engage in conversation, for example, discuss with them about news of the world and let the patients enjoy conversations
- ★ Play appropriate games, such as bingo, crosswords, jigsaw puzzles and sudoku 🧩
- ★ Encourage the patient to write, read and paint if possible 📖
- ★ Encourage the patient to read books or magazines that he or she is interested in
- ★ Music therapy: playing instrumental background music, for example, lullabies and classical music or patients' favorite songs

## Physical activation



Benefits from the physical activities:

1. Regular physical activity can improve the muscle strength and keep the bones strong with the impaired coordination.
2. Physical activity improves muscle memory which can help to prevent falls



***Nurses can motivate the patients with AD to be physically active***

- ★ Arrange regular aerobic exercise 3-5 times (30-60min) per week, such as taking a walk, cycling and water sports (for example swimming) 
- ★ Make sure the patient with AD has an ID bracelet or wristband with phone number and address when she or he walks alone
- ★ Find exercise videos or TV programs intended to elderly
- ★ Play music ~~on~~ while the patient is doing exercise or encourage the patient to dance with the music if possible
- ★ Encourage the patient to participate in daily activities, such as putting on clothes, washing their face and hands, bathing, moving and eating 

**Gentle exercise for AD patients who may not be able to walk well:**

- ★ Encourage the patient to do simple tasks at home, such as dusting, clearing the table, washing the dishes, watering the plants and folding the laundry
- ★ Encourage the patient to use indoor exercise bike to strengthen legs and lower body muscles
- ★ Arrange the stretching exercise with soft rubber exercise ball, or encourage the patient to throw the soft rubber balls forward and backward
- ★ Arrange the easy strength exercise with the resistance band, such as chest press, shoulder press, standing biceps curl and triceps extension.

## Nutrition



Benefits from the nutrition:

1. Healthy diet can lower the risk of cognitive decline and reduce the anxiety and depression.
2. Unsweetened and decaffeinated coffee drinkers can have less depression than non-coffee drinkers.



***Nurses can motivate the patients with AD to receive adequate nutrition***

- Provide healthy diet, including fresh, unprocessed foods, enough water and calcium. Keep the trans fats content in meal low
- Provide supplementary probiotics, such as lactobacillus and bifidobacterium, and provide fermented (sour) food, for instance, yogurt and miso
- Recommend the patient to reduce drinking alcohol, drink with sugar and sweetened beverages and to drink unsweetened and decaffeinated coffee

---

*Life is divided  
into three: when  
you believe in  
Santa Claus, when  
you don't believe  
in Santa Claus,  
and when you are  
already Santa  
Claus. Bob Phillips*

---

#### Appendix

Feedback is very important for us. 

Please rate the following parts of the guide.

Timoshuk Daria, Zou Qi

Thesis spring 2020

LAB University of Applied Sciences

Mukkulankatu 19

15210 Lahti



## Appendix 2 Evaluation form in English

**Guide evaluation form**

<i>Please rate the following aspects of the guide</i>	 strongly agree	 agree	 disagree	 strongly disagree
The guide highlights the main chapters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The guide concentrates on the relevant part	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It was clearly mentioned what the target group need to do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Words were carefully chosen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The text corresponds to its meaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The visual look of the guide was best possible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The guide was easy to follow and understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Realistic images was used to illustrate small subjects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The guide is easy to understand and put into effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The text is attractive and easy to read	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The terms used are familiar to the target group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There were messages to certain group and subgroup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The benefits of the material were mentioned to the target group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments 				

## Appendix 3 Guidebook in Finnish

# *OPAS SAIRAANHOITAJILLE ALZHEIMERIN TAUTIA SAIRASTAVIEN POTILAIKIDEN MOTIVOINTIIN KOTIHOIDOSSA*

---

**«Ja lopulta ne eivät ole vuodet, jotka elämässäsi ratkaisevat, vaan elämä vuosissasi.»  
-Abraham Lincoln**

---

Haluamme motivoida vanhuksia nauttimaan elämästään...

Tämä opas on ositettu Alzheimer potilaita hoitaville sairaanhoitajille. Opas koostuu psykologisen, kognitiivisen, fyysisten aktiviteettien ja ravinnon osioista. Sairaanhoitaja voi käyttää ohjekirjassa mainittuja aktiviteettejä Alzheimer potilaiden motivoimiseen ja terveyden ylläpitoon kotihoidossa.




---

## Sisältö

PSYKOLOGINEN AKTIVOINTI: .....	2
KOGNITIIVINEN AKTIVOINTI .....	3
FYYSINEN AKTIVOINTI.....	4
RAVINTO .....	6

## Psykologinen aktivointi:



Psykologisen aktivoinnin hyödyt:

1. Keinoja vähentää masennusta ja ahdistusta
2. Kirkasvaloterapia voi parantaa unen laatua, kohottaa päivän vireystilaa ja vähentää masennuksen oireita



***Sairaanhoitajat voivat auttaa Alzheimer potilaiden motivoinnissa ja paremman mielenterveyden rakentamisessa***

- ★ Potilaan tukeminen itsetunnon parantamiseksi (esimerkiksi kehumalla ja rohkaisemalla)
  - ☺ Älä kommentoi negatiivisesti tai anna turhaa kritiikkiä
- ★ Auta potilasta parantamaan positiivista mielentilaa (esimerkiksi ympäröimällä hänet positiivisilla ja henkistä tukea antavilla ihmisillä)
- ★ Käytä kirkasvaloterapiaa: varmista kirkkaan valon saanti päiväsaikaan (vähintään 1 000 luksia sarveiskalvolle); lisäksi varmista valkoisen valon saanti koko spektrille 5 000 luksista 10 000 luksiin päivittäin

## Kognitiivinen aktivointi



Kognitiivisten aktiviteettien hyödyt:

1. Muistin kohentaminen
2. Tapoja keskittymisen parantamiseen
3. Etenevän demensian riskin vähentäminen



**Sairaanhoitajat voivat auttaa Alzheimer potilaiden kognitiivisen kehityksen edistämisessä**

- ★ Alzheimer potilaiden rohkaiseminen keskittymään konkreettisiin asioihin kysymällä kysymyksiä esimerkiksi säästä, päivästä tai muista tulevista tapahtumista
- ★ Potilaiden rohkaiseminen keskusteluun osallistumiseen, esimerkiksi keskustelemalla uutisista ja antamalla potilaan nauttia keskustelusta
- ★ Sopivien pelien, kuten bingon, ristikoiden, palapelien ja sudokun, pelaaminen 🧩
- ★ Potilaan rohkaiseminen kirjoittamiseen, lukemiseen ja maalaamiseen jos mahdollista 📖
- ★ Potilaan rohkaiseminen häntä kiinnostavien kirjojen ja lehtien lukemiseen
- ★ Musiikkiterapia: instrumentaalisen taustamusiikin, kuten klassisen musiikin tai potilaan suosikkikappaleiden soittaminen

## Fyysinen aktivointi



Fyysisten aktiviteettien hyödyt:

1. Säännöllinen liikunta voi parantaa lihasvoimaa ja ylläpitää luiden kuntoa heikentyneessä koordinaatiokyvyssä.
2. Liikunta edistää lihaskuitujen muodostumista, mikä taas ehkäisee kaatumista



**Sairaanhoidajat voivat motivoida Alzheimer potilaita fyysisiin aktiviteetteihin**

- ★ Säännöllisten aerobisten harjoitusten järjestäminen 3-5 kertaa viikossa (30-60 min), esimerkiksi kävely, pyöräily ja vesiuheilu kuten uinti 
- ★ Varmista, että Alzheimer potilaalla on tunnistusranneke tai muu ranneke, jossa on puhelinnumero ja osoite, jos hän kävelee yksin
- ★ Etsi vanhuksille suunnattuja liikuntavideoita tai -ohjelmia TV:stä
- ★ Soita musiikkia potilaan urheillessa tai kannusta häntä tanssahtelemaan musiikin tahdissa jos mahdollista
- ★ Rohkaise potilasta osallistumaan päivittäisiin askareisiin, kuten vaatteiden pukemiseen, käsien ja kasvojen pesuun, kylpemiseen, liikkumiseen ja syömiseen 

**Liikuntaa Alzheimer potilaille, jotka eivät pysty kävelemään kunnolla:**

- ★ Kannusta potilasta helppoihin kotiaskareisiin, kuten pölyjen pyyhkimiseen, ruokapöydän siivoamiseen, tiskien pesuun, kasvien kasteluun ja pyykin viikkaamiseen
- ★ Kannusta potilasta käyttämään kuntopyörää jalkojen ja alaruumiin lihasten vahvistamiseen
- ★ Järjestä venyttelyharjoituksia pehmeällä jumppapallolla tai kehota potilasta heittämään jumppapalloa eteen- ja taaksepäin
- ★ Järjestä helppoja voimaharjoitteita kuminauhan avulla, esimerkiksi penkkipunnerrus, pystypunnerrus, hauiskääntö seisaaltaan ja ojentaja-lihasten rasitus.

## Ravinto



### Ravinnon hyödyt:

1. Terveellinen ruokavalio voi vähentää riskiä kognitiiviseen rappeutumiseen sekä vähentää ahdistusta ja masennusta.
2. Makeuttamattoman ja kofeiinittoman kahvin juojat voivat kokea vähemmän masennusta kuin ihmiset, jotka eivät juo kahvia.



### *Sairaanhoitajat voivat motivoida Alzheimer potilaita riittävään ravinnonsaantiin*

- Tuoreita, prosessoimattomia ruokia sisältävän terveellisen ruokavalion takaaminen sekä tarpeellisesta veden ja kalsiumin saannista huolehtiminen. Trans-rasvojen osuus aterialta pidettävä vähäisenä
- Tarjoa probiootteja, kuten lactobacillusta ja bifidobacteriumia sekä hapanmaitotuotteita, kuten jogurttia ja misoa
- Suosittele potilaalle alkoholin, sokeristen ja makeutettujen juomien vähentämistä ja kehoita häntä juomaan makeuttamattomia ja kofeiinittomia juomia

---

*“Elämä jaetaan  
kolmeen aikaan:  
milloin uskotaan  
joulupukkiin,  
milloin ei uskota  
joulupukkiin ja  
milloin itse olet  
joulupukki”*

*-Bob Phillips*

---

Liite

*Palaute on meille tärkeää.* 

Pyydämme teitä arvioimaan seuraavat kohdat oppaasta.

Timoshuk Daria, Zou Qi

Thesis spring 2020

LAB University of Applied Sciences

Mukkulankatu 19



## Appendix 4 Evaluation form in Finnish

**Oppaan arviointilomake**

<b>Arvioi seuraavat osa-alueet oppaasta asteikolla:</b> 	 <b>vahvasti samaa mieltä</b>	 <b>samaa mieltä</b>	 <b>eri-mieltä</b>	 <b>vahvasti eri-mieltä</b>
Opas painottaa tärkeämpiä kappaleita	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opas keskittyy oleelliseen osa-alueeseen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kohderyhmälle kerrottiin selvästi, mitä heidän tulisi tehdä	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sanat olivat huolellisesti valittuja	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tekstin ulosanti vastaa tarkoitusta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oppaalla on paras mahdollinen ulkonäkö	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opasta on helppo seurata ja ymmärtää	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Realistisia kuvia oli käytetty pienten aiheiden kuvaamisessa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oppaan viesti on helposti ymmärrettävä ja toteutettava	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teksti oli kutsuvaa ja helppolukuista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tekstissä on kohderyhmälle tuttuja termejä	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oppaassa on tietyille ryhmille ja alaryhmille suunnattuja viestejä	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oppaan noudattamisen hyödyt kohderyhmälle mainitaan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kommentit: 				

## ABBREVIATIONS

AD	Alzheimer's disease
ADL	Activities of Daily Living
BI	Bertel Index
CES-D	Center for Epidemiologic Studies Depression Scale
CGA	Comprehensive Geriatric Assessment
CMAI	Cohen-Mansfield Agitation Inventory
GDS-15	Geriatric Depression Scale
IADL	Instrumental Activities of Daily living
MMSE	Mini-Mental State Exam
MSAH	Ministry of Social Affairs and Health
SAGE	Publishing
WHO	World Health Organization

## ALALIITTEET

---

<sup>i</sup> Teri, L., Borson, S., Kiyak, A., et al.: Behavioral disturbance, cognitive dysfunction, and functional skill. Prevalence and relationship in Alzheimer's disease. *J Am Geriatr. Soc.* 1980; 37: 109-116.

<sup>ii</sup> Qui, C., Fratiglioni, L. 2009. Epidemiology of Alzheimer's disease. *ONPL Alzheimer's Disease.* 17-26.

<sup>iii</sup> Alzheimer's Association. 2010. Alzheimer's disease facts and figures: Alzheimer's & Dementia