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DEMENTIA AND RECREATIONAL ACTIVITIES

Development of recreational activities plan for dementia

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Kamala Kharel

Abstract

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Abstract

This researched-based development project focuses on the planning of the recreational activities intended to residents of the dementia for a nursing home.

As dementia causes dependency for daily activities depending upon the level of severity of the problem (cognitive impairment and physical disability), it decreases overall quality of life. The quality of life can be maintained and improved by providing them meaningful recreational activities. Recreational activities are one of the effective non-drug treatments for them which enhance physical, mental and social well-being as well as help to reduce caregivers' stress level. The nursing home needs a proper recreational activity plan.

As part of qualitative research method, two different series of focus group interviews were conducted to generate valuable and meaningful information from the caregivers and staff members of the nursing home. The first one was conducted before the development of the recreational activity plan and the second one was conducted after the implementation of the developed recreational activity plan to get the feedback.

The developed recreational activity plan targeted to the demented residents are found to be suitable to the organization and meaningful to the residents. Organization can launch the planned activities for long term.

Keywords

Dementia, recreational activities, functional ability, quality of life

CONTENTS

1 INTRODUCTION

As people's life expectancy is getting longer, the number of people living with dementia is expected to increase, because age is one of the main risk factors for developing dementia (Lokon, Sauer & LI 2016, 2). According to World Health Organization (WHO) 2017, the people living with dementia are around 50 million in the world and numbers increasing by almost 10 million with new cases every year. The total number of the people with dementia are expected to reach 82 million in 2030 and 152 million in 2050. Now, it is estimated that the dementia is the 7th leading cause of death.

Dementia is a descriptive term for a collection of symptoms that is caused by several disorders that affect the brain. It creates cognitive impairment and physical disabilities to the person and need external support and care to perform daily activities. Dementia is not curable permanently, and it causes memory loss and other problems that make the difficulty for a person to survive and manage the activities independently. The decreases in functional abilities are physical ability, mental ability and social ability leading to poor quality of life. In addition to that, very low rate of activities participation due to such disabilities also decreases the willingness to engagement resulting frustration, agitation, aggression, restless, depression, anxiety etc. to the demented person. (Scholzel-Dorenbos 2011, 20-24.)

There are different types of non-drug activities available that can help them to live better life and maintain their quality of life. Recreational activities to demented people help to keep their mind active and cope better with the situation caused by dementia (Milte, Shulver, Killington, Bradley, Ratcliffe& Crotty 2016, 9-16.) As the physical, mental and social activities are basic activities to be provided to the demented people; those activities should be related to their interest and meaningful to them to enhance their physical, mental and social engagement. Those activities help to reduce the problems caused by dementia and maintain the quality of life by way of improving their mood, well-being and mental abilities. (Alzheimer’s Society UK 2017b, 35-37.)

As dementia causes disability and dependence, providing them basic care itself is challenging. In addition to this, caregivers must deal with the dementia-caused cognitive and functional disabilities. People with dementia have different behavioural and psychological symptoms such as restlessness, anger, depression, anxiety, sadness. Such behaviours, disabilities and dependencies increase the stress level and burden of the caregivers. However, direct benefits of recreational activities to the demented people ultimately help caregivers. (Culinary schools.org 2017; Snelling 2012.)

This research-based development project is intended to the residents with dementia of my workplace organization, Valkamahovi nursing home, branch of Attendo Oy based in Helsinki. The area of this project is chosen based on the current needs of recreational activities for demented residents. The problem is also realized and accepted by the management and other staffs. The existing meaningful activities for demented residents are not carried out regularly and systematically. Residents with dementia living in nursing home, lack meaningful activities for better quality of life. The research-based development plan is needed to provide meaningful and enough activities to support their well-being and improve their quality of life.

The meaningful and suitable recreational activities plan is developed based on literature reviews and conducted focus group interviews. Those activities are discussed with the practicing caregivers and other staffs in focus group interviews and implemented to see whether those activities are relevant and meaningful to the residents and organization or not. Final versions of the development guideline of recreational activities were designed with timetable for final implementation followed by second focus group interview.

2 BACKGROUND INFORMATION

2.1 Background of the target organization

The target organization of the project is Attendo Terveyspalvelut Oy and the target unit is the Valkamahovi housing/nursing service. Attendo Finland has been operating under the auspices of Attendo Group's private social and health service companies. As Finnish Company, it started in 2000 and was originally established in 1985 in Sweden. It employs more than 22,000 employees in the Nordic countries and about 10 000 people in Finland. Attendo Finland is considered as one of the largest employers for new employees and seen as biggest rival of public service and local government. The guiding values are knowledge, commitment and communication. Quality work and its promotion also form an integral part of the company's operations. It works in the field of primary health care, occupational health services, oral health care and specialized medical care. It provides services for older people, people with disabilities and individuals and families, and health, medical and dental care as well as staffing. (Attendo 2018a.)

Attendo's vision is to "strengthen people", meaning that people are listened to and involved. People are treated warmly and respectfully and encouraged them to be independent. People must feel safe and improve their quality of life. As, Attendo’s guiding values are knowledge, commitment and communication. Knowledge means the details and the work is done thoroughly. The problem is to reverse the problem by developing a solution. Commitment is that employees are proud of their actions and to Attendo. The aim is to exceed the expectations and the importance of trustworthiness and keeping promises. Well-made work brings satisfaction to the employee himself. Competence means seeking to understand human needs and aspirations. The results of the work are openly shared and qualitative work guides all activities. The aim is to make things right in the right place at the right time. (Attendo 2018b.)

Attendo ensure that people fell that they are safe, and they are helped and encouraged to take care of themselves to support their independency with respect. The work is done by teamwork and the employees support each other. (Attendo, 2018b.)

One of the activities of Attendo is the housing services for people with disabilities. Attendo’s service homes offer rehabilitative and functional-quality service housing for people with disabilities, physically or mentally disabled people all over Finland. Modern, safe living environment and multi-professional staff support to the individual's individuality and individual rehabilitation. It ensures that people with disabilities can live their life as active and independent as possible, based on their own preferences. (Attendo 2018c.)

Attendo, Valkamahovi is a service home opened in September 2014 in Finland's Helsinki region. It provides 24-hour service housing for people who are under 65 years of age and are physically and/or mentally disabled. The main goal of the organization is to provide multi-patient opportunities for active life in an accessible, home-like and safe residential environment. (Attendo 2018d.) It consists of 45 places of residents with three Sheltered Housing Units: Poiju, Uisko and Kummeli. A personal care plan is done for each resident and each has own responsible nurse. The staffs consist of trained social and health care professionals whose activities are guided by professional ethical values. Cooperation with relatives and with social and health care institutions is part of the company's operations. They are always welcome to watch and explore activities.

Development project was carried out in Poiju unit of Attendo, Valkamahovi where most of the residents have dementia and four demented residents joined from Uisko unit. Poiju unit has 13 places for residents and 9 residents are diagnosed with dementia. Therefore, recreation activities plan is developed and implemented for 13 residents. Most of them are physically depended and need support to perform the activities.

2.2 Selection of the topic

Selection of the topic started with identifying of the current organizational problem that need to be solved as earliest possible. Additionally, the area must be suitable and feasible for this research-based development plan. Several other probable topics were identified based on the development need of the organization and my areas of interest. As an employee, I have noticed and realized some problems which are to be solved and those issues were always in my mind while working as well as during my study. In addition to that, those issues were frequently discussed in the regular meetings and informal discussions among the workmates.

The necessary efforts to solve those problems were not enough, successful implementation has always been lacked even though they were planned somehow. Those problems helped me while I was working on my thesis topics and I listed out all the possible options then I discussed with the manager and other staffs about those issues to make decision on topic. This topic has been finalized after the discussion with them based on appropriateness to the organization and feasibility to study. So, the manager and other staffs were ready to support during the study period and implement the new developed plan on recreational activity for residents with dementia.

2.3 Significance of the topic

This topic is significance to the researcher in personal development, to the organization and its residents with dementia and caregivers. Similarly, it benefits to other concerned people or groups of people.

The significance of the topic is not only meaningful to me but also to the organization and its clients especially to the dementia-based clients. The development plan on this topic would impact on organization in several ways. The project will develop the guidelines of recreational activities to the residents with dementia, which is highly expected and implacable as soon as the plan is developed. Implementation of the developed plan enhances the patient satisfaction as well as their positive feedback leads to support enhancing market value of the organization. Similarly, resident satisfaction creates a good working environment, harmonious client-care giver relationships and this atmosphere.

The direct benefit of this development project goes to the residents with dementia and care givers of the nursing home. According to alzimer.net based on different research, the recreational activities have positive advantages for demented and caregivers of them. Recreational activities help them in improving the quality of life especially in physical, mental and social level of the patients. On the other hand, the positive effect to the residents helps to reduce caregivers' stress. (alzimers.net 2015.)

2.4 The purpose and objective

The development plan is intended to the organization Attendo, Valkamahovi nursing home and its residents.

The purposes of this thesis are:

- To improve the physical, mental and social functional abilities and quality of life of the residents of dementia.
- To reduce the stress level of caregivers to the individual with dementia

The objective of the thesis is:

- To produce the new recreational activity plan model for the residents with dementia

3 KNOWLEDGE BASE

3.1 Dementia

According to Alzheimer Europe 2014, the number of people with dementia (PWD) in Finland is 92,232 in 2012, which represents 1.71 percentage of the total population. Finland has a higher percentage than the European Union (EU) average of 1.55 percentages. In Finland, there are 200,000 people with moderate impairment of cognitive behaviour and 100,000 mild to 93,000 persons have moderate problems of dementia. The group of people is growing yearly with 14,500 from memory disorder. (Memory disorders: Current Care Guideline 2017.) According to statistics Finland 2017, the numbers of the persons died from dementia is 9,200 in 2016, including Alzheimer's disease, which represented 17 percent of all death. Dementia causing death percentage has grown rapidly in the past decades partly due to the aging of the population. The women living longer than man and more than double the number of women die from dementia than the number of men.

Dementia is classified as a syndrome, not a separate disease. It is not a normal part of ageing process. Dementia is generally a chronic or progressive nature of syndrome caused by disease of the brain which leads to impairment of multiple functions like memory, ability to think, orientation, comprehension, calculation, capacity to learn, language and judgment. Changes in behaviour, emotional handling and social functioning are the symptoms of this disease. The symptoms of dementia depend on the parts of the brain that are damaged and the disease that is causing the dementia. The most common cause of dementia is a progressive memory disorder. Dementia limits social, professional and physical activities. It has a physical, psychological, social and economic impact, not only for a people with dementia but also on their families and society. (Alzheimer Europe 2013; Alzheimer's Society UK 2017b, 10-14.)

Dementia is caused by physical changes in the brain that happens as the result of a disease. The structure and chemistry of the brain changes when dementia progresses, which causes nerve cells to die. As more nerve cells die, the brain becomes more damaged. The different factors, which are responsible to increase the risk of developing dementia, are for example; aging, genes, health and lifestyle (exercise, diet, alcohol or smoking). (Alzheimer Europe 2013; Alzheimer's Society UK 2017a, 2-3.)

Dementia or Alzheimer's disease is not just a disease that happens with aging but also to the people who are under the age of 65. Alzheimer affecting people younger than age 65 is called young onset dementia (YOD) and Alzheimer's. YOD has been diagnosed with many people who are in their 40s and 50s. Generally, younger people get less common

type of dementia such as frontotemporal dementia or another dementia with a genetic cause. Only a third of younger people with dementia have Alzheimer's disease. (Alzheimer's Association 2018; Alzheimer's Society UK 2017b, 22-23.) YOD is an estimated prevalence, between 45 and 64 years, of 100 individuals per 1000,000 populations in Europe. A typical Alzheimer's disease is more common in YOD, usually occurs through non-memory problems such as language dysfunctions and impaired in organizational and planning skills. (Jones et. al 2017, 159-160.)

Dementia has three stages; the mild stage, the medium stage and the difficult stage. In the mild stage, the person can manage himself/herself but there is reduction of ability to work and social skills. The symptoms include forgetfulness, losing track of the time and get lost in well-known places. In the medium stage the person is not able to manage himself/herself. In this stage, a patient needs partial help by others to perform activities. Medium stage symptoms are forgetting people's names and recent events, difficulty with communication. In the third stage or difficult stage, the person needs help all the time or totally dependent. Symptoms include unaware of the time, date and place, difficulty in movements. (WHO 2017.)

Types of dementia can be differentiated in many ways. The most common types are Alzheimer's disease, vascular dementia, dementia Lewy bodies and frontotemporal dementia. (Alzheimer's Society UK 2017a, 2-4.) Alzheimer's disease is the most common type, followed by vascular dementia. It accounts for an estimated 60 to 80 percent of cases. Alzheimer's disease is an increase of abnormal protein that surrounds brain cells and damages brain cell's internal structure. This causes cells to die due to the loss of chemical connections between cells. Alzheimer's disease usually begins gradually with mild memory loss such as difficulty learning new things. Others early changes are problems with language, feeling confused, having difficulty with everyday activities and experiencing mood swings. (Alzheimer's Society UK 2017b, 16-17.)

Vascular dementia occurs due to problems with the blood supply to the brain because to narrowing or blockage of blood vessels. Nerve cells do not get enough oxygen, nutrients through the blood. So, nerve cells start to die, and brain damage occurs. In this type of dementia, the common early changes include difficulty in planning, thinking and concentrating. Memory loss is not always common in the early stages. This dementia accounts for 20-30 percentage of all cases of dementia. (Alzheimer's Society UK 2017a, 3-4; Alzheimer's Society UK 2017b, 17-18.)

Dementia with Lewy bodies (DLB) occurs when the tiny clumps of protein develop inside the nerve cells of the brain then they disrupt the functions of the brain, the levels of

chemical messengers and cause nerve cells to die. In early stage, symptoms may include difficulty with planning ahead and solving problems. This dementia is closely related with Parkinson's disease. The person can also develop symptoms like Parkinson's disease such as slow and rigid movements, problems in balancing and staring performance and trembling of an arm or leg. (Alzheimer's Society UK 2017b 18-19; Härmä & Juva 2013.)

Frontotemporal dementia (FTD) occurs due to the damage of the nerve cells in the brain areas called the frontal and temporal lobes. These areas of the brain control human behaviour, emotional response and language skills. In the early stage, the most common signs could be: changing in personality and behaviour. (Alzheimer's Society UK 2017b, 20-21.)

3.2 Quality of life

> *WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. (WHO 2018.)*

Quality of life (QOL) is mostly personal, which is based on many factors. The factors can be based on person's lifestyle, purposes of the life, personal characteristics as well as social relationships, social networks, and social support. QOL includes perceptions of overall quality of life, physical condition, happiness, personal development and achievement, social activities, recreational activities, leisure, age and the financial status of a person. QOL is not only satisfaction of the individual but also the cultural, religious beliefs, education, wealth and the environment. In human life, quality varies between individual to individual and their life cycle. (Scholzel-Dorenbos 2011, 2-4.)

The change in health status is not only the measurement factor of changes in individual quality of life, but also by the psychological adaptation process of the disease. This psychological adaption process is also called as response shift. For individuals with dementia, hope is the important part to enhance quality of life, as dementia is known as hope-hindering experience of life. Certain methodologies must be developed that supports dementia-specific quality of live measures. Similarly, the quality of life of people with dementia can be determined by whether the treatments, which are expected to benefit, are perceived as meaningful by the patients as well as caregivers. Therefore, it is important to identify the

suitable treatment goal to the patients as well as the caregivers that leads to improve the quality of life. (Scholzel-Dorenbos 2011, 20-24.)

Dementia creates a substantial burden to patients as well as family members and caregivers at large. It has a significant medical, social and psychological pressure on all the persons involved. The quality of life in general is understood by the emotional, physical and social well-being and their capacity to perform daily life of individuals. There are other perspectives to understand about the quality of life. The quality of life is also determined by the level of happiness of the people to their life. Health related quality of life, especially in case of dementia on the other hand, is related to the happiness of the patients and concerns with the care providers and health care systems. The general quality of life can be distinguished from health-related quality of life from the perspectives of the caregivers and health care system. General quality of life is limited within the people, but health-related quality of life is extended towards the health care system because their quality of life can be improved by treatment and other related activities. (Scholzel-Dorenbos, Krabbe & Rikkert 2010, 32-34.)

The International Group for the Harmonization of Dementia Guidelines has also suggested that the dementia related quality of life should be part of outcome of both patients and healthcare system. It has paid attention not only the improvement of dementia related quality of life but also caregiving-related stress and its improvement. Therefore, it is acceptable that the quality of life especially in case of dementia should provide a plan that supports both patients and caregivers that express whether the implemented plan generates a meaningful difference to the patient's and caregiver's life or not. (Mack & Whitehouse 2001, 69-71.)

According to the research, positive mood and engagement in pleasant activities are essential factors for good QOL for PWD. More factors include preserved activities of daily living functioning, health and well-being, physical mobility and maintenance of cognitive ability. PWD are especially susceptible to loss of pleasant events and mood disturbances, as increasing cognitive impairment results a loss of ability to engage in meaningful and enjoyable activities, that bring to increased depression and decreased QOL. Meaningful activity provides a sense of efficacy, reduction in depression and improves social relationship. The ability of performing ADLs is an essential factor in maintaining QOL for PWD. Lack of meaningful activities contributes to lowering the quality of life for PWD. (Logsdon, McCurry & Teri 2007, 1-8.)

3.3 Importance of functional abilities and dementia

As people are living longer and life expectancy is increasing, it reflects the risk in an increase of chronic and degenerative diseases, which are responsible for impaired functional abilities and poor quality of life. Functional ability is a main component of health among the elderly. Health and functional abilities are closely related to each other. The health and well-being of the elderly can be observed with functional ability from the perspective of he or she can cope and manage with daily life. Therefore, maintaining and improving the functional capacity of elderly population is more important. Maintaining functional ability as well as opportunity to participate in each of the activities is important irrespective of the building blocks of quality of life with elderly. (Koskinen, Lundqvist & Ristiluoma 2012, 119-137; Talmelli, Vale, Gratao, Kusumota, & Rodrigues 2013, 219-225.)

WHO (2015, 26-28) report explained that healthy aging is the process of maintaining and developing the functional ability, which helps to maintain the well-being during older age. For most elderly people, the maintenance of functional ability is the most important. Functionality is the ability of a person to meet the living standards. It involves the ability to take care of themselves, manage their jobs and enjoy leisure activities. The ability to balance of ability between living and operating environments and their own goals. Functional abilities are essential for human being survival and to perform the activities of life such as work, study and recreational activities. It also includes the interaction with other people and the surrounding and striving towards the goals of life. Human holistic well-being consists of a physical, psychological and social and their balance. The change in one area can impact on all other areas as well. Improving the physical ability increases the human participation that has a positive impact on mental and social performance.

Functional abilities contain basic activities of daily living (ADL) and instrumental activities of daily living (IADL). Basic ADL includes a range of self-care activities such as eating, walking, bathing, dressing and toileting. These activities are closely related with each other. For instance, when a person is not able to perform one activity then, this will impact on others. Basic ADL needs muscle strength, coordination, balance and cognitive and sensory skills to perform. IADL includes the activities which are necessary for adaptation to the environment and emphasize social activities such as telephone use, shopping, money management, taking medication and travelling. (Charernboon & Lerthattasilp 2015.)

The functional abilities are generally divided in to physical, psychological and social ability. As there three functional activities are related to each other, are difficult to separate in practice. Generally, changes in some these areas affect the entire human ability to

function. For example, maintaining a mental ability, recreational activity often also supports social and physical ability. Maintaining physical functionality with physical activity to extend its impact also, to psychological and social functionality. When functional abilities deteriorate, it becomes more dependent on other people to be carried out the daily activities. (WHO 2015, 28-33.)

Aging and different diseases affect the person's functional ability in different ways. Body, mind and environment are a whole that works together and closely related with each other. Age-related functional dependence is leading poor quality of life and increased health-related costs. The factors related with deteriorating functional capacity and functional dependency are age, dementia, vascular diseases and hip fracture. However, only dementia and age are associated with the development of functional dependency and decline functional ability. In elderly population, dementia and cognitive impairment are closely associated to both the development of long-term functional dependence and decline in functional ability. (Aguero-Torres et al. 1998, 1452-1456.)

The effects of memory disorders to the functional ability of elderly are significant and they are the major cause to seek for social and health services for the elderly. Dementia is associated with memory disorders as well as holistic impaired performance compared to a person's previous level. All memory disorders involve a risk of functional impairment. In memory disorders, symptoms may include for example, the lack of survival of demanding work performances, difficulties in reasoning and solving problems as well as difficulties in walking. With the progression of the disease, increases the difficulty level to cope and perform daily activities as well as detoriates the cognitive functions. (WHO 2015, 55-56.)

Talmelliet et. al 2013 (219-225) argue that the stage of dementia is an important predictive factor for functional performance problems in elderly people with Alzheimer's disease. Elderly's functional performances are significantly associated with severity of dementia. Even in moderate stage of dementia, the performance of ADL is compromised. The elderly with advanced stage of dementia show worse performance in accomplishing ADL and are completely dependent on others.

Dementia affects the person's intellectual function and leads different symptoms such as dysphasia, apraxia, disturbance in movements, agnosia and so on. Memory loss and other dementia problems make the difficulty for an elderly to survive or manage independently. Recreational activities help to support the person's ability which make a person to feel safe and valuable. Moderate and sever stage dementia needs help in all daily activities round the clock. Therefore, it is important to help PWD properly and support them to

maintain the remaining ability. (Stella, Banzato, Quagliato, Viana & Christofoletti 2008, 96-101.)

Physical functional ability means the person's ability to cope and manage with daily basic activities such as eating, drinking, dressing, movement, working life and leisure activities outside the home and so on. It is a body's ability to perform physical function efficiently and effectively in work and leisure activities. Physical ability to function covers human mobility, speed and abilities that everyone can develop. It cannot be stored but possible to develop and maintain, that requires a certain amount of regular training. Physical ability is based on body's different systems such as respiratory, circulatory and musculoskeletal system operation. (Eloranta & Punkanen 2008, 42.)

The areas of physical ability include muscle strength, joint mobility, body management and the functioning of these coordinating central nervous system. Aging is usually first cause to decrease human performances, muscle tone and affect the physical function ability. Physical ability problems become more common with age because different physical changes are associated with aging such as visual and hearing impairment, muscles strength decrease, memory loss, changes in senses and metabolism decrease and so on. (Koskinen, Lundqvist & Ristiluoma 2012, 120-124; WHO 2015, 50-54.)

Physical activity can be significantly enhanced by good nutrition, adequate rest, sleep and exercise. One of the most important areas of physical ability is mobility. The ability to move is part of good quality of life and independent survival. Lack of mobility create a sense of loneliness, dependency and increase the need for support. Difficulties in mobility becomes more common with age and limit the opportunities for participation and decreases the quality of life. (National Institute for health and welfare 2017a.)

Physical changes occur with aging process that diminishes the physical ability. The regular physical exercises can help to maintain. The ability to get up from the chair, muscular strength of the lower limbs, balance and ability to walk is very important for elderly people. The impairment of functional capacities may result in upper and lower joints deficiencies and deterioration of muscular strength. The first signs of deterioration in muscle strength can be observed at age of 50 and physical impairment usually begins at the age of 75. Physical changes in the body is unique and active. The daily functionality helps to be an independent for a long time. The physical ability of aging people can be improved or maintained by everyday movements of the joints to avoid stiffening the joints. Exercise can be for example, lifting the hands towards ceiling or pressing the fingers into the fist and opening. (WHO 2015, 67-69.)

Psychological functional ability is the ability of a human to perform various mental and mental working activities**.** It includes of human life management, mental health and well-being. Mental ability includes self-esteem, mood, emotional stability, understanding and a variety of things relating to coping with challenges. Mental ability helps human to cope with different things and tasks that require intelligence and mental strength. The areas of mental performances are perception, memory, thinking, learning new things and communication. Mental ability affects a person's ability to cope with various cognitive and demanding activities. (Lähdesmäki & Vornanen 2008, 36; Kan & Pohjola 2012, 13.)

Memory is an important aspect of mental ability. This ability is used to evaluate the importance of their own activities. Person works efficiently and sensibly with good psychological ability. Person with good mental health feels good and worth able, appreciates him/herself and others as well as optimistic about future. It is important to support of cognitive function and mood to improve the aging psychiatric function. Mood can be improved by value by listening, experiences of successes and exercise. PWD need different things to maintain mental ability such as encouragement, guidance, time and opportunities to participate in different activities. (Eloranta & Punkanen 2008, 127-128.)

The experience of happiness is deteriorating with age usually in women than men. Quality of life decreases with aging both in men and women. The causes of deterioration of the quality of life in older age are increasing the number of health and functional problems. Depression is the most common mental problem for the elderly population. It more possibly lead to a decrease in functional ability. (National Institute for health and welfare 2017b.)

Social functional ability is the ability to deal with people in different situations and surroundings. It is the ability to interact with others and maintenance of relationships and usually defined by relations with relatives and friends. Social performance brings person's life meaningful as well as allows leisure and fun together with other people. (Lähdesmäki & Vornanen 2008, 24; Eloranta & Punkanen 2008, 16-18.)

Physical and psychological ability also play an important role to maintain social ability. Social ability is also important for the development and preservation of good physical and mental health. Memory impairment can limit social ability by influencing opportunities to participate for social activities and hobbies. It is important to maintain social relationships to improve the well-being of aging and their quality of life. (Lähdesmäki & Vornanen 2008, 24; Koskinen, Lundqvist and Ristiluoma 2012, 137-140.)

Social relationship and participation in social activities are important factors for maintaining mental and physical ability of elderly people. Lack of motivation and skills reduce the

functional ability of them. Force and balance training programs are beneficial to improve the mobility of the elderly and to prevent crashes. (Heinonen 2007.) According to National Institute for health and welfare 2017c, loneliness is getting high with age and nearly 20% of Finns over 80 years of age experience themselves lonely. The cause of loneliness is lack of social networks due to the deterioration of physical function and the death of closed ones.

3.4 Recreational Activities for Dementia

The dementia cannot be cured permanently; however, research is conducting for developing drugs, vaccines and other medical treatment. Medical treatments are not the only way to treat or manage the symptoms or slow down the progress of dementia. There are a range of non-drugs treatments available that can help the PWD to live well and maintain quality of life. These includes supports, therapies and recreational activities. It helps to keep the people's mind active and cope better with the consequences of dementia. Dementia's care and support should be focused on that person and their individual needs and preferences, as need to be 'person-centred'. The activities of persons with dementia become meaningful through feelings of pleasure and involvement, a sense of connection and belonging, and a sense of autonomy and self-identity. (Milte, Shulver, Killington, Bradley, Ratcliffe& Crotty 2016, 9-16.)

The activities, relating to physical, mental and social, are the basic need of human being. Many activities contain more than one component. Studies suggest that the activities containing more than one of the components have been noticed to be more beneficial than to be engaged in only one type of activity. Engagement in activities can have positive effects on persons with dementia, such as a marked increase in measured happiness, elevated interest and alertness, a decrease in boredom. Recreational activity can be defined as the voluntary use of free time for activities outside the daily routine. PWD have a very low rate of activity participation because of lacking physical and cognitive abilities to initiate engagement. Recreational activity helps to promote and maintain quality of life by providing an appropriate level of stimulation using meaningful activities. PWD participation and engagement in group or one-on-one activities, is an important way to support independence, a sense of accomplishment and a sense of self. Recreational activities' programme is challenging for PWD, as their ability to initiate or sustain meaningful activity is limited due to pathological changes including with cognitive impairments. Recreational activities should not only meet the interests of residents, but also their physical, mental and psychosocial needs. (Baker et. al 2001 87-90; Kolanowski, Fick & Buettner 2009, 2-4.)

Recreational activities help the PWD to live well and improve the quality of life. It helps to improve person's mood, well-being and mental abilities. For example, when person's dementia progresses, they may also enjoy reminiscence work. Other meaningful activities include music, singing or art. It is very essential that with dementia, activities help the person to stay as active as they can physically, mentally and socially. It has been researched that diet, exercise and participating in various stimulating activities has positive effects both in memory and in information processing functions. (Alzheimer's Society UK 2017b, 35-37.)

Recreational activities should be focused not only the interests of each individual but also that person's specific needs for movement, stimulation, relaxation, and social experiences. To provide meaningful activities, need to assess each client's physical limitation and cognitive function that determines client's skill level. Based on the assessment, recreational activities can be tailored, so they meet interest and are implemented in an adapted manner to get best outcomes. As dementia is a progressive disorder which can limit residents' ability to participate in certain activities, but this does not mean that those activities cannot be modified according to individual's abilities. Often, the activities can be simplified by breaking them down in to simple steps by eliminating difficult steps and this process is called activity adaptation. (Kolanowski et. al 2009, 2-4.)

Meaningful activities have a positive impact on cognitive function and dementia. It needs to be designed in such a way that provides the opportunities to the residents to feel happiness, control and purpose in their lives. It has an important aspect of supporting personhood of PWD. It is important that PWD not only that they are able to continue to be who they are by participating in activities that are meaningful to them. There need to be sense that activities should be tailored to the people's interest and preferences, rather than people being offered activities by traditional way that may provide no context to participants. (Milte et. al 2016 12-15.)

Lokonet. al (2016, 8-15) explored the result that PWD expressed significantly more intense and frequent well-being during five different activities that includes, Opening Minds through Art (OMA), music therapy, creative activities, non-creative activities and no activities at all. PWD showed the highest well-being scores during OMA compare to other activities. Creative activities performed by the art and music therapy contributed to significantly higher overall well-being and pleasure than non- creative activities. Study found that PWD benefits from having activities, regardless of the type of activities (creative or non-creative), or who conducts them (therapists or activity staffs).

A study by Buettner and Fitzsimmons (2003, 219-226) revealed that PWD feel that, life often lacks purpose, friendship, and opportunities for challenge and excitement without meaningful activities. This may also bring isolation, depression and an unnecessary loss of cognitive and physical function. So recreational activities should be matched to functional levels of the residents for best outcomes and should be appropriately planned. Small group recreational therapy programme enhances the strength, flexibility and reduce the problematic behaviours in a month. It helps to prevent social isolation, problematic behaviours and decline in functional level.

3.4.1 Physical activities

Physical activity can be defined as any movement of the body, which is produced by skeletal muscles that need energy expenditure and produces progressive health benefits. This includes any motion people do such as walking, working, cycling, playing, travelling, cleaning house and participating in recreational activities. (WHO 2018.)

Physically active lifestyle has a significant impact on the well-being of PWD. PWD can bring muscle disuse atrophy, which can be delayed by adequate physical exercise and nutrition. Exercise is a type of physical activity but not every physical activity is exercise. When people perform physical activity on regular basis can help to improve overall health and fitness as well as decrease the risk for many chronic diseases such as cancer, heart disease, diabetes and Alzheimer's disease. Physical exercises help to maintain good blood flow to the brain and may encourage new brain cell growth and survival and reduce frequency and severity of behavioural disorders. On the other hand, it helps to maintain people's quality of life and improves mental, social health and cognition in all stages of dementia. Walking helps to improve mobility, reduce depression and positive effects on cognition. Physical activity assists to improve the ability to perform the ADL and independency. (WHO 2018; Alzheimer's Society UK 2018; Dementia Australia 2015; Bowes et. al 2013, 1-3; Mechling 2008 1-2.)

WHO (2018) recommends physical activity for adult aged 18 to 65 years and above is required to perform at least 150 minutes of moderate-intensity physical activity per week or 75 minutes of vigorous-intensity physical activity throughout the week. This equates to 30 minutes of moderate-intensity activity per day, for at least five days a week. This activity time can be done into shorter sessions throughout the day, with each session lasting a minimum of 10 minutes. As well as, for additional health benefits, adults can increase their moderate-intensity physical activity to 300 minutes per week. People with poor mobility should perform physical activity to enhance the balance and prevents falls, 3 or more days

per week. Moderate-intensity physical activities include walking, cycling, or participating in sports.

According to Alzheimer's Society UK 2018, physical activity provides the opportunities for social interaction and help to reduce the feeling of isolation. It helps to improve the people's confidence and mood as well as increase self-esteem by reducing stress and depression, which are commonly experienced by PWD. There are many suitable exercises which are beneficial for people in the early or middle stage of dementia such as ball games, seated exercises, music and dance. Walking, gardening, housework and cleaning are also suitable types of everyday physical activity. Seated exercises help to maintain muscle strength and balance and are less strenuous than exercise in a standing position and suitable for all people including wheelchair people. Mobility is necessary for everyday activities and to maintain quality of life. Immobility brings many effects such as changes in aging are faster and when the muscles are not used, they get lost. Changes are the loss of muscle mass and strength, bones frustration, nervous changes and metabolic changes. Exercise affects people's self-confidence, anxiety, stress and depression.

A study has suggested that the exercise programs including resistance training, joint mobility and coordination exercise would improve the muscle strength, flexibility and agility. Individualized exercise regimens are also very important to postpone physical deconditioning of the patients with dementia. Proper stretching and strengthening exercise can prevent rapid physical deconditioning due to memory impairment with Alzheimer disease. (Cheng, Hsieh, Kao & Chan 2012, 6-7.)

Studies supported that dementia progression can be slowed and improve the patients' functional abilities, health, well-being through physical exercise. It has significant positive impact on people's brain health and assists to improve person’s balance, motor skills, mobility and performance of ADL. Cognitive function can be improved with moderate exercise in older people. Physical activity includes planned exercise and sport, as well as other everyday activities where bodily movements are involved and are performed as a part of playing, working, household chores and leisure activities with ensuring patient’s safety. This all help to improve the well-being, mood and promote the functional abilities. Multimodal exercise is beneficial to improve physical functioning in people with mild cognitive impairment or mild to moderate dementia and need to perform for 60 minutes for a day or two to three days in a week to achieve the results. (Neng, Deng, Shuai, Zhang, Wang & Song 2016, 168-175; Farrow & Ellis 2013, 5-10; Lam, Huang, Liao, Chung, Kwok & Pang 2018, 4-15; Lautenschlager, Cox & Cyarto 2012, 477- 479; Logsdon et. al 2007, 4-7.)

Based on studies, Physical activity includes both aerobic exercise and nonaerobic exercise such as strength and resistance exercise, flexibility and balance exercise. Each activity helps to improve the functions of the body. Aerobic exercises help to improve the health and fitness of people's lungs, heart and blood vessels as well as improve cognitive performances. It involves moderate to high intensity exercise such as walking, swimming and cycling. Recommendation for adult is needed to do at least 30 min moderate aerobic activity on the most of days of the week. Nonaerobic exercises help to improve fitness of the tendons, bones and joints as well as keep joints and muscles limber and flexible. Balance exercises help to improve people's balance and coordination. Need to perform at least twice a week. A combination of different types of physical activity led to greater improvement of physical performances and more effective. (Farrow & Ellis 2013, 3-5; Ruthirakuhan, Luedke, Tam, Goel, Kurji & Garcia 2012, 1-3; Dementia Australia 2015.)

3.4.2 Mental activities

Mental activity is the activity of involving the mind or an intellectual process, resulting in a collection of thoughts. It can be described as anything that stimulates or and activates the mind. The stimulation can be provided by internally from thoughts or externally from the environment. Mentally stimulating activities are good for better brain function and delay the cognitive decline and impairment. Mental activity enhances physiological responses in the brain by inducing the flow of blood, oxygen and nutrients which help to induce the growth and survival of brain neurons. Dementia is significantly associated with mental stimulation, the greater the mental stimulation, the lower the risk of developing or progressing dementia. Mental stimulating activities are memory tasks, attention tasks, information processing tasks and problem-solving tasks and other recreational activities such as arts, crafts and other competitive games. (my Virtual Medical Center 2015.)

PWD have different behavioural and psychological symptoms as the disease progresses such as restless, anger, depression, anxiety and sadness which lead to reduce the quality of life. Dementia can cause people to withdraw from activities, family and friends. But maintaining those relationships, interests and hobbies reduces the effect of severe cognitive impairment, functional decline and improve the quality of life. Mental activity enhances to build brain reserve which assist to compensate for the damage caused by dementia. Because the brain can compensate and keep functioning well. Mental activity includes reading, listening to the radio or music, board and puzzle games and participating in leisure activities such as hobbies, dancing, gardening and conversation and so on. Many of the mental activities involve also social interaction and physical activity as well. (Dementia Australia 2016.)

Depression is a common effect of lack of mental activity with PWD. Life story and reminiscence work with dementia helps to improve person's mood, well-being and mental abilities such as memory. In life story, scrapbook, photo album or electronic app can be used to remember and record details of the person's life. It's a joint activity for a person with dementia, a family members, friends and support workers. Reminiscence work includes talking about things from past, using prompts such as photos, familiar objects or music. Life story and reminiscence work can be combined using a memory box of favourite things. Putting together a memory box is a good way of stimulating and drawing out memories. (Alzheimer's Society UK 2017b, 35-37.)

Music and creative arts therapies help to keep person's brain active and helps with emotions and self-expression. Massage is a complementary therapy helps for agitation. It provides a great deal of pleasure and relaxation, as there is social as well as physical contact. (Alzheimer Scotland, 2003.) Musical activities help to maintain physical and mental health, cognitive and functional abilities as well as promotes the well-being of family members in mild and moderate stage of dementia. Both singing and music listening improved mood, orientation, and remote periodic memory and beneficial for both PWDs and their caregivers. Singing help to enhance short-term and working memory as well as caregiver well-being, whereas music listening has a significant positive effect on QOL. (Särkämö et. al 2013, 641-648.)

According to Alzheimer's Society (2017a, 8-9), Cognitive stimulation therapy (CST) has an important part of intervention because impaired cognitive function is most detrimental to the quality of life of PWD and their families/caregivers. CST helps to improve mental abilities by keeping the person's brain active and quality of life. This therapy includes; music, reminiscence therapy, involving in word puzzles and talking about current issues, these are beneficial for cognitive and emotional function of the patients with dementia. Cognitive stimulation activities help to improve overall participant cognition, quality of life and communication skills. (Logsdon et. al 2007, 5-6.)

Beard (2011, 636-645) explained that engagement in the arts contributed to better health and improves psychosocial well-being of all people and quality of life. Music therapy helps to reduce agitation and apathy as well as improvements in specific areas of cognitive functioning, such as language or memory recall, motor activity, and bathing cooperation, is also emphasized. Music is considered to empower participants and stimulate conversation, interaction and meaningful activity. It helps to express people's experiences, memories, fears, concerns, hopes, desires, dreams and to deal with difficulties and feelings of life. 'Person-centred' or individual musical preferences should be taken into consideration.

Cohen (2006) explained the physiological benefits from engaging in the arts. Creative activities help to improve cardiovascular, endocrinological and immunological systems as well as provide social engagement and improve social well-being. These activities help to stimulate the development of new dendrites in the brain and improve the communication between brain cells. (Lokon et. al 2016,3.)

Art therapy can be used as an alternative channel of communication for PWD. For instance, drawing and painting need the people´s fine and gross motor skills, sensory, cognitive skills, observation, thinking and memory as well as desire to express their emotions and thought. So, it helps to maintain and develop a patient's coordination and motor skills. It is also helpful for caregivers to understand the status of patient through the contain, line and colour of the painting. On the other hand, it helps to activate aging people, social interaction and to maintain self-esteem and functional abilities. It helps to improve the patients' attention and reduce behaviour and psychological symptoms as well as improve QOL and social skills. Art therapy helps to improve cognitive functions such as verbal skills, attention and orientation. (Wang & Li 2016, 105-108.)

According to National Health Service (NHS, 2015) choices, multisensory activities can help dementia because bright colours, interesting sounds and tactile objects to catch their attention such as reading, making conversation, baking, gardening. Friedberg (2010) stated that reading aloud to group of PWD has been found to stimulates memories and imagination. It also gives the opportunities to combine the people with memories, feelings and the whole world and creates the social discussion. Book and newspapers reading stimulates cognitive skills, slowdown the progression of dementia and deterioration of language skills. Moreover, it helps to slowdown the behavioural symptoms of PWD and motivates for positive thoughts and improves their own image, renewing self-esteem and dignity.

Generally, all people enjoy moving in nature and surrounding. Outing or moving in nature helps to maintain good mood, good sleep and pain-relieving effects. Particularly, nature has positive effect on the health and well-being of elderly people. It refreshes the elderly and improves quality of life and mental health. Research suggest that outdoor activities improve the well-being of people with memory-impaired and depressed and even 10 to 15 minutes stay in nature produces noticeable health benefits. Memory impaired people may not remember later that where they have been because the important is that the moment is enjoyable and help to slowdown the behavioural symptoms such as aggressive, agitation and restless. (Iltalehti 2015.)

According to terve.fi (2010) a study reported that even five minutes of green exercise or outdoor activities help to increase self-esteem and mood. Exercise relieves depression even faster than antidepressants drugs by increasing the number of neurotransmitters and antidepressants as well as exercise also increases the amount of pleasure hormone. Therefore, exercise takes care of mind by relieving stress and depression, decreasing anxiety and panic disorder and improving sleep quality. An hour-long training of 2-3 times a week is enough for best outcomes. (Kaaro 2013.)

Salonen (2015) stated the sauna helps to strengthen the health. It helps to improve blood circulation, be relax and refresh and reduce anxiety, depression and chronic pain. Some studies suggested that regular sauna help to treat hypertension, flu and sleep problems. According to Räsänen (2016), a recent study reported that sauna can reduce the risk of dementia by visiting several times a week. Similarly, it helps to reduce the risk of heart failure, coronary heart disease and other cardiac death. It provides the experiences of feeling well-being and relaxation. Sauna can be used for the treatment of mild depression and anorexia. It also helps to improve the activity of peripheral blood circulation in the elderly people so that they do not feel as cool and cold as easily as others. (Hannuksela, 2012.)

Studies have argued that playing brain games can significantly increase mental well-being, especially among the elderly for example Bingo and memory games. Playing games have a lot of different benefits, help brain function and entertains to PWD. Games help to develop communication skills by the conversation with others. It helps to maintain working memory, reasoning skills and improve cognitive abilities for instance, observation and attention. Additionally, it helps to improve creativity and problem-solving skills. Playing games that encourage and need co-operation which helps to promote the development and positive use of social skills. Playing helps to reduce stress and anxiety as well as provides positive and pleasant experiences. As all of these helps to keep up and maintain with everyday life and support peoples' well-being. (Supercarers 2017; ElmcroftSenoir Living 2015.)

3.4.3 Social activities

Social activities are the activities that brings members of the community together to interact. Social activities consist of playing cards/games, attending theatre, concerts, art and participating in social groups. Inactivity and social isolation contribute to loss of strength and confidence level, depression, insomnia and functional decline of PWD. (Park et. al 2015, 3-9; Glei, Landau, Goldman, Chuang, Rodriguez & Weinstein 2005, 865- 867.)

Research studies have explored that social relation, including social networks, social activities and engagement, social integration, impact significantly on the mental and physical health of elderly people. Social activities have strong correlation between the health and well-being among older adults. The higher level of participation in social activities, the greater the benefits. Being socially active and maintaining interpersonal relationships can help to maintain good physical and emotional health as well as improves cognitive function by providing stimulation, whereas remaining in isolation can greatly reduce a person's quality of life. Loneliness may have a physical as well as emotional impact among adults. For instance, people who are lonely frequently have higher systolic blood pressure and is a risk factor for depression and anxiety. (Zunzunegui, Alvarado, Ser & Otero 2003, 93-95; Glei et. al 2005, 868- 870; Newlin et. al 2015, 167-169.)

A study suggests that just one hour a week of social interaction can improve the quality of life for PWD in care homes as well as helps to reduce the level of behaviour symptoms such as agitation and aggression. Agitation is a common symptom among PWD which can significantly decrease a person's QOL. When PWD interact with other friends, family members and relatives, they must think of way to converse and respond. This basic exchange is a form of stimulating exercise that stimulates the brain cells and helps to create new nerve cells in the brain. As dementia is often associated with psychological and behaviour symptoms such as depression, anxiety, stress, mood disorder, agitation and sleep disorders socially active life can significantly reduce the risk of psychological and behaviour symptoms and improve sleep quality. Participating in social activities help to improve the people's ability to perform ADLs and reduce the risk of fall. On the other hand, physical activities such as walking, exercise and playing games offer opportunities of social interaction.

According to Ruthirakuhanet. al (2012, 1-11) study explored that physical activity, intellectual stimulation and socialization provide benefits to cognition and overall well-being in patients with age related cognitive impairments. Intellectual stimulation games include reading, word puzzles and card games. This help to improve patients' cognition, emotional and social well-being as well as performance of ADL. Social interaction is a participation of a patient in group related activities such as discussion or conversation during mealtime, support groups or other forms of social engagement. Social interaction helps to provide a sense of self-worth and a better attitude towards life for Alzheimer's patients by decreasing the sense of loneliness, isolation and stress. Residents with Alzheimer's disease have depression and agitation due to lack of meaningful activities which lead because of social isolation. Residents also tend to present behaviour such as calling out, physical aggression due to lack of stimulation and meaningful activities.

Several studies have found that leisure and social activities help to maintain ADL and QOL in older population and decrease the functional dependency. For instance, Särkämöet. al (2013, 641-648) study stated that regular musical leisure activities can have significant impact on long-term cognitive, emotional and social benefits in case of mild and moderate dementia. Park et. al (2015, 3-9) explored that participation in social activities is positively associated with health-related quality of life in all groups regardless of age and gender. Participation in social activities is more important for elderly than in younger population, especially those that include relationships, to enhance the QOL. Individualized social activities have been found to improve night-time sleep, help to maintain physical function and reduce cognitive decline in older adults in the study carried out by Lorenz et. al (2012,6-8.)

According to social care institute for excellence (2015), the recreational activities which are related to eating together, help to stimulate senses for PWD, especially those who may be losing appetite or interest in food and participating in mealtimes. It helps to encourage for food and enjoy food again. On the other hand, it provides opportunities for conversation and sharing of memories related to food and help to develop social and communication skills and positive feeling towards eating and food. Involvement in food preparation, give a sense of purpose and usefulness, boosting confidence and self-esteem.

Cooking and baking are the positive social and fun activities which provide the cognitive and health benefits for Alzheimer's people and result positive impact of being able to continue participating in enjoyable activities. It helps to maintain their skills and independency and reduce the behavioural problems. Moreover, involvement in meal preparation provides emotional benefits with Alzheimer's such as facilitating positive personal interaction, the ability to be familiar with routines, to stir memories and sense of self-worth and independence. It helps to reduce the feeling of stress, anxiety, agitation and irritability. Being active, engaged and socialized, slow down the progression of the disease and help the person to cope and adjust with changes brain. (Culinary schools.org 2017.)

3.5 Group activity and nurses' role

Group activity need to be based on the interest of group members or needs. A well-organized group activity helps to reduce depression and anxiety, raise mood and improve well-being, functional abilities and quality of life. It can be challenging to conduct the activities with dementia patients because the ability to interact with PWD is no longer the same as before due to impaired cognition. Dementia causes different functional abilities such as mobility, communication and performance. So, it is important to appreciate a conversation, provide enough time and create safe and familiar surroundings. During communication

with PWD, the caregiver's role is to present sympathy and respect to create a genuine interest. Everyone has own life story, personality and value that make him/her unique and valuable. (Brand, Holmi&Kuikka2013, 7-11; Vavike 2018.)

Group size should be designed to take account based on the functional ability of participating members and available resources. The size of a group affects the nature of the group work. Small groups are mentioned to be 5-12 people, but the size of the group depends on its basic functions and participants' capacities. The planning of group activities includes goal, orientation, the need of the participants, timeliness as well as clarification of the group situation with its content and methods. While conducting the activities with PWD, the supervisor must consider each group a member of an individual and every participant response and opinion is important to listen carefully. (Mustonen 2018; Brand et. al 2013, 7-10.)

Generally, the group activity is carried out in three steps; orientation, operational and ending. Orientation part is important to help a PWD to identify the group activity and its purposes. It helps to create a sense of safety and motivation in the group. Repeating similar steps to start each group activity, help participants to identify the beginning and ending of the group activity. Therefore, the responsible nurse needs to welcome to all the participants and explain the purposes in the orientation step. During the implementational or operational step, each participant should be encouraged to participate in the group activity based on their functional abilities. Each participant must get time to perform and must have feeling that his/her story are valued and encouraged. PWD may sometimes need more time to process information and may take longer to response to a question and follow the instructions. (Mustonen2018.)

Feedback should be clearly stated when performance is in progress. Finally, feedback can be given at the end of the activities as well as need to ask the feeling about the event so that peoples' motivation and involvement are realized. The feedback should be realistic and positive. Participants should be informed clearly that the activity is over and apricate and thankful for the participation. Furthermore, need to inform the next activity and time. Each participant should gain experience in the group. (Mustonen2018.)

In general, the group atmosphere must be calm and unhurried. The group supervisor leads the group's activities and different things need to consider before starting a group activity. For instance, demented peoples' diagnosis and severity as well as remaining functional abilities (mobility, cognitive ability) and sensory functions. Need to consider their life story and possible behavioral symptoms. Nurses need to have good interaction skill and behave calmly and clearly. Positive attitude of the group supervisor towards his/her

own work and participants' abilities helps to create a good atmosphere and adds a group satisfaction. The supervisor's motivation and supportive guidance assist to increase the participants' interest towards the activities. The nurses need to be able to use and understand verbal and non-verbal communication. The role of the supervisor is to create a favorable atmosphere to each participants of the group therefore the involvement is assured. When guiding a group, it is important to keep in mind that each member of the group should feel that he/she is important. The supervisor needs to take into consideration all group members, for example, at the beginning of a group activity, can make a round of talk everyone gets their voices heard. The instructions must be clear, brief and concise. (Brandet. al 2013 7-10.)

Tri-channel technique is a method that can be used to support a memory-impaired people while conducting activities. This technique simultaneous use of eye contact, touch, verbal and pattern control. It is essential to guide a positive attitude, approaching individually and with appropriate group size, and taking in the account of the limitations caused by the illness. Firstly, good eye contact is important because PWD have a perception disorder that makes it difficult to perceive environmental events. Direct eye contact shows that the control is directed to him/her. Therefore, circle group form is good where all participants can have eye contact with each other. Secondly, the touch can be used to guide the patients in the right direction and the desired motion path. For instance, pressing a hand may help in the movements to movement. This also help to get in touch and so let the person notice him talking and safe feeling. Doing together and by showing the model can promotes doing, learning, and performing. The oral guidance should be clear and short as possible for PWD to understand. Long and hard sentences should be avoided because it can create the frustration and difficult to understand. Short and clear sentences combined with the body language (facial expression, gestures, sound weights) is the best performing or instructing way to PWD. (Mustonen 2018; Ruonala2016.)

3.6 Alleviating the caregiver burden

Caregiver burden can be defined as the amount of distress (For instance, physical, mental, social, and socioeconomic problems) experienced by people who care for adults with chronic diseases or condition such as dementia, cancer, or musculoskeletal diseases. The higher level of caregiver burden includes higher level of depression, feeling of isolation, increase physical health problems, and risk of work disturbance. The level of caregiver burden also based on the types of dementia. For example, caregivers of DLB and Parkinson disease dementia expressed more stress than those caring for patients with Alzheimer's disease and vascular disease. The factors associated with caregiver stress related

with PWD include cognitive impairment, degree of difficulties with ADLs and IADLs, extent of personality change and the presence of psychiatric symptoms and behavioural disturbance. (Stinson et. al 2014, 1177-1188; Lee et. al 2012.)

Dementia has become a major cause of disability and dependence in caregivers and giving large pressure on caregivers, the patient´s family and society. Declining in cognitive and functional abilities are the primary characteristics of dementia. Thus, many PWD loss the ability to live independently without the assistance of others. This is likely to grow as the aging population increases. As dementia progress, people may have different behaviour and psychological symptoms such as restless, anger, depression, anxiety, sadness and increase the dependency in ADL and IADL which an exacerbated burden for both patients and their families, especially for caregivers. (Wang & Li 2016, 105-108; Razani et al 2014,1-2; Covinsky et. al 2003, 1006-1013.)

Studies found that physical, emotional, social and financial burdens are increased in caregivers of patients with cognitive impairment. The caregivers' burden can be assessed from different aspects such as time dependency, development burden, physical burden, social burden and emotional burden. Caregivers of dementia are more suspected to suffer from psychological distress specifically depression and anxiety compare to caregivers of patients with other diseases. The most common complaints among caregivers of PWD include anger, depression, guilty, feeling of isolation, worry, and marital stress. Caregivers' depression rates increase due to the perception of time restriction, development burden and fatigue and poor physical health. Patients' functional abilities are closely related to psychological distress. The lower functional abilities of dementia patients lead the higher level of burden in caregivers. (Razani et. al 2007, 1415-1419; Razani et. al 2014, 1-9.)

According to Gonzalez-Salvador et. al (1999, 701-708), caregivers of Alzheimer's patient often suffer from physical and psychological morbidity. The factors associated with caregiver stress are behaviour symptoms and impairment in IADLs. Argued that caregiver burden can be reduced with special attention paid to the treatment and management of behaviour and functional symptoms in the Alzheimer's disease patient. A study stated that caregiver burden from PWD can be reduced by periodic leisure activities. Meaningful recreational activities as their leisure activities help to maintain peoples' physical, mental and social well-being as well as functional abilities. In addition to that, by way of providing them recreational activities decreases their aggressiveness, agitations, anger, depression, anxiety and such dementia causes symptoms. So, they become physically less dependent and improves overall function ability relatively in better way. Those changes ultimately lead to decrease the stress level of the caregivers (Hirano et. al 2015, 264-268.) For

instance, meal preparation and music offer stress-relieving benefits for caregivers due to improvement of behaviour problems with PWD (Culinary schools.org 2017; Snelling 2012.)

4 RESEARCH AND DEVELOPMENT METHODS

4.1 Qualitative research method

The qualitative research method was used in this development plan as it focuses on qualitative meanings and cannot be measured and explained the collected data in terms of quantity, amount and frequency (Haber J. and LoBiondo-Wood G. 2006, 131). Qualitative research explains the phenomenon broadly with depth understanding and intuition of the research area and always concerns with social situations (Kylmä & Juvakka, 2007, 58, 64, 65, 79; Burns & Grove 2009, 51). Unstructured interview of focus group and observation are the sources of data in qualitative research and helpful in finding out thorough and extended ideas and answers from respondents. Unlike structures questionnaire in quantitative research methods, flexible, interactive and continuous questions are presented to the respondents in this research method. (Babie 2007, 305-313; Judith and Geri 2006, 132.)

4.2 Focus group interview

The focus group interview is an in-depth interview with the concerned respondent group. It is relatively small and appropriate members of group (5 to 10 people) to discuss on certain issues or topics. The invited members are involved in discussion based on questions asked by the moderator of the discussion session. (Creswell, 2007).

Traditionally recommended size for the focus group interview is 10-12 members. However, this size is found to be too large for the most non-commercial topics. The recommended ideal size for most cases is 5-8 participants and it is not suggested to plan focus group participants more than 10 participants because large groups are difficult to control and limits the opportunities to contribute ideas, insights of the participants also, difficult to observe. Additionally, the group dynamics changes as participants in the discussion are not able to express their views. On the other hand, if the size of the focus group is too small, it limits the coverage of the views just because of the small size (Sagepub, 2018.) Fern (1982 p. 1-13) has suggested that the optimal size of the focus group is 8 participants and claimed that 8-member focus group generates significantly more ideas and experiences than larger and smaller groups.

Levy (1979 p. 34) has explained the problems related with the increasing the size of the focus group:

> *As the group grows, opportunities to address it decline, people must wait more for their turns, and are frustrated by more views that they have less chance to respond to. They are also more widely dispersed in the room or around the table. The*

> *tendency for the group to fragment becomes great, and, as a result, the problems of controlling the conversation are magnified. There are likely to be distractions, frequent murmuring, dissipation of remarks in the side conversations, sly antagonisms. The moderator is pressed toward the role of disciplinarian and classroom behaviour, cautioning the group to be quiet, asking for a show of hands, questioning individuals in turn to be sure everyone gets a vote. The problems grow without necessarily enlarging the pool of information or range of themes that emerge.*

The focus group discussion is recorded, recorded data are transcribed, and those data are analysed based on suitable data analysis method. It is distinctive in a way that, it is basically the most contemporary method, that focuses more on how to conduct the effective interview rather than how to analyse the collected data.

Focus group interview as part of qualitative research, is gaining popularity in social science research is because of its flexibility. There are number of methodological options at almost every stage of focus group interview-based project depending upon the situations. It can be made on a single occasion with single group of participants or it can also be many with single or multiple interviews with repeated meetings. Similarly, number of participants also varies between 4 to 8 and the participants could be group of people known to each other or brought together for research purpose, represent of a certain population and so on. So far as data analysis part is concerned, there are wide varieties (simple to complex) of options for data analysis. (Silverman 2015.)

Focus group interview was undertaken as part of the qualitative research for this work. The quantitative data was not possible to produce regarding analysing the data as the primary attention was to collect data based on the experience, opinion, feelings and insights of the participants. The respondents of this interview were the caregivers of the residents with dementia of the nursing home, other staffs and the management. They are the one who have direct interactions with the demented residents of the home. They could explain the situation of the residents' better way as they are experiencing with all the activities and bearing burden from the causes of the dementia based physical, social and psychological dependence. The staffs and the management were the primary and most important source of the meaningful information of this project and result of this work is supposed to implement by them.

4.3 Data collection method

The primary data was collected through focus group discussion. In this discussion, related participants were selected to discuss to generate data based on their own experiences and opinions (Powell 1996, 499). The data were generated from the responses of the members to the questions and the interaction between them. The ideas, opinions and experiences of the participants are recorded for further analysis.

The duty of researcher is to make sure that the discussion is going to the right direction as planned and research issues are being covered and paid attention to participants' equal opportunities for their opinion as an individual and as group. (Ritchie and Lewis 2004, 170-197.)

While collecting the data through the focus group interview, it is important to consider the physical arrangement of the group, interview style, discussion aids, intimacy, observers and recordings, ensuring participation, time management, dealing with problems and other issues. The quality of the data should be the primary objective and it also depends upon the researcher that how well it is being carried out. The moderator`s role is also important to move the group from topic to topic to extract the meaningful data. (Stewart and Shamdasani 2015, 99-113.)

4.4 Analysing the focus group data

The analysis and interpretation of the data collected through focus group interview require a great deal of judgement and care as other scientific research. As focus group data are subjective and difficult to interpret, the analysis should be rigorous. However, there is no one best or correct way for analysing the data collected by focus group. (Stewart and Shamdasani 2015, 99-113.)

4.4.1 Transcribing the interview

This is the first step to carry out the analysing the data collected from focus group interview. The whole discussion was transcribed on the Microsoft word, based on audio recording. The transcript document facilitated the future analysis of the data and those documents as data can be kept permanently, which may be useful in future as well. It was important to pay attention that transcribed data are not always complete. There could be missing words, spelling errors and other errors relating to typography. Similarly, there could be high chances of having incomplete sentences, unfinished opinions and other irrelevant spoken word in the discussion. It was the observer`s responsibility to fulfil the gap

of those errors carefully based on the discussion and added information shouldn't mislead the meaning and intent of the conversation. On the other hand, too much editing and deleting of the data was not desirable and productive. Similarly, there was no reflection of the nonverbal communication, body language and behavioural responses in the transcript of documents. So, it was the researcher, who is responsible to consider those issues as well while analysing the data. (Stewart and Shamdasani 2015, 117-118.)

4.4.2 Content analysis

As the content of the focus group discussion must be examined and meaning of implications of the research issue to be discovered, a content analysis was taken as data analysis method. Content analysis is a method used to make sense in a systematic way of large amount of contents from documents. The contents of documents may be from different sources and the focus group interview is one of them. There are rigorous approaches to the analysis of the contents collected from focus group discussion that approaches and emphasize the reliability and replicability of observation and subsequent interpretation. (Krippendorf, 2013.) Krippendorf (2013) defines the content analysis as follows:

> *"Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the context of their use." - according to (Stewart and Shamdasani 2015, 125).*

Data which were acquired from focus group interview, used in this content analysis include speech of participants, their behaviour and body language, as well as various other forms of nonverbal communication. As such data are highly unstructured for the researcher, the content should be converted into specific units of information so that the research can analyse them properly. Depending upon the purpose of the research, the three steps in the structuring processes which are common to all applications and questions are utilizing, sampling and recording. (Stewart and Shamdasani 2015, 127.)

The interview was recorded and transcribed using the same words on the word processing program (MS Word) in order to analyse the content discussed. The scissor-and-sort technique was used to analyse the data. This technique is also called as cut-and-paste method which is also fast and cost-effective method to analyse the data obtained from focus group discussion. This technique follows the certain steps as under:

- Identifying the relevant sections through the transcript, major topics and issues are developed, colour coded brackets are used to categorise different topics within the texts. This may take several phases to go through the texts as categories of the

concerned issues evolve and researcher gets considerable insights towards the content of the discussion.

- The coded texts can be cut out and sorted to arrange all the relevant contents together, related pieces of phrases, words, sentences etc are assembled and incorporated within an interpretative analysis.
- Finally, the raw texts are transformed to the codes to write the conclusion of the discussion. (Stewart and Shamdasani 2015, 123-124).

5 IMPLEMENTATION OF THE DEVELOPMENT WORK

5.1 First focus group interview

As the focus group interview as part of qualitative research method in this project, I had to be familiar and prepare well to conduct the focus group interview. I went through various research articles on focus group and internet search to know the suitable way to conduct focus group interview. In addition to that, I especially followed the book "Focus Groups, theory and practice" written by David W. Stewart and Prem N. Shamdasani. I had divided the focus group session into two sections: preparation section and conducting the focus group session.

Preparation for focus group interview

As a moderator, I had to prepare before taking focus group interview that it is a critical factor in the success of coming out with the proper result. I studied different aspects of conducting the focus group interview. I got familiar with the potential nature of the group dynamics that may arise because of group composition while the topics are being discussed. Group dynamics are the processes that occur among the members of the group which affects each member's internal thoughts and feelings as well as their expressed thoughts and feelings. Similarly, it also affects group member's nonverbal communications and relationship between them. (study.com, 2018.) This helps the moderator to understand how each person's actions make sense in the context of the group.

The possibility of emergence of leadership could be the problem so I paid attention in designing strategies to manage the disruptive behaviour of emergent leaders. It is sometimes possible that such behaviours are unavoidable. This situation could be possible in such situation when group members have great respect for a certain group member by his or her experience and knowledge with the topic being discussed.

While preparing for the focus group interview, I have realized that preparation part of moderator must also involve understanding the nature and scope of the research issues, giving priority to the purposes and objective of the development plan, determining the appropriate depth of the probing, being familiar and updated with the primary issues of the discussion and making decision on the possible strategy and sequencing of questionnaire to facilitate the interview in proper way. Similarly, it was important to design and make strategy in such a way that supports in analysing and interpreting the collected data from the discussion. (Stewart and Shamdasani 2015, 90.)

I reviewed the prepared questions and made some strategies as the primary purpose was to address the major issues and problems for which the purpose of the interview is aimed. It was worth to get to know Wheatley and Flexner's (1988, 16-17) topology of questions and the usage situation to which it is recommended to apply.

Moderator's possible bias on the other hand could mislead the objectivity of the focus group interview so it was important to be aware of the possible intentional and unintentional bias while conducting the interview. So, I studied and prepared how to reduce such biasness and I developed an understanding of possible sources and nature of biases that could probably affect the validity of collected data through focus group interview. For example, Kennedy (1976, 19) states sources of bias that misleads the moderator objectivity.

- Personal bias: welcoming and reinforcing the views that are consistent with moderator's opinion.
- Unconscious needs to please the client: tendency to welcome and encourage the explanations made by participants that are favourable with those to whom research is intended.
- The need for consistency: welcoming and reinforcing the expression of viewpoints that are internally consistent.

5.2 Conducting the first focus group interview

The preparation part of the focus group interview helped me greatly that the conducting the interview went very well. The first focus group interview was conducted on 22 February 2018. There were 8 participants for the interview including a manager, a registered nurse, four practical nurses and two assistant nurses. Five of them have work experience of 2 to 4 years and three of them recently started to work in this nursing home. The registered nurse, who has just started work, has 15 years of work experience with the residents with dementia and the manager has 4 years of experience as a trainer on dementia. All the other participants were familiar with the dementia and recreational activities based on their education and experience from previous workplaces.

There were some important issues to be paid attention while conducting the interview for example, the physical arrangement of the group, interviewing style, discussion aids, intimacy, observers and recordings, beginning the interview, ensuring participation, time management, probing, dealing with problems, special issues and ending the focus group interview.

Physical arrangement of the group

A round table and comfortable chairs were arranged for the discussion. Participants felt comfortable when seated around. As the group members were familiar to each other, name card was not necessary, but I had a list of first names with respect to the seating arrangement so that I could ask them directly by their names with immediate and simultaneous eye contact.

Interviewing style

Depending upon the questions and situations being asked, the focus group interview was conducted somewhere between the directive and non-directive approaches. The directive approach was used for moving the discussion along that helped me to control the talkative group participants who seemed to be dominant in the discussion and paid attention to the level of directiveness that was desirable to get the enough answers.

Non-directive style was used when discussion should lead to the enough depth and let the participants to emerge the new views or ideas from their discussions. For example, when I asked about suitable timetable for the implementation of the recreational activities, they had to discuss among themselves, so I encouraged them to invent some new ideas or solutions based on their situations and work pressures during the working hours. It was a bit challenging to move from a directive to a non-directive style as needed though, I tried my best depending upon the situational demand of questions.

Intimacy

As I was an employee of the organization and it was high possibility to express my own opinions, examples about the issues being discussed. On one hand, I mentained the distance with respect the group and on the other hand, I sometimes explained the situation based on my personal experiences.

Recordings

I informed the participating members that audio recording is taking place during the discussion. I got oral permission from all the group members to record and assured them that the recording will remain confidential and told them that the recording replaces notes helps me while writing my development plan.

Beginning the interview

I introduced myself and explained the purpose of the discussion and agendas then asked group members to introduce themselves and tell a little about themselves such as work experience, education background etc. one by one.

Once the introduction round was finished, we took a small coffee break so that we could be more open and friendlier to present views. We started the group discussion after 10 minutes break.

Ensuring participation

I encouraged all the participants during the interview so that members could express their opinions, especially to those who were shy in nature and are not able to share their views unless they are asked. I asked them questions directly to ensure participation.

Time management

As the estimated time for the discussion was around one hour and participants were informed about time when they were invited for the discussion. While discussing about the topics, I paid attention whether the enough information has been collected or not. Depending upon the question, I decided when to ask further question or let the participants to discuss by encouraging them to present their opinions without letting discussion to go beyond the time limit and keeping discussion in track.

Probing

Participants sometime signalled by way of nonverbal communication that they have more to say for example continuing to look at me after having said their views. So, I recognized those cues and let them speak by encouraging and acknowledging them to continue. Similarly, when I was not sure what the participant was saying, I asked follow-up questions to make sure that I understood correctly. For example, I reflected the participant's thoughts back to him or her by saying what I have understood or bay asking to tell me more.

It was very helpful to manage the agendas for the discussion within the allotted time by knowing when to probe and when further probing is unlikely.

Major discussion areas or agendas of first focus group interview

Area of discussion were divided into three parts: staffs' background, current recreational activities and possible future recreational activities. It was easy to start with the background of the participants a little bit about them, their education background and their work experience in the field and in the current working unit. Those starting questions helped to make them more open, comfortable and make them known to each other and get them ready for the next level of questionnaires.

Then we discussed about the current situation of the recreational activities. The discussion was especially centered to acquire the information whether current activities intended to the clients are enough, systematic and what do the caregivers feel and experience

about the recreational activities arranged for the demented residents. In addition to that, the discussion was also related to sufficiency of resources, clients' willingness and their capability to perform the activities and how willingly they participate and the about the possible results of the recreational activities. Similarly, we discussed on the possible stress and burden to the care-givers and how the recreational activities help them to reduce those problems.

Finally, we discussed about the possible recreational activities that could be organized systematically and regularly so that residents' physical, mental and social well-being would improve, and care-givers stress and burden would reduce. So, the discussion at this stage was related to those issues which were needed to address. Participants discussed on what kind of recreational activities that they prefer to arrange, and the target residents would like to have to be arranged for them based on their functional ability and suitability to perform. We discussed on the different possible recreational activities based on views presented by the participants.

In addition to that, I had also prepared the lists of possible recreational activities that are related to physical, mental and social activities based on literature reviews. I have collected from the different sources and tried to collect as more activities as possible and have also explained them in the theoretical framework section of this thesis. I presented those activities for discussion and discussed on several different possible recreational activities then participants have selected the recreational activities based on the functional capability of the residents, feasibility and suitability to implement them. This was quite intensive discussion and all the participants have expressed their views from their side as they were the one who are going to apply the planned activities in practice. This helped to develop the framework of preliminary recreational activity plan.

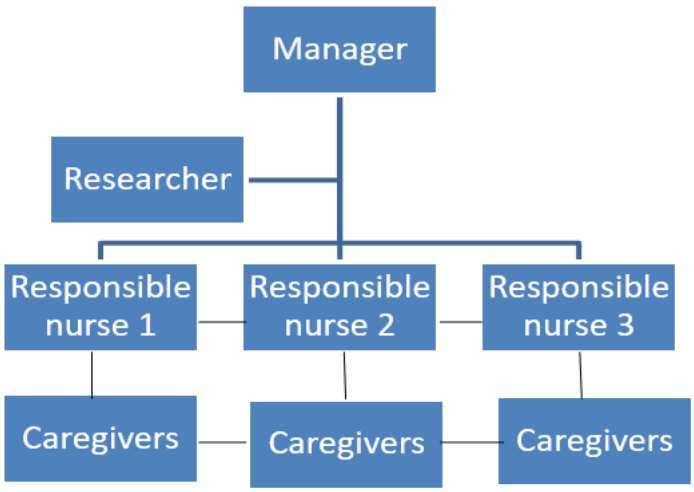
5.3 Development of recreational activities and implementation plan

After the first focus group interview, I started to develop the preliminary recreational activities plan that will be implemented to make sure the activities are suitable and to get feedback and to review them from the practical point of view. It was important to design different suitable recreational activities plan, organize them, prepare in handling the responsibilities, supervision in such a way that could be implemented as part of regular organizational management activities. The purpose was not just to see whether planned activities are suitable or not but also to make sure it is applicable to solve the problem.

As the participants expressed that a recreational plan is needed to be developed with the suitable time-table and the instructions, I designed them in table form. The activities were

grouped into two parts as odd-week activities and even-week activities. During the discussion we discussed the implementation plan of those activities as well. The implementation plan was developed as per the following:

- As the existing duty roster for the staff members and caregivers must be changed without adding the extra number of employees, the manager changes the duty roster according to the activities time table and the new duty roster plan won't disturb the other regular activities of caregivers.
- The new dusty roster has been planned in such a way that includes the regular activities as well as the new recreational activities and it can be continued regularly.
- As dementia patients are in both Poiju and Uisko departments having 9 and 4 patients respectively, 3 responsible nurses were chosen (2 from Poiju and 1 from Uisko) to implement and supervise the plan and report the manager. In addition, the necessary resources will be provided by the manager as needed.
- Three responsible nurses work under the supervision of the manager and the caregivers work under the guidance of the responsible nurses. This authority-responsibility relation has been created to coordinate the activities and implement them in a structured and systematic way.
- The researcher will follow the activities by visiting the nursing home or by being in touch with the manager as well as the responsible nurses.
- The structure of the implementation plan looks as under:



- The duration of this preliminary implementation plan was scheduled for 2 weeks starting from 6.3.2018 to 18.3.2018 that includes both odd-week activities as well as even-week activities.

- Before the starting of implementation, a workshop to orient the concerned staff members was arranged. The workshop was conducted on 5.3.2018 at 14:00 – 15:00.

5.4 Workshop

The primary purpose of the workshop was to orient and make especially responsible nurses familiar the developed recreational activities plan and instruct them to implement them as planned. It was important to orient them and make more familiar to the purpose of the implementation, the importance and essence of recreational activities. In addition to that, the purpose was also to let the responsible nurses know that they could pay especial attention towards the implementation and observe whether the implementation plan is suitable or not from the different perspectives for example is it suitable to the residents or not, how do the residents react to those activities and the management point of view that the suitability of time table, feasibility to implement in future in regular basis or not.

During the first focus group interview, the manager of the nursing home has expressed her interest in educating the staffs as she had worked as a trainer in her previous work places especially to the caregivers about how to treat the dementia patients and assist them in implementing the recreational activities. The first group interview was fruitful from this perspective also that the manager herself was experienced working with caregivers of the residents with dementia and she would also like to contribute her experience to implement the recreational activities plan. Therefore, the manager was also the facilitator of the workshop in addition to me. We both discussed about the issues to be addressed in the workshop and prepared for the presentation.

Responsible nurses and the other caregivers were invited to attend the workshop which was organized in the premises of the nursing home. Workshop was conducted on the previous day of the starting date of implementation plan.

Manager started the workshop with her PowerPoint presentation prepared by herself based on our discussion. She presented those issues which helps the participants to understand the common objectives and assist the participants to implement the planned activities. In addition, she explained the difficulties and areas of special attention that come across while implementing the recreational activities plan based on her past experiences.

In my presentation, I have covered especially practical part of the implementation plan. My presentation was based on literature review and first focus group interview. I started with the background of dementia and recreational activities and made them familiar with timetable of the recreational activities plans and different activities which are to be performed

during implementation. Similarly, I explained about the roles and responsibilities of the caregivers, practical ideas and tips to apply in practice while implementing the plan, authority-responsibility relationship and adjustment of the new structure with the regular activities.

I have informed the participants of the workshop about the purpose of the implementation plans. They are also asked to note down whenever they notice the change requirement or some additional activities, other way to perform and suitability and meaningfulness to the PWD and management perspective as well. At last, I answered the questions raised by the participants and discussed more about the time schedule and activities in detail. I also provide my contact details so that they could contact me when needed.

5.5 Second focus group interview

Second focus group interview was conducted on the next day after the completion of the implementation of the preliminary implementation plan of the recreational activities. It was held on 19.3.2018 at 14:00 and took around 1.5 hours.

The participants of the second focus group interview were five, including the responsible nurses, caregivers and manager of the nursing home, who were also the participants of the first focus group interview. The primary purpose of the second focus group interview was to get feedback of the purposed recreational activity plan after implementation so that necessary changes could be made for final preparation of the recreational activities plan.

The second focus group interview was more comfortable to me as I already had experience while preparing and conducting the first focus group interview. I reviewed those issues again and prepared well for the second focus group interview.

Major issues discussed during the second focus group interview

As the discussion area was related to the implementation of the planned recreational activities, we discussed about the suitability and feasibility of timetable, frequency, duration of the performed activities and easiness to carry out the activities from the management perspective. Participants also expressed their experiences from the implementation and different factors affecting the implementation the planned activities. In addition to that, we discussed about responses of the residents and their behaviour and other noticeable changes as well as residents' wishes for better planning and implementation.

It was important to discuss whether the planned activities were meaningful or fruitful to the residents in enhancing the social, mental and physical well-being or not and to what extent the recreational activities have helped the caregivers in reducing the stress level or

ease to carry out the other activities. Finally, we have discussed about different possible organizational benefits after applying the planned recreational activities and their further suggestions and other feedback if any to improve and finalize the recreational activities plan.

5.6 Analysing the focus group data

After the data has been collected through two discussions, the raw data around 11 pages (font:12, Times New Roman, 1,5 spacing) the exact word used by the participants. I carried out the data management manually and highlighted (coloured with the same color) the relevant responses based on question asked. I brought those responses into shorter and more refined version by cutting them and putting them into a table. I put here a example how the responses have been coloured and taken forward to the table:

This was the one of the participants answers to the question for example, how the residents participate in recreational activities. (Appendix 1).

> P1: It is very difficult, they do not participate well. They need more instruction and need to be near to them. Need more staffs to carried out it.
> P2: Very difficult to carried out, they don't do and need more instructions and guidance, small group may be useful and easy to take
> P3: Yes, they need more instruction than others, need to be near to residents.
> P4: It's difficult, but if they get enough instructions and guidance they participate well, very important the instructor role, group need to be small
> P5: Need more staffs to carry out, and very difficult to carried out before lunch time so better to organize after coffee time at 14:30 pm, better to perform in the day time.
> P6: It is very difficult
> P7: It's very difficult, not possible with few staffs.

Participants	**How they participate (level of difficulty)**	**Why it is difficult?**	**What need to be done**
P1	Very difficult	Need more instructions	Need more staffs Need to be near to them
P2	Very difficult	They need more instruction	Small group may be useful to take

P3	Yes! (supporting previous partici-pantsS)	Need more in-structions	Need to be near to residents
P4	Its difficult	Enough instruc-tions and guid-ance	Group need to be small
P5	Very difficult		Need more staffs to carryout Better in day time
P6	Very difficult		
P7	Very difficult	Not possible with few staffs	

With this table it was easy to review the answers and draw a conclusion. I went through the table several times and answers and concluded for example as follows:

From the implementation point of view, all the participants have same opinion that it is very difficult to conduct recreational activities with few staffs as the residents need more instructions and personal support.

6 DATA ANALYSIS

6.1 First focus group interview

6.1.1 Current recreational activities

All most of all the participants have expressed same opinion that, there is no recreational activities organized for the residents with dementia and they have not noticed any of the recreational activities performed by the other caregivers. Very few staffs rarely conduct the recreational activities by their own. It is difficult to arrange activities because of busy work schedule and challenging to manage such activities with few staffs.

> *For example, one of the participants said, "I have not noticed any recreational activities in the unit since I started work here". Similarly, another participant added "well, I have tried to go outing with residents because it helps them to be quite and fresh but there are many residents who need wheelchair, so I was not able to do so because of lack of staff or may be lack of proper plan".*

All the participants have agreed that, recreational activities for PWD are not prioritized in the nursing home and there is a high need to organize such activities. Staffs are ready if such plan is purposed to perform with proper and systematic plan that would also lead to minimize the stress level of the caregivers. They are willing to plan and carry out the recreational activities for residents and the manager is also waiting this project to implement as soon as possible.

This nursing home has available resources to organize recreational activities plan for example, multi-purpose room, spacious rooms and other instruments for games and other activities. Manager is ready to initiate and arrange additional resources if needed to implement the plan. As far as necessary training regarding recreational activities for dementia is concerned, participants do not have special training, but they did have some experience from their practice during their studies.

From the implementation point of view, all the participants were agreed that it is very difficult to conduct recreational activities with few staffs as the residents need more instructions and personal support.

> *For example, a participant has said "it is very difficult, they do not participate well. They need more instruction and we need to be near to them. Need more staffs to carryout it".*

As the group size is large, in number, it is not possible to arrange activities to all the residents at large and number in a group should be small so that, it would be manageable and possible to offer them activities based on their functional ability.

Another participant added that they need more staffs and proper plan to make recreational activities happen in the house. In addition to that, it is more difficult to implement the activities before the lunchtime. So, most of the activities should be performed during the day time after the lunch.

Participants have experienced that, working with the PWD is challenging and stressful while caring them for their daily activities for example, they are more agitated, less cooperative, and aggressive and they believe that, the main reason behind such behaviour is lack of meaningful recreational activities.

All the participants were confident that, after the implementation of the recreational activities, it would help both residents and caregivers. Residents would be benefited and improved the social, mental and physical well-being that leads to ease such difficulties to provide daily care and eventually helps to reduce the stress level of the staffs as well.

> *A participant for instance has said "we can easily notice the difference for example, even after a short outing, resident is fresher, quieter and less aggressive. Which is also good for us to handle them more easily".*

All agreed that, recreational activities to the PWD would benefit both the residents as well as the caregivers.

6.1.2 Future recreational activity plan

While discussion possible and suitable recreational activities, participants have suggested different suitable and feasible activities to the PWD. Participants have purposed following possible activities for the residents:

- Food preparation
- Walking outside
- Music
- Reading newspaper, books, magazines
- Exercise
- Drawing

Similarly, participants have added the following activities that the PWD are willing to have:

- Trip

- Memory game
- Walking outside
- Other daily activities for example cleaning, baking etc.

As far as the performance ability of the residents is concerned, most of the participants are agreed that all the PWD can perform above-mentioned activities and can be added more activities in addition.

It was necessary to develop the recreational activities plan from the implementation point of view for example the frequency, duration and schedule of the activities. As most of the residents from Poiju and Uisko wards, can walk outside of the building and this activity can be arranged on the daily basis during weekdays at 13:00. When the evening staffs come to work, one of them do not need to change their dress immediately, rather he/she can directly take the residents for outing from both wards everyday with different residents. Participants of the discussion have agreed that, it is possible this way to take the residents to the store for shopping from 13:00 to 14:00 at least once a week for example on Thursday without having any additional staff. As residents are interested in cleaning activities, they will be involved in cleaning for example arranging and cleaning own room and common room together with other residents based on their functional abilities and interest.

After an intensive discussion, participants agreed to arrange recreation activities (drawing and exercise) from 14:30 to 15:30 on Mondays in multi-purpose room and 2 staffs will be arranged from Poiju (1 staff from morning and 1 from evening), 1 from Uisko, evening shift. To arrange such duties for recreational activities, duty schedule must be changed in such a way that additional staff will not be needed to conduct recreational activities. Currently, 3 staffs are working in the morning shift (7:00-15:00) and 2 staffs in the evening shift. Now, the manager reschedules the duty roster for the staff and 1 staff comes at 8:00 in the morning till 16:00. This change will bring 5 staffs from 14:00-15:00 and 3 staffs from 15:00 – 16:00, so there will be more staffs for recreational activities and 1-hour change in duty schedule will not have any significant impact on regular activities. This way there is no need to arrange additional staffs for the recreational activities. Newly scheduled morning staff (8:00 – 16:00), will be responsible for the implementation of the recreational activities with coordination of the evening staffs. This change in duty also applies on Thursdays.

Tuesday is doctor-visiting-day and is not able to change the duty roster of the staffs. All the 3 staffs do their regular duties from 7:00. Participants are agreed that the evening

staffs can arrange the reading-session. Residents can read newspapers, books and other materials based on their area of interest in each unit from 14:30 – 15:30 during the odd weeks. Discussion moments for example, their life story, experiences, interests, habits, family members etc., with others will be arranged during even weeks on Tuesdays. Similarly, on Wednesdays, the units have baking day. Currently, residents are not involved in baking activities. Now, participants are agreed to involve the residents in baking activities also. The unit arrange the sauna to those who are interested on Friday.

Different games (for ex. BINGO, memory game) will be arranged on Saturdays during the morning time by the morning staffs. Similarly, on Sundays, being together and movie-day will be conducted during even weeks and musical activities (listening, singing and playing if possible) will be offered during odd weeks.

6.2 Second focus group interview

There were five participants for the second focus group interview including a manager, two registered nurses and two practical nurses, who were involved in implementation of the recreational activities and participated in the first focus group interview as well.

Participants' initial response was very good about the timetable for the recreational activities. The duty roster is updated to carry out the recreational activities as well as other regular activities. The timetable was helpful as it was easy to understand and follow and all most of the planned activities were performed as scheduled. The manager can assign the responsibility to perform the recreational activities to the staff and the responsible staff works together with other staffs according to the schedule.

> *For example, a participant has shared her experience "well, recreational activities were carried out as planned in our department coordinating with others such as, physical activities, drawing, movie time, outing etc. Those activities changed their symptomatic behaviour noticeably. I felt like they are more relaxed and supportive, less aggressive and fresh. All other activities are performed well there were no problem in implementing them".*

Some of the participants expressed some difficulties and challenges during implementation. According to them, it is quite challenging to pay attention all the time to the residents as some of the residents need more support and do not participate continuously. Similarly, going out for shopping was a bit difficult as with few residents as they must manage the money issue and may take long time to come back. However, it is not a big problem and depends upon the nurse who is taking the residents out and mood of the residents.

Participants have observed that, while performing physical activities in a group of 5-6 members, 2-3 members participate actively while other would like to observe and participate the activities and they like to communicate during the activities time. When residents observe the activities performed by other residents, this observation also helps them, and they get fresher, have good mood and relatively less aggressive.

> *A participant expressed that physically active residents participate actively, and others like to observe them, however they perform based on their physical condition, they enjoyed the activities. Bedridden residents were also taken to the hall to observe the activities, which helps them to get fresh and less complain of pain than before and easy to help them.*

All the participants of the focus group interview also felt that, the residents are performed the planned activities, they are more interested and excited towards the activities intended to them.

There are different factors affecting in effective implementation of the recreational activities. Participants have experienced that, the mood of the nurses/caregivers, mood and willingness of the residents, activeness of the nurses, interest towards the activities of the residents and nurses are the factors that could affect the successful implementation of the planned activities in long run as well.

> *For example, a participant said, "some staffs are willing to take residents outside and some are not interested as they think that it is difficult".*

However, the participants come to conclude that, they can discuss with each other about the activities and can decide the area of interest and assign the responsibilities accordingly.

The participants have same feeling that, after the implementation of the recreational activity plan, the PWD are quieter, in a good mood, fresher, happy and less aggressive and such change in their behaviour has created a better working environment for the caregivers as well.

> *A participant in discussion added "yes, I totally believe that when these activities are carried out for long time their behaviour would be improved in a significant way. However, within this sort span of time I have noticed positive changes in their behaviour. They look happier and more supportive to us than before."*

Most of the residents are enjoying going out and they also wish to go for coffee and grill in summer time. Participants have realized that, PWD have liked the planned activities and

are meaningful and suitable to them as the activities improve their quality of life socially, physically and mentally. On the other hand, when the PWD are happier, quieter, less aggressive and working environment is better, it also helps to reduce the stress level of the caregivers, they can work well with good mood, and they feel like they are enjoying the work in a better way.

7 RESULTS AND CONCLUSIONS

7.1 Results

Due to the declining of the functional ability, dementia cause to interfere with daily life of the people. They face several challenges physically, mentally and socially and need the support to perform their daily activities.

Dementia is such a syndrome, which cannot be cured permanently though different researches are conducting to develop possible medical treatments. However, the medical treatments are not the only way to manage the symptoms and slow down the progress of dementia. Arranging recreational activities for them by the responsible nursing home is one of the non-drug ways to treat them in managing and coping with the difficulties of the problems caused by dementia. The recreational activities help to maintain the quality of life by way of activating their mind to some extent that helps to adjust better with the adverse consequences. Therefore, the meaningful and suitable recreational activities intended to PWD should be planned and implemented accordingly in regular basis to improve the physical, mental and social well-being.

This project-based development plan of recreational activities for PWD is targeted to the residents of Valkamahovi nursing home, Helsinki. Currently 13 residents are suffering from dementia problem and there is a high need of recreational activities, as they are not having such activities due to lack of proper plan and implementation. However, the manager and staffs are very much willing to implement a developed recreational activity plan for the well-being of the residents as soon as possible.

As the current need of development plan is identified, the development of a new recreational activity plan must be developed as part of solving current problem of the organization. To develop the recreational activity plan, a through discussion with the management and the staffs was necessary and conducted two different focus group interviews with them. Focus group interview as part of qualitative research was suitable to gain relevant and meaningful information to develop the recreational activity plan.

Planned activities were tested by implementing for certain period (2 weeks) to see whether the purposed recreational activity plans are suitable and feasible or not. A second focus group interview was conducted to get feedback, update the purposed plan accordingly, and develop the final timetable with different meaningful and suitable activities to implement in long run. Following is the finalized recreational activity plan developed after second focus group interview:

Timetable of final recreational activity plan to be implemented on regular basis:

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
	Outdoor walk 13:00-13:30	Outdoor walk 13:00-13:30	Outdoor walk 13:00-13:30	Visiting shop 13:00-14:00	Outdoor walk 13:00-13:30		
In odd weeks	Exercise 14:30-15:30	Reading newspapers/ story books 14:30-15:30	Baking 13:00-14:00	Cleaning day 14:30-15:30	Sauna	Memory Game 10:00-11:00	Being together and Music (10:00-11:00)
In even weeks	Drawing 14:30-15:30	Discussion moment with others 14:30-15:30	Baking 13:00-14:00	Cleaning day 14:30-15:30	Sauna	Bingo 10:00-11:00	Movie day (14:30-15:30)

Followings are the summary of guidelines developed to assist in implementation of the recreational activity plan. The guidelines are developed based on literature reviews and focus group interviews.

- Manager can regularly train the staffs or new staffs if needed and this recreational activity plan should be introduced to the new employees during orientation. Recreational activities should be included as part of the orientation.
- The more diverse the recreational activities, the better the impact, so provide different kinds of activities
- Recreational activities should be enjoyable and meaningful to the patients and care givers should pay attention whether they are enjoying or not
- It is important to identify the interests, hobbies, history of the residents with dementia and include them as part of the activities
- Closed ones, family members are the source of those information
- It is good to keep in mind that the observation of the patients could also be the way to participate in recreational activities, especially to the bedridden patients.
- The social skill of the residents with dementia may reduce due to the loneliness and declining interaction and difficulties in communication lead to more problems to them so, working together and group activities help them create the interest towards the surrounding
- Different activities, exercises, games help them to develop the coordination between the eyes, hands and other part of body
- Different things need to consider before starting a recreational activitiy:
    - type of dementia, possible behavior symptoms, performance capacity, pain, medication and other difficulties

    - Cognitive activities of the participants: aphasia (the difficulty of producing and understanding the speech), agnosia (inability to identify things, objects and people), apraxia (operational guide and voluntary movements become more difficult)
- Group form:
    - The number of the participants for the group activities is 5-12 members, based on participants' capacities and resources.
    - Make sure each participant is participating and feel safe and comfortable.
    - The circular is a good group form where participants have eye contact with each other
    - The place needs to be quiet, good lighting and specious
    - Group should meet at the same time and each participant must get time and have feeling that they are valued and encouraged.
- Supervisor
    - The supervisors should introduce themselves and be familiar and every participant response and opinion is important to listen calmly.
    - Explain the purpose of group activity, which helps to create a sense of safe and motivation towards the activity.
    - Assistant should be near to those who need support and help, and the supervisor can sit in the middle of the circle
- In the beginning of the group activities
    - Initially, each participant is personally greeted (shake or hug), mention their name of participant themselves say their names
    - Explain the instructions clearly
- Group activities (physical exercise)
    - There should be good interaction between participants and the supervisor so that, demented person senses feelings and emotional climates and understands the guidelines
    - Clear, simple and polite language should be used with eye contact and body language
    - Instruction could be by verbal, by doing or by supporting them based on their ability to understand and follow the instructions
    - Do not force them to do the activities, just let them do voluntarily and encourage them by giving positive feedback and feeling of success
    - Repeat the instruction until they understand and follow them
- Group activities (memory)
    - Looking at the life would be easy to memorize

    - Strengthen self-esteem and identity
    - Strengthens the sense of belonging
    - Promote adaptation to aging and old age
    - Activate memory capacity
    - Supervise should provide the enough time for each participant
    - Participants must have the feeling that he/she is valued
- Ending group activities
    - This is also as important as beginning
    - The action must not be turned on
    - Scheduling the activities for group for example, before coffee time, which naturally moves into another end of the situation
    - Need to thank all the participants, that means the group activity is over

Activity based guidelines

Outing

Usually, elderly people would like to move out, walk around the nature that would help to have good mood, relieve pain, and the nature refreshes the PWD and improves the quality of life. Research suggests that outdoor activities improve the well-being of people with progressive dementia.

Morning staff gets ready for the outgoing resident and evening staff take the resident for outing as she joins the work without changing the dress. Manager informs in advance and mark the work shift list who is responsible for the outdoor activities everyday. Those residents, who would like to go to the store for shopping, they should take them to the store on that day.

Exercise

Exercise helps to maintain the weakening ability to move, stiffening, better sleep and mood, prevents behavioral symptoms and improves operational management. It has positive effect on mental, social and physical capacity.

As accessories, ball or pea bag, chairs for each participant are needed. Physical fitness training - various movements for warming muscles, exercising muscle relaxation.

Warming ball in the ring throwing or jumping walking for example, on the corridors

Standing in the musculoskeletal system, Moving the legs upwards (hands in rhythm), Hand lifting eg, up and down, fingering of the fingers and upper body rotation sitting

Stretching Hand bending over the head, Standing on land

Playing a competition ball throwing, form a queue for each ball, make a line from which the ball is thrown, each alternatively throws as far as it gets, A prize for example, juice or candy for each

Exercise is organized for the residents of the house in the multipurpose building

Crafting

This helps to highlight the experiences, memories, dreams and desires of the residents, and handle difficult experiences and feelings of life. Similarly, this helps in smooth functioning of senses, cognitive skills, observation, thinking and memory functions, and the desire to express emotions and thoughts by means of art. Crafting activates by, increasing social interaction and maintains self-esteem and operational capability

Accessories: paper, colorful pens, markers, watercolors and other instruments as per needed and music.

Organize the program in the multipurpose hall at the big table

Handover the accessories to the residents and observe their performance and help when needed

Reading circle

As we read to residents aloud, it would evoke memories and imagination. The time of issue can trigger a lively debate and spontaneous recollection. Studies show that cognitive stimulation of treatment of written material may slow down the progression of dementia and the deterioration of language skills. Reading combines older adults with memories, feelings, loved ones, and the whole world. Well-chosen reading material undermines the reader's feelings of disorientation, depression, restlessness and anxiety. Books can calm and shift the focus to positive thoughts. Reading as a stand-alone act improves your own image, renewing self-esteem and dignity.

Assemble the residents in the common room for example in a living room

Read articles in the magazine that would be of interest to residents and you can ask the resident to read aloud one by one.

Changes in text, graphic design, language, and content can replace the reader's visual and cognitive deficiencies.

Discussion moment

The simplest of psychological and social activities are the various discussions that people can attend with each other and the nurses. It is important for the caregiver to have time for each one of the people to talk about things that are related to them, such as the feeling of insecurity and fears. It reduces residents' unrest and behavioural symptoms.

Bring residents to the living room, then can start discussion.

Discussion topics could be such as, memories of time, childhood and youth, questioning, comparison between today and past, memories of children and toys, favorite animals / food, interesting things, etc.

Baking

Baking increases the mood and creates a group spirit, and baking creates home-like feelings. It is fun and social and activates efficiently so that smells, flavors and sensations, and gentle speech at the pits fills the kitchen quickly. Brings joy, variation, good communion and refreshment to everyday life.

Accessories: Bowl, roller, knife for dough cutting, baking paper, oven, tin, buns and egg for lubrication, raisins, baking sheet, baking tray and wheat flour for rotating the flasks based on what is going to make.

Get biscuits ready in the kitchen.

Collect the bun at the baking tables by hand washing

For every one of your stapler pieces.

Help and encourage

Sometimes you can sing, even the common songs

The scent of a fresh bouquet brings lots of memories to the memory and gets a mouthpiece.

Cleaning day

Physical activity and everyday activities (for example, cleaning) help to improve the well-being and mood of memory patients. It encourages the demented residents to use their own resources and engaging them in, for example, traditional and regular home activities which is important to increase their physical activity.

The possible activities that can be offered to them could be small cleaning wiping dust, arranging the goods and covering the table. Those activities also promote the functional ability of a memory mucus.

From the morning shift 1 attendant and from the evening shift 1 attendant can help and guide the residents according to their capabilities.

Collect residents to the living room, then start cleaning the living room first and then the kitchen and others.

Caregivers can give tasks to residents and help and guide residents. for example, wiping dust, vacuuming, wiping and arranging the goods.

Next, nurses help alternate with the residents to clean and arrange the goods in the living room, for example, giving instructions to put dirty clothes on the basket, change the clothes, and put dirty clothes on the washing machine.

Sauna

Sauna has many health benefits for example, improving blood circulation, killing the pathogenic microbes and helping to prevent Alzheimer's disease and dementia. This helps to relax, soothe, clean and refresh and reduces anxiety, depression and chronic pain

The resident group of nursing home, who wanted to go to the sauna, take care of the turn and help the resident in the house's sauna day, on Friday evening.

Games

Studies prompted to satisfy the needs of having fun and rejoicing by playing. Playing relaxes and entertains, at the same time it cleanses intelligence and gives creativity the opportunity to be realized.

The bingo game is always a popular and versatile game. The player must concentrate on listening to the numbers.

Fingers and hands on movement practice and the eye and the hand together is practicing while playing

The memory game takes advantage of the activation tool. It helps to increase the self-confidence of the people, to develop the ability to concentrate, the hand and the perception skills to maintain and develop

Collect the residents at the big table - start playing the game

Bingo: Numerobingo, Namebingo, Bookbingo are different options and memory game

Game prizes can be given for example candy

Music

Music activates residents' memory, raises emotions, even acts as a missing communication medium and maintains activity and reduces depression and improves quality of life. Similarly, music stimulates refreshes and comforts, promotes learning and develops cognitive abilities. Singing together is a form of social activity through which it is possible to belong to something. Music helps to get memory cells to work according to the study; especially live music is associated with the well-being of people with moderate to severe dementia.

Music should be used as a tool, not as a purpose. The methods used are, for example, singing, listening, and moving at the pace of music

Collect the residents for example in a living room

Songs of interest to residents and songs suitable for seasons

Radio and television come from like Eurovision, Tangomarket and clubs

It can be combined with various events for example, devotional, memorial, party, etc.

Movie time

Watching movie helps to improve the well-being of residents by reducing anxiety, aggression and restlessness. The picture helps a demented person to return to their lives regularly, to increase their mood and to help them return from low moods quickly. It also

connects with friends, family, and the wider community by giving them personal conversations and self-esteem with social people.

Gather the residents into the living room and start watching the movie, the residents my want to select the movie they like.

Offer juice and small refreshments to eat for example, popcorn, candy etc.

A summary of guidelines that will be given to the organization for final implementation is prepared in Finnish language.

Further suggestion to the organization

The developed recreational activity plan is based on the literature reviews, theoretical framework and the focus group interviews and this can be implemented on the regular basis. While implementing this, it is better the management and staffs could discuss about the implementation activities and improve the planned activities depending on the situation. Staff members can discuss about the progress of the recreational activities in regular meetings and purpose better options to update and improve the better way of doing things. There are different kinds of residents with dementia having varying degree of abilities and interests and of course in future situation may change. Therefore, there will be enough room to improve the developed recreational activity plan in future. Innovative ideas and best way of doing the activities should always be welcomed.

7.2 Conclusions

This research-based recreational activity plan has supported that the purposed recreational activities have resulted the positive results to the patients and caregivers. Several researches conducted on the same area have also concluded the similar results. Conti 2006, in his research on Meaningful activities for individuals with dementia living in long term care, Clemson University has concluded that, recreational activities are relieving tool that can be beneficial to the demented person as well as care giver. Such recreational activities promote the environment of better care and result for both patients and caregivers.

Similarly, the report of National Institute of Health, 2009, pointed out that the behavioural symptoms (aggression, wandering, screaming and apathy etc.) of dementia are among the most distressing symptoms from the caregiver's perspective and the meaningful recreational activities hold much promise for minimizing such behavioural symptoms and improving the overall quality of life for demented people. A systematic approach of such activities will maximize the effectiveness of this first line treatment.

The results of the mean comparisons, published by Lokon, Sauer & Li (2016), in their article demonstrated that the PWD expressed significantly more intense and frequent well-being during all activities comparing to those who have not participated at all. The implication of the findings of the article also added that benefit from having regardless of types of activities or who conducts them (specialist or regular activity staffs). The benefits of well-designed and well-conducted recreational plan are powerful in that such activities truly provide physical, mental and social benefits to PWD. In addition to that, such activities also benefit the individuals themselves as well as the caregivers. Moreover, with the recreational activities demonstrate to society in general that the PWD are highly capable of expressing themselves creatively if they are encouraged and allowed to do so.

The two-week implementation period has also shown the similar results that the recreational activities help them to meet the living standards by way of improving quality of life to some extent. Hence, the regular offering of the planned recreational activities helps to achieve the improvement of the functional abilities and quality of life of the residents as well as reduces the stress level of the caregivers.

The overall project work went very well so far as my experience is concerned. With this project work I have developed a suitable recreational activity plan for the organization I work. Although the whole process took quite a long time than expected due to my own personal issues, I tried my best to complete this work as guided by the university. From the time to think about the suitable topic for this work till writing this final work, there were so many ups and downs during the journey. The process itself was a part of learning and I have learnt a lot of new things which I never would have learnt. In addition to solving a problem of the organization, this research-based project has taught me many lessons. For example, I have realized that, there could be many problems in the organization that could be solved in a certain way. This project-based approach could be applied in the work in the future as well to solve other problems.

Proposal for further development

My proposal for further development, based on this development work would be to conduct in-depth study on each resident to provide them more customized recreational activity plan as far as possible. The area of study of the resident could be level and type of dementia, his/her background, interests, hobbies, area of passion etc. from their family members, relatives, friends. The purpose is to obtain as more information as possible so that a customized activities plan could be designed. Although, it may not be possible to arrange a complete customize activities to each resident, the intention should be to provide more meaningful and suitable activities to make the activities more effective. For example,

during reading moment, the same reading materials to all participants may not be effective as there are different kinds of residents with varying degree of abilities and interests. The further development work should focus on those issues.

7.3 Ethical considerations

As this project-based development plan went through qualitative research approach most of protections are related to human subjects (Haber and LoBiondo 2006, 166). This project work on developing recreational activity plan has followed the ethical consideration from the beginning to the end of the research process. In addition to that, the privacy of the people with dementia and organizational privacy policies are followed absolutely.

The consent of the organization was taken before the beginning of the study. The participants of the focus group interview were participated voluntarily as they were informed about the focus group interview and possible areas of discussion in advance and they were informed that they have rights to withdraw from the study whenever they wish to do so. Similarly, the privacy of the target residents of the nursing home was of a paramount importance and followed accordingly.

There was no use of discriminatory, offensive and other unacceptable language while formulating and asking the questions during focus group interview. I have tried my best to maintain the highest level of objectivity in discussion and analysing the collected focus group data. The content analysis of the data leads the reliability and validity of the result of the work. The secondary source of information was collected as per the instruction of the thesis guidelines provided by the university and followed the Harvard referencing system according to the guidelines.

LIST OF REFERENCES

Aguero-Torres, L., Fratigclioni, L., Guo, Z., Viitanen, M., E.V., Strauss &Winblad, B. 1998. Dementia is the major cause of functional depencence in the elderly: 3-year follow-up data from a population-based study. American journal of public health.1452-1456.

Alzheimer Europe 2013. Dementia. Retrieved 18 January 2018. Available at :*http://www.alzheimer-europe.org/Glossary/dementia*

Alzheimer Europe 2014. Finland. 2013: The prevalence of dementia in Europe. [Retrieved 18 January 2018]. Available at: *http://www.alzheimer-europe.org/Policy-in-Practice2/Country-comparisons/2013-The-prevalence-of-dementia-in-Europe/Finland*

Alzheimer Scotland 2003. Activities a guide for carers of people with dementia. [Retrieved 19 January 2018]. Available at :*https://www.alzscot.org/assets/0000/0266/activities.pdf*

Alzheimer's Association 2018. Younger/Early onset Alzheimer's and dementia. [Retrieved 17 January 2018]. Available at: *https://www.alz.org/alzheimers_disease_early_onset.asp*.

Alzheimer's Society UK. 2017b. The dementia guide. [Retrieved 17 January 2018]. Available at: *https://www.alzheimers.org.uk/download/downloads/id/1881/the_dementia_guide.pdf*.

Alzheimer's Society UK. 2018. Exercise and physical activity. Retrieved on 03 May 2018. Available at: *https://www.alzheimers.org.uk/info/20029/daily_living/15/exercise_and_physical_activity*.

Alzheimer's Society UK. 2017a. What is dementia? Retrieved 17 January 2018. Available at: *https://www.alzheimers.org.uk/download/downloads/id/3416/what_is_dementia.pdf*

Attendo. 2018a. This is Attendo. Retrieved 17 January 2018. Available at: *https://www.attendo.fi/t%C3%A4m%C3%A4-on-attendo*

Attendo. 2018b. Attendo's vision and value. [Retrieved 17 January 2018]. Available at: *https://www.attendo.fi/t%C3%A4m%C3%A4-on-attendo/attendon-visio-ja-arvot*

Attendo.2018c. Housing services for people with disabilities. Retrieved 18 January 2018. Available at: *https://www.attendo.fi/vammautuneiden-asumispalvelut*

Attendo.2018d. AttendoValkamahovi service home. Retrieved 18 January 2018. Available at: *https://www.attendo.fi/valkamahovi*

Babbie, Earl. 2007. The practice of social research. United States of America: Wadsworth, Cengage Learning.

Baker R, Bell S, Baker E, Gibson S, Holloway J, Pearce R, et al. 2001. A randomized controlled trial of the effects of multi-sensory stimulation (MSS) for people with dementia. British journal of clinical psychology; 81–96

Beard, L.R. 2011. Art therapies and dementia care: A systematic review. United States of America. Saga, P 636-645.

Bowes, A., Dawson, A., Jepson, R. & McCabe, L. 2013. Physical activity for people with dementja: a scoping study. BMC geriatrics. BioMed Central ltd: Scotland.

Brand. S., Holmi, M. &Kuikka, A. 2013. Avain osallissuuteen: menetelmiä ikääntyneiden ryhmätoimintoihin-osa 1. Vanhus- ja lähimmäispalveluliitto ry (valli): Helsinki.

Buettner, L. &Fitzsimmons, S. (2003). Activity calendars for older adults with dementia: What you see is not what you get. American journal of Alzheimer's disease and other dementias. 215-226.

Charernboon, T. &Lerthattasilp, T. 2015. Functional disability in dementia: A validation study on the Thai version of daiability assessment for dementia scale. Journal of clinical gerontology and geriatrics.

Cheng, Y-Y., Hsieh, W-L., Kao, C-L & Chan, R-C. 2012. Principles of rehabilitation for common chronic neurologic diseases in the elderly. Journal of clinical gerontology and geriatric 3.

Covinsky, K.E., Newcomer, R., Fox, P., Wood, J., Sands, L., Dane, K. &Yaffe, K. 2003. Patient and care giver characteristics associated with depression in caregivers of patients with dementia. Institute for health and aging. San Franciso.

Creswell JW. Thousand Oaks, California: Sage Publications; 2007. Qualitative inquiry and research design: choosing among five approaches: International student edition.

Culinary Schools.org,2017. The benefits of cooking with Alzheimer's: a caregiver's guide. Retrieved on 21 May 2018. Available at: *https://www.culinaryschools.org/blog/cooking-with-alzheimers/*

Dementia Australia 2016. Mental exercise and dementia. Retrived on 04 May 2018. Available at:*https://www.dementia.org.au/files/helpsheets/Helpsheet-DementiaQandA06-MentalExercise_english.pdf*

Dementia Australia. 2015. Physical exercise and dementia. Retrieved on 03 May 2018. Available at: *https://www.dementia.org.au/files/helpsheets/Helpsheet-DementiaQandA08-PhysicalExercise_english.pdf*

ElmcroftSenoir Living. 2015. Memory and brain games for elderly. Retrieved on 23 May 2018. Available at: *https://www.elmcroft.com/blog/2015/january/memory-and-brain-games-for-the-elderly/*

Eloranta, T. &Punkanen, T. 2008. Vireään Vanhuuteen. Helsinki: Tammi.

Farrow, M. & Ellis, K. 2013. Physical activity for brain health and fighting dementia. Alzheimer's Australia publication, 1-10.

Fern E. 1982. The use of focus group for idea generation: the effects of group size, acquaintanceship, and moderator on response quantity and quality. Journal of Marketing Research.

Friedberg, J. 2010. The rhyme and reason of reading to dementia patients. The Guardian: UK.

Glei, D. A., Landau, D. A., Goldman, N., Chuang, Y-L., Rodriguez, G. & Weinstein, M. 2005. Participating in social activities helps preserve cognitive function: an analysis of longitudinal, population-based study of the elderly. International journal of epidemiology.

Gonzalez-Salvador, MT., Arango, C., Lyketsos, CG. & Barba, AC. 1999. The stress and psychological morbidity of the Alzheimer patient caregiver. Int J geriatric psychiatry. Joha Wiley & sons, ltd: Baltimore.

Haber, Judith and Geri LoBiondo-Wood. 2006. Nursing research: methods and critical appraisal or evidence-based practice. United States of America: Mosby Inc.

Hannuksela, M. 2012. Sauna ja terveys. Duodecimterveyskirjasto:Helsinki.

Health and well-being. 2016. Elderly Functionality. [Retrieved 12 February 2018] Available at:

Hirano, A., Umegaki, H., Suzuki, Y., Hayashi, T. &Kuzuya, M. 2015. Effects of leisure activities at home on perceived care burden and the endocrine system of caregivers of demntia patients: a randomized controlled study. Vol.2. Issue 2. International psychogeriatric Association. Japan.

https://thl.fi/fi/web/toimintakyky/vaeston-toimintakyky/iakkaiden-toimintakyky

Härmä Heidi and Juva Kati 2013. Muistiliitto Lewyn Kappale-tauti. [Retrieved 19 January 2018]. Available at: *https://www.muistiliitto.fi/application/files/2015/1263/4678/Lewyn_kappale_-tauti.pdf*

Iltalehti.2015. Nämä ovat luonossa liikkumisen hyödyt. Retrieved on 12 May 2018. Available at: *https://www.iltalehti.fi/terveys/201507220122555_tr.shtml*

Jones, B., Gage, H., Bakker, C., Barrios, H., Boucault, S., Mayer, J., Metcalfe, A., Millenaar, J., Parker, W. &Wallin, O, A.2017. Availability of information on young onset dementia for patients and cares in six european countries. Ireland: Elsevier Ireland Ltd, 159-165.

Kaaro.J. 2013. Depression is relieved by exercise. Hyväterveys-Health. Retrieved on 16 May 2018. Available at:*https://www.hyvaterveys.fi/artikkeli/terveys/masennus_lievittyy_liikunnalla*

Kan, S. & Pohjola, L. 2012. Erikoistu Vanhustyöhön. Helsinki: Sanoma Pro.

Kolanowski, A., Fick, D. M. &Buettner, L. 2009. Recreational activities to reduce behavioural symptoms in dementia. National institute of Health. USA: Geriatric Aging, 1-4.

Koskinen, S., Lundqvist, A. &Ristiluoma, N. 2012. Terveys, toimintakyky ja hyvinvointi suomessa 2011. Raportti 68/2012. Juvenes print-Suomen yliiositopaino oy, Tampere.

Krippendorf, K. H. 2013. Content analysis: An introduction to its methodology (3rded.). Thousand Oaks, CA: Sage.

Lam, F.M., Huang, M-Z., Liao, L-R., Chung, R. C., Kwok, T.C. & Pang, M.Y. 2018. Physical exercise improves strength, balance, mobility, endurance in people with cognitive impairment and dementia: a systematic review. Journal of physiotherapy 64.4-15.

Lautenschlager, N.T., Cox, K. &Cyarto, E.V. 2012. The influence of exercise on brain againg and dementia. Journal of aging research. 477- 479.

Lee, D.R., McKeith, I., Mosimann, U., Ghosh-Nodyal, A. & Thomas, A.J. 2012. Examining carer stress in dementia: the role of subtype diagnosis and neuropsychiatric symptoms. Int J geriatric psychiatry. John wiley& sons, ltd.

Levy, S. J. 1979. Focus group interviewing. In J. B. Higginbotham & K. K. Cox (Eds.), Focus group interviews: A reader. Chicago, II: American Marketing Association.

Logsdon, R. G., McCurry, S.M. & Teri, L. 2007. Evidence-based interventions to improve quality of life for individual with dementia. National institutes of health. Washington, p 1-8.

Lokon E., Sauer E. P. & LI Y. 2016. Activities in dementia care: A comparative assessment of activity types. United States of America: Saga, p.2, 15.

Lorenz, R.A., Gooneratne, N., Cole, C.S., Kleban, M.H., Kalra, G.K. & Richards, K.C.2012. Exercise and social activity improve everyday function in long-term residents. Am J geriatrpsychiatry: Pennsylvania.

Lähdesmäki, L. & Vornanen, L. 2008. Vanhuksen parhaaksi. Hoitaja Toimintakyvyn tukijana. Helsinki: Edita.

Mack JL, Whitehouse PJ, 2001. Quality of life in dementia: state of the art--report of the international working group for harmonization of dementia drug guidelines and the Alzheimer's society satellite meeting. Alzheimer Dis Assoc Disord;15:69-71.

Mechling, H. 2008. Dementia and Physical activity. Instituate of movement and sport gerontology: Cologne.

Memory disorders: Current care guideline.2017. Käypähoito. Retrieved 22 January 2018. Available at: *http://www.kaypahoito.fi/web/kh/suositukset/suositus?id=hoi50044*

Milte,R., Shulver, W., Killington, M., Bradley, C., Ratcliffe, J. & Crotty, M. 2016. Quality in residental care from the perspective of people living with dementia: The important of personhood. Archives of Gerontology and Geriatrics 63. Ireland: Elsevier Ireland Ltd, 9-17.

Mustonen R. 2018. Dementtoituneiden ryhmätoiminnan periaatteet. Attendo Valkamahovi: Helsinki. Oppimateriaalit.

My Vertual Medical CenteR. 2015. Effects of mental activity on health. Retrieved on 04 May 2018. Available at: *https://www.myvmc.com/lifestyles/effects-of-mental-activity-on-health/#c2*

National Institute for health and welfare. 2017a. Physical functionality. Retrieved on 12 Feburary 2018. Available at: *https://thl.fi/fi/web/toimintakyky/vaeston-toimintakyky/iakkaiden-toimintakyky/fyysinen-toimintakyky*

National Institute for health and welfare. 2017b. Psychic functionality. Retrieved on 16 Feburary 2018. Available at: *https://thl.fi/fi/web/toimintakyky/vaeston-toimintakyky/iakkaiden-toimintakyky/psyykkinen-toimintakyky*

National Institute for health and welfare. 2017c. Social functionality. Retrieved on 12 Feburary 2018. Available at: *https://thl.fi/fi/web/toimintakyky/vaeston-toimintakyky/iakkaiden-toimintakyky/sosiaalinen-toimintakyky*

Neng, Z., Deng, Y-H., Shuai, T., Zhang, H., Wang, Y. & Song, G-M. 2016. Effect of physical activity training on dementia patients: A systematic review with a meta-analysis. Shanxi: Shanxi medical Periodical Press, Elsevier B.V.,168-175.

Newlin, M., Webber, M., Morris, D. & Howarth, S. 2015. Social participation intervation for adults with mental health problems: a review and narrative synthesis. Social work research. Vol. 39, Issue 3.

NHS.2015. Activities for dementia. Retrieved on 10 May 2018. Available at:*https://www.nhs.uk/conditions/dementia/activities/*

Park, H.K., Chun, S.Y., Choi, Y., Lee, S.Y., Kim, S.J.& Park, E-C.2015. Effects of social activity on health related quality of life according to age and gender: an observational study. Health and quality of life outcoms. BioMedcentral:Korea.

Powell R.A. 1996. Focus groups in mental health research: enhancing the validity of user and provider questionnaires, Internal Journal of Social Phychiatry.

Razani, J., Corona, R., Quilici, J., Matevosyan, A., Funes, C., Larco, A., Miloyan, B., Avila, J., Chung, J., Goldberg, H. & Lu, P.2014. The effects of decelining functional abilities in dementia patients and increases psychological distress on caregiver burden over a one-year period. National instituates of health: Northridge.

Razani, J., Kakos, B., Orieta-Barbalace, C., Wong, J.T., Casas, R., Lu, P., Alessi, C. & Josephson, K. 2007. Predicting caregiver burden from daily functional abilities of patient with mild dementia. The American geriatrics society: Northridge.

Ritchie, J. and Jane L. (ed.) 2004. Qualitative research practice. A guide for social science students and researchers. London: SAGE Publications Lt.

Ruonala, H. 2016. Kohti parempaa aivoterveyttä: aivojen aktivointi ja mielen hyvinvoint. Lapin Muistiyhdistys ry, Lapin muistikunto-hanke. Oppimeteriaalit.

Ruthirakuhan, M., Luedke, A.C., Tam, A., Goel, A., Kurji, A. & Garcia, A. 2012. Use of physical and intellectual activities and socialigation in the management of cognitive decline of aging and in dementia: A review. Hindawi publishing corporation, 1-11.

Räsänen, J-P. 2016. Tuore tutkimus paljastaa: saunassa kannattaa käydä useita kertoja viikossa-upeat terveyshyödyt. Savon sanomat: Kuopio.

Sagepub 2018. The size of the focus groups. Retrieved 12 February 2018. Available at: *https://www.sagepub.com/sites/default/files/upm-binaries/24056_Chapter4.pdf*

Salonen, H.2015. Näin sauna vahvistaa terveyttä. Iltalehti: Helsinki.

Scholzel-Dorenbos C.J.M. 2011. Quality of life in dementia, from concept to practice. Ratio sluisgrafischtotaal BV, Doetinchem, The Netherlands. 2-4, 20-24.

Scholzel-Dorenbos C.J.M., Krabbe P.F.M &RikkertOlde M.G.M 2010. Quality of life in dementia patients and their caregivers, a narrative review of the concept and measurement scales. Handbook of desease burdens and quality of life measures, springer science and business Media. 32-34.

Silverman, D. 2004. Qualitative research: Theory, method and practice. 2nd. ed. London: Sage.

Snelling, S.2012. Caregivers take note-music as therapy. Alzheimer's Association. Chicago.

Social care institute for excellence. 2015. Activities for people woth dementia based around food. Retrieved on 21 May 2018. Available at: *https://www.scie.org.uk/dementia/living-with-dementia/eating-well/activities-around-food.asp*

Statistics Finland. 2017. Causes of death in 2016. Retrieved 17 January 2018. Available at: *http://www.stat.fi/til/ksyyt/2016/ksyyt_2016_2017-12-29_kat_001_en.html*

Stella, F., Banzato, C.E.M., Quagliato, E. M.A.B., Viana, M.A &Christofoletti, G. 2008. Dementia and functional decline in patients with pakinson's disease. Dementia and Neuropsychologia. Campua of Rio ; Brazil.

Stewart D. W. &Shamdasani 2015. Focus group theory and prictice, 3 ed, Sage.

Stinson, J.M., Collins, R.L., Maestas, K.L., Pacheco, V., LeMaire, A. & Benge J. 2014. Dependency aspect of caregiver burden is uniquely related to cognitive impairment in Veterans. Journals of rehabilitation research and development.

Study.com 2018. Group dynamics defined. Retrieved 10 February 2018. Available at: *https://study.com/academy/lesson/what-are-group-dynamics-definition-theory-quiz.html*

Supercarers. 2017. Playing brain games improves mental health and memory in the elderly. Retrieved on 23 May 2018. Available at:*https://supercarers.com/blog/playing-brain-games-improves-mental-health-and-memory-in-the-elderly/*

Särkämö, T., Tervaniemi, M., Laitinen, S., Numminen, A., Kurki, M., Johnson, J.K. & Rantanen, P. 2013. Cognitive, emotional and social benefits of regular musical activities in early dementia: randomized controlled study. The gerontologist vol. 54, no. 4. Oxyforduniversity: America.

Talmelli, LF.,Vale, FA., Gratao, AC., Kusumota, L. & Rodrigues RA. 2013. Alzheimer's disease:functionaldeceline and stage of dementia. Acta Paul Enferm. Alegre: Brazil. 219-225.

Terve.fi. Treeni ja ravinto. Terveempää elämää uloilemalla-Ulkoilulla on monia terveysvaikutuksia- ja vihreällä liikunnalla vielä useampia.2010. Retrieved on 12 May 2018. Available at: *https://www.terve.fi/artikkelit/terveempaa-elamaa-ulkoilemalla*

Wang, Q-Y.& Li, D-M.2016. Advance in art therapy for patient with dementia. Chinese nursing research. Shanxi medical periodical press. Elsevier B.V:Hangzhou.

Vavike, ryhmä- ja viriketoiminnan aineistopankki. 2018. Ryhmän ohjaaminen. Retrieved on 14 June 2018. Available at: *https://www.vahvike.fi/fi/ryhman-ohjaaminen*

Wheatley, K. L. & Flexner, W. A. 1988. Dimensions that make focus groups work. Marketing News.

WHO 2015. World report on ageing and health. Retrieved 7 April 2018. Available at: *http://apps.who.int/iris/bitstream/handle/10665/186463/9789240694811_eng.pdf?sequence=1*

WHO 2017. Dementia. Retrieved 18 January 2018. Available at: *http://www.who.int/mediacentre/factsheets/fs362/en/*

WHO 2018. Physical activity. Retrieved on 02 May 2018. Available at: *http://www.who.int/en/news-room/fact-sheets/detail/physical-activity*.

WHO 2018. WHOQOL: Measuring quality of life. Retrieved 3 February 2018. Available at**:** *http://www.who.int/healthinfo/survey/whoqol-qualityoflife/en/*

Zunzunegui, M-V., Alvarado, B. E., Ser, T. D. & Otero, A. 2003. Social networks, social integration, and social engagement determine cognitive decline in community-dwelling Spanish older adults. The journals of gerontology.

APPENDICES

Appendix 1

Questionnaire for the first focus group interview

Staffs' background

1) Education
2) Work experience in the Unit

Recreational activities

1) What kind of recreational activities are organized here for the dementia residents and how often?
2) Do you think that is enough? Is it versatile?
3) How the recreational activities are organized here and do you participate?
4) Do you consider the resident's wishes related to recreational activities and are those resident-oriented?
5) What kind of resources do you have for organizing here?
6) Have you received any special training in order to organize a recreational activity for dementia residents?
7) How the residents participate in recreational activity?
8) What are the effects of recreational activities for the residents and staffs?

Development of the recreational activities plan

1) What kind of recreational activities do you prefer to arrange for the residents?
2) Do you know what kind of recreational activities dementia residents would like to have?
3) Do you know that what kind of activities they are able to perform based on their functional capacities?
4) What kind of recreational activities do you think, are beneficial for dementia residents to improve their functional abilities and quality of life?

Appendix 2

Questioners for the Second focus group interview

What do you think about the timetable of the recreational activities, its frequency, duration and easiness to carry out for the staffs/organization?

What are the factors that influence in the implementation of recreational activities plan?

How the residents participate in the recreational activities during implementation period? Give examples;

Do you notice anything special in the end of the days after recreational activity is performed?

Do you observe and notice the effects of recreational activities for the residents and staffs after the plan implementation?

Do the residents have any new wishes and hope towards recreational activities?

Do you think that planned recreation activities are suitable and meaningful for the residents?

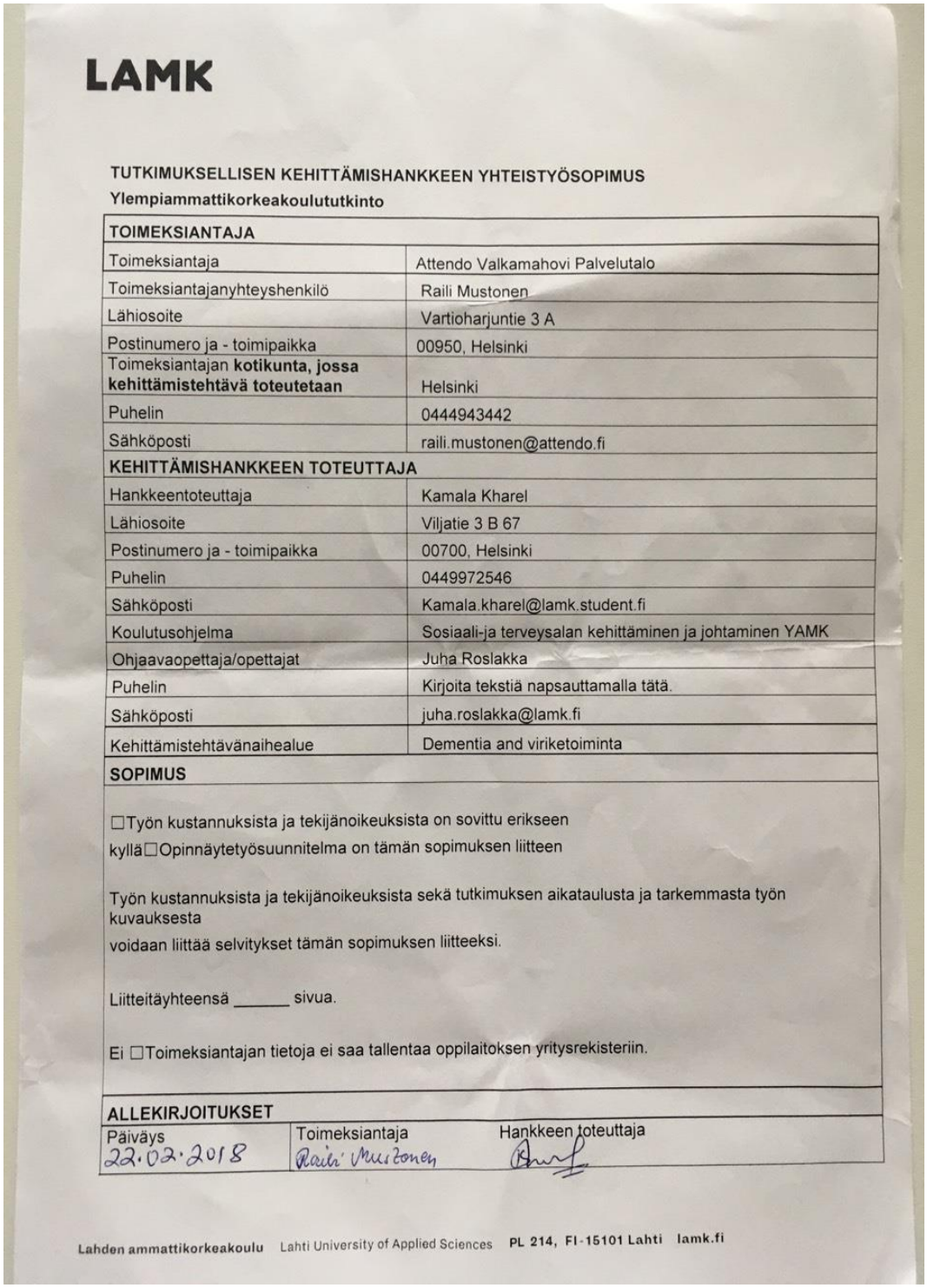
How do you think that planned recreational activities help to improve the residents' functional abilities and quality of life?

To what extent your think that the new recreational plan would reduce the stress level of the caregivers?

What are the benefits you think the organization would get after implementation of this recreational plan?

Appendix 3

Cooperation agreement for research development project:



LAMK

TUTKIMUKSELLISEN KEHITTÄMISHANKKEEN YHTEISTYÖSOPIMUS

Ylempiammattikorkeakoulututkinto

TOIMEKSIANTAJA	
Toimeksiantaja	Attendo Valkamahovi Palvelutalo
Toimeksiantajanyhteyshenkilö	Raili Mustonen
Lähiosoite	Vartioharjuntie 3 A
Postinumero ja - toimipaikka	00950, Helsinki
Toimeksiantajan **kotikunta, jossa kehittämistehtävä toteutetaan**	Helsinki
Puhelin	0444943442
Sähköposti	raili.mustonen@attendo.fi
KEHITTÄMISHANKKEEN TOTEUTTAJA	
Hankkeentoteuttaja	Kamala Kharel
Lähiosoite	Viljatie 3 B 67
Postinumero ja - toimipaikka	00700, Helsinki
Puhelin	0449972546
Sähköposti	Kamala.kharel@lamk.student.fi
Koulutusohjelma	Sosiaali-ja terveysalan kehittäminen ja johtaminen YAMK
Ohjaavaopettaja/opettajat	Juha Roslakka
Puhelin	Kirjoita tekstiä napsauttamalla tätä.
Sähköposti	juha.roslakka@lamk.fi
Kehittämistehtävänaihealue	Dementia and viriketoiminta

SOPIMUS

☐Työn kustannuksista ja tekijänoikeuksista on sovittu erikseen
kyllä☐Opinnäytetyösuunnitelma on tämän sopimuksen liitteen

Työn kustannuksista ja tekijänoikeuksista sekä tutkimuksen aikataulusta ja tarkemmasta työn kuvauksesta
voidaan liittää selvitykset tämän sopimuksen liitteeksi.

Liitteitäyhteensä _____ sivua.

Ei ☐Toimeksiantajan tietoja ei saa tallentaa oppilaitoksen yritysrekisteriin.

ALLEKIRJOITUKSET

Päiväys	Toimeksiantaja	Hankkeen toteuttaja
22.02.2018	Raili Mustonen	

Lahden ammattikorkeakoulu Lahti University of Applied Sciences PL 214, FI-15101 Lahti lamk.fi