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**NEEDS ASSESSMENT FOR ASSISTED LIVING FACILITIES
AMONG ELDERLY POPULATION**

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ABSTRACT



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<p>The purposes of the study were to determine the demanding activities of daily living and instrumental activities of daily living as well as to explore the influencing factors contributing for elders' dependency. This study was conducted to contribute the improvement of older people's safety, security and ability to cope independently at home through the usage of assisted living facilities.</p> <p>The research methodology was quantitative descriptive approach by survey design. A questionnaire with 38 variables was distributed to home care facilities and nursing homes in Kokkola, Finland. Data was collected by caregivers. The number of participants was 96 elderly living in home care facilities and in nursing homes and 79 filled questionnaires was collected. The response rate was 82.3%.</p> <p>The results of the study suggested that elderly dependency is influenced by age, sex and chronic illness. The most demanding activities of daily living were bathing, dressing, bladder control and moving on the stairs. On the other hand, the most demanding instrumental activities of daily living were house work, laundry, shopping and money management. Assisted living facilities is directed to address the demands of activities of daily living and instrumental activities of daily living by resolving the elderly needs.</p>		

Key words

Activities of daily living, assisted living facilities, dependency, elderly care, instrumental activities of daily living.

ABBREVIATIONS

ADL	Activities of Daily Living
ALF	Assisted Living Facility
CHD	Coronary Heart Disease
EU	European Union
GDP	Gross Domestic Product
HDI	Human Development Index
IADL	Instrumental Activities of Daily Living
WHO	World Health Organization

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1 INTRODUCTION

Aging is a normal and inevitable physiologic process. The definitions of an elder or 'elderly' person correlate with the chronological ages of 50 to 65 years, depending on the setting, the region and the country (World Health Organization 2011). It has been observed with changes in the cells, tissues, organs and organ system that tend to have an effect on body structure and function (Linto & Lach 2007, 135-136). Elderly people have chronic condition and associated function and cognitive limitations that require assistance with Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) (Konetzka, Spector & Limcangco 2007). Today, more Assisted Living Facilities (ALF) are needed due to the number of healthier older people is increasing and with improved health care. Moreover, the elderly wants to stay independent as long as possible, using minimal assist when needed. (Linto & Lach 2007, 952-955.)

The main goal of this study was to assess the needs for assisted living facilities among elderly population. The purposes of the study were to determine the demanding ADL and IADL as well as to explore the influencing factors contributing for elders' dependency. The target population of the study was nurses and practical nurses caring for elderly people aged 80 and above working in nursing homes and home care facilities. This elderly group is the most vulnerable age group and needs assistance in the ADL and IADL (Delaune & Ladner 2002, 267).

The study was complemented with the ongoing project called HONKA that was undertaken in the compound of Honkaharju Nursing Home in Kokkola, Finland. The purpose of the project was to construct a living lab facility that has the model assisted living facilities. These facilities serve as a representative for the users to choose according to their demands. The results of this study will contribute to the project's objective through identifying the gaps in the daily activities. Besides that it pointed out the demanding ADL and IADL thereby develop the required assisted

living facilities. The project can also utilize the needs assessment forms (questionnaires) for this study in the future assessment.

This research is conducted using a quantitative descriptive study by survey design. A questionnaire was used to carry out the study. The questionnaire was constructed from standard geriatric assessment index. For instance, Barthel Index was used for ADL and Lawton and Brody Index for IADL. The collected data was analyzed with the statistical program SPSS. Moreover, frequency distribution, percentage, summation and correlations test were used to analyze data. Ninety six questionnaires were distributed and 79 filled questionnaires were collected. Therefore, the response rate was 82.3%.

In general, the finding showed that the most demanding ADL are bathing, dressing bladder control, and moving on the stairs. Likewise, the most demanding IADL were house work, laundry, shopping, meal preparation and money management. Dependency of elders is influenced by age, sex and chronic illness. ALF directed in addressing these demanding ADL and IADL help resolve elderly need.

2 ELDERLY CARE IN FINLAND

The proportion of the elderly population is growing throughout the world, with more developed countries leading the process. According to World Health Organization (WHO), the global populations of people aged above 65 were 390 million in 1998 and this figure is estimated to double by the year 2025. Moreover, the increment number of older aged 80 or above is expected to be more dramatic, being more than fivefold. (WHO 2011.)

According to European Central Bank Monthly Bulletin (2006), approximately 20% of the population with functional limitations aged 65 and above living in European countries receives long term care in an institution. Moreover, nearly 30% receive formal care at their own home. However, the remaining 50% receive no formal care and either rely on informal care or receive no care at all.

Finland is among the industrialized countries. According to the World Bank's report, the country's rank in the Human Development Index (HDI) is among the highest. HDI is a tool for assessment of comprehensive economic development which consist of Gross Domestic Product (GDP) and social and health status indicators. (Dowrick, Dunlop & Quiggin 2002.)

Finland's expenditure for health care services constitutes 11.7% of the country's GDP. Increasing number of elderly population give rise to high expenditure for health and social services. According to the project of Helsinki City Health Department (2003), 16.8 % of the whole population consists of elderly people (65 years and above) in Finland. It has been estimated that Finland is one of the fastest ageing countries within the European countries. Moreover, in 2020 one-fifth (20%) of the population will be above 65 years old. The number of Finns above 75 years of age is expected to increase by 50% by the year 2020.

Older people are living healthier and life expectancy is rising almost yearly. The life expectancy was 79.3 years in 2010. Increase in life expectancy of the elderly population stimulated the actions of protecting functional independence in social health. The majority of the elderly people live independently at home and viewing ageing mainly in a positive way. A growing number of the older people live in different kind of institutions such as residential, nursing homes and home care nursing. (Helsinki City Health Department 2003.)

Local and Regional Government Finland (2009) stated that local authorities and municipalities have a responsible role in providing welfare services for their residents. The main Finnish policy for the elderly is assist to live independently in their own homes for as long as possible. Residential services and different forms of institutional care are offered to people who can no longer manage to live at home. (Local and Regional Government Finland 2009.)

The Finnish elderly care system covers all citizens regardless of income, insurance or other personal circumstances. It provides comprehensive medical and social services. In Finland, elderly care services include home care, support services, informal care, preventive home services, housing service and 24 hour care in homes for the elderly and bed wards at health clinic. The largest percentage of people aged above 75 used home service by 64% in 2003. (Local and Regional Government Finland 2009.)

According to Finnish Ministry of Social Affairs and Health, home care provides nursing services and assists sick or disabled elderly people in everyday activities. Home visits are carried out regularly by social welfare and health care professionals. Preventive home visits facilitate early assessment in order to evaluate the elderly functional abilities and health status. It assists them to live independently and promote their health and wellbeing by assessing the risk factors and facilitate environmental safety. (Ministry of Social Affairs and Health 2009.)

3 NEEDS ASSESSMENT

According to Concise Oxford English Dictionary (2004), “a need is something required because it is essential or very important rather than just desirable.” A need is a discrepancy or a difference/gap between the current state regarding the situation and the desired state. A need reflects the existence of a certain issue that requires an intervention, an issue that must be dealt with. (Peterson & Alexander 2001.)

Needs assessment attempts to identify such gaps, to analyze their nature and causes and to establish priorities for future actions. Needs assessment is the process of collecting information about an expressed or implied need that could be met through different approaches. The need can be a desire to improve current performance or to correct a deficiency. A deficiency is a performance that does not meet the current standard. The needs assessment process helps the client and the service provider to specifically identify the service need or performance deficiency. (Peterson & Alexander 2001.)

Needs assessments are undertaken for a number of reasons. It is appropriate that there should be a periodic reappraisal of whether the various services and activities are relevant to continue in existing programs. Such reassessments of needs can serve several purposes. Needs assessment can be used to validate the current target populations in need of services as well as to identify new target populations with unmet needs. These can be used to refine or redefine appropriate goals, objectives, and activities of programs and agencies. In some cases, it can result in the development of new programs. (Peterson & Alexander 2001.)

4 ACTIVITIES OF DAILY LIVING

ADL includes a range of seven self-care activities such as bathing, eating/feeding, dressing, walking, transferring, controlling bladder and bowel movements (Arslantas, Unsal, Metintas, Koc & Arslantas 2009). Each ADL is closely related to each other. For instance, when a person is not able to perform one activity then, this will impact on others. ADL provides a basic framework to evaluate an older persons' ability to live independently, requiring assistance or dependent. Dependency or independency in activity of living depends on age, sex, health and illness status. (Holland, Jenkins, Solomon & Whittam 2003.)

Aging is associated with a progressive decline in the function of many organs and apparatus. This can affect old people in different ways. The physiological changes are associated with aging mean that elderly people become more prone to injury and ill health due to deterioration in the functioning of body system. (Heath & Schofield 1999, 81-83.)

Studies suggest that increasing age has an adverse effect on various human capabilities such as visual, auditory perception and mental perception. For instance, visual accommodation plays a critical role in one's visual perception and activities of daily living. Basic ADL requires muscle strength, coordination, balance, cognitive and sensory skills and adequate joint range of motion. Furthermore, age-related loss of muscles strength has a significant detrimental impact on motor performance in old age and on the ability to recover from falls, resulting in an increased risk of fracture. This leads to an increasing dependency upon others in order to perform ADL. (Mollaog̃lu, Tuncay & Fertelli 2010.)

4.1 Feeding

Feeding is essential to survival as human being and to maintain the body homeostasis. Essential nutrients are necessary to provide the energy, growth, repair of the body tissue and to maintain physiological functioning. Nutritional status is influenced by general health, mobility, chronic disorders as well as age. (Holland et al. 2003, 163-164.)

Different factors impact on elderly peoples' ability to obtain an adequate diet and maintain an appropriate nutritional status. A variety of age-related changes can affect the elderly people dietary habits. These changes include a reduction in the sensitivity of olfactory and gustatory receptors as well as alterations in the hormonal and neurotransmitter mediated regulation of hunger and satiety. The loss of teeth and ill-fitting dentures can make chewing uncomfortable. Furthermore, reduced smell and taste may tend to render food bland and unappetising. A decreased in the ability to handle food and dishes due to arthritic hands, difficulties in cooking and preparing food as well as loss of senses can create problems when feeding an older person. (Holland et al. 2003, 163-164.)

4.2 Personal cleansing and dressing

Personal cleaning includes the different activities such as washing, bathing, grooming. Dressing means to put-on and-off clothes and essential for living in different environments, social and cultural contexts. These are the personal, pleasurable and relaxed activities. It has an important role to maintain personal wellbeing. Clothing is required for physical comfort, warmth and protection. They also provide a positive self-image and makes good feeling as well as help to improve the sense of wellbeing which is very important for older people than other age groups. (Holland et al. 2003, 233-242.)

Age influences the normal condition of the skin and type of hygiene required. The skin loses its resiliency, moisture, sebaceous and sweat glands become less active with age. Sometimes, older people unable to hold a toothbrush with firm grip or manipulate brush due to musculoskeletal and nervous system alternations. Therefore, as people get older some tasks may become more difficult due to age related changes and different health problems such as arthritis. For instance, elderly people with weakening eyesight and shaking hands may make it increasingly difficult to retain their independence with conventional clothing. (Holland et al. 2003, 235-237.) Standing in bath demands a considerable degree of strength and coordination from upper and lower body. In this regards, elderly people need help to take care of their personal hygiene. (Hepherd 2011.)

4.3 Elimination

Elimination is a private activity of human beings. It is an act of excreting waste products or foreign substances through different body parts. It is necessary to remove waste product such as urine and feces from the body. Elimination can be influenced and compromised by many other activities of daily living such as mobilizing, feeding and bathing. (Holland et al. 2003, 199.)

Older people may be affected by inability to remain in control of bladder and bowel functions due to age related physiological changes such as the loss of muscular control, changes to the central nervous system and cerebrovascular disease and immobility. Older people tend to urinate frequently during the night due to changes in homeostatic mechanisms controlling the production of urine. Older people are more susceptible to urinary and faecal incontinence because of functional limitation such as immobility related with inability to reach toilet facilities and handling clothing. (Holland et al. 2003, 202-204.)

Urinary incontinence is common among older people. Multiple age-related changes occur in the lower urinary tract. For instance, collagen deposition within

the bladder wall results in a reduction in functional bladder capacity and lower urinary flow rates through a reduction in bladder elasticity. Ageing causes reduced the production of antidiuretic hormone. This problem can be managed by using catheter. (Shakespeare, Barradell & Orme 2011.)

Older people have peristalsis declines and oesophageal emptying slows. The muscle tone in the perineal floor and anal sphincter weakens, causing difficulty in controlling defecation. Furthermore, constipation and fecal incontinence are common symptom among older people. Older people are five times more likely to complain about the symptom than younger people. Many age-related problems such as decreased mobility, different medical condition, increased used of medications and changes in diet may contribute to the increased prevalence of constipation in older people. Laxatives and cathartics soften stool are used to promote peristalsis movement. (Potter & Perry 2007, 952-953.)

4.4 Moving and transferring

Mobility is important for various activities of living. It assists to complete activities of daily living such as bathing, dressing and eating. It is important to obtain basic needs and fulfill desires. Mobility is the capacity of moving within an area, be in a room, in a chair or a bed, or with in the area. The capacity of moving and transferring depends on the physical ability, functioning sensory ability and musculo-skeletal system. There are a number of age-related changes that impact on mobility of older people such as physiological changes, biological factors, person's perception and beliefs and different kind of diseases. Ageing produces changes in muscles and joints, particularly to the back and legs. Furthermore, strength and flexibility decreased markedly. For instance, falls are a common occurrence in older people and are associated with significant level of morbidity and mortality. (Holland et al. 2003, 283-303.)

The physical changes in old people impact on theirs' mobility levels such as a reduce sense of balance, reduced righting reflex and reaction time and speed of response. Immobilization of older people increases their dependence on others. (Potter & Perry 2007, 992-993.)

5 INSTRUMENTAL ACTIVITIES OF DAILY LIVING

The phrase IADL was originally introduced in 1969 by Lawton and Brody in their seminal work entitled "Assessment of Older People." IADL describes activities necessary for adaptation to the environment and emphasize community activities such as telephone use, shopping, cooking, money management, laundry and housekeeping. The activities of IADL are more cognitively influenced. IADL are activities related to independent living and involve interaction with the physical and social environment, generally more complex than personal ADL. (Spector & Fleishman 2006.)

IADL require a higher level of physical and mental ability than do ADL. IADL are less related to the ability to managing basic personal needs. They involve more complex activities that we all must do regularly to remain safely independent. A decline in the ability to manage one's IADL is a sign that a senior is beginning to lose the ability to remain independent. (Spector & Fleishman 2006.)

The IADL-score is an enhancement to ADL describing everyday functional competence and the ability to adapt independently to the environment. The assessment of functional status is critical when caring for older adults. Normal aging changes, acute illness, worsening chronic illness and hospitalization can contribute to a decline in the ability of performing tasks necessary to live independently in the community. (Spector & Fleishman 2006.)

5.1 Telephone usage

Elderly people might have difficulty operating the phone. This includes problems by dialing or pushing the buttons, hanging up incorrectly or talking into the wrong end of the phone. Underlying causes such as Parkinson, Alzheimer, dementia or

other organic diseases may compromise their capability of telephone usage. (Prieto 2008, 6-8.) Elderly with dementia often cannot remember phone numbers, cannot remember who they are talking to or hung up the phone and forgets that they are engaged in a conversation. The assessment of telephone usage constitutes operation of telephone on own initiative, ability to read telephone directory and dial numbers as well as the ability of answering the telephone when it is calling. (Jefferson, Paul, Ozonoff & Cohen 2006.)

5.2 Money management

Managing financial matters independently involves budgeting, paying bills, visiting to bank, writing checks as well as collecting and keeping track of income. Handling money and understanding its value requires the ability to mentally process complex concepts such as recognizing money, appreciating its value and noting down on the money spent monthly. (Prieto 2008, 20.) For instance, it is difficult for elder patient with Alzheimer's disease to process many of these concepts. Problems with financial management can become apparent in many ways. Paying bills twice or not paying at all are common signs in mild dementia. (Prieto 2008, 80-84.)

As the dementia becomes more established, they exhibit unusual behaviors with their money. For instance, they may leave their cash out in the open, hide money around the house, offer money away to family or strangers or refuse to keep money in the bank. They may also develop irrational fears about having no money or running out of money. There are also difficulties handling the money and completing basic financial transactions due to trouble counting or adding coins and bills or understanding their value. General banking procedures such as deposits and withdrawals may also present difficulties. Consequences such as losing money, forgetting to pay bills or paying more bills could also happen. (Jefferson et al. 2006.)

5.3 Preparing meals

Preparing meals involves planning meal, gathering ingredients, opening cans, jars and packages, using kitchen equipment safely and other activities such as washing if needed, cutting and cooking (Prieto 2008, 70-71). Alzheimer's disease can affect the ability to create multiple decisions one after another. This type of decision making is needed in order to prepare food ingredients. These difficulties may result in low motivation to cook. Safety can become a concern due to memory loss or decreased attention span. (Heath & Schofield 1999.)

5.4 Shopping

Shopping involves visiting to stores and purchasing necessities such as food, clothing and medication. Diseases such as Alzheimer impairs the cognitive functions that enable a person to know list of things to buy, writing a list and to locate items in the store. It is difficult for such patients when shopping to remember items they needed or already have at home. All of these difficulties may lead to feelings of frustration and stress so that the person no longer enjoys shopping. Shopping becomes a big concern for patients with trouble in handling money. For instance, they do not understand the price of items or the amount of change should be provided and may even leave the store and forgetting to pay for the groceries. (Heath & Schofield, 1999.)

5.5 Laundry

Laundering involves washing clothes and to smooth with flat-iron or mangle. Diseases such as Alzheimer impairs cognitive functions that enable a person to know when selecting clothes to wash, placing them in the washer, adding washing chemicals and setting the time. The ironing or mangling task also require

cognitive thinking that the person may damage the cloth or other objects surrounding or more importantly, may burn him/her. (Heath & Schofield, 1999.)

5.6 Essential house work

The state of a person's home or yard provides valuable information about the level of functioning of the individual. Elderly may need a reminder to perform the chore or require direction to carry out chores properly or safely. However, they may refuse assistance which can result in the chores being completed incorrectly and thereby creating more work for the caregiver. For example, they may be able to sweep the floors but unable to vacuum. Often, they may stop performing their chores because they may find it overwhelming or they do not feel motivated any longer. (Heath & Schofield 1999.)

6 DEMANDING ADL AND IADL

The study conducted by Roehrig, Hoeffken, Pientka & Wedding (2006), the most demanding ADL and IADL activities are identified. The study evidenced that four items 'ascend and descend stairs', 'urine continence', 'walking on a corridor' and 'taking a bath or a shower' recognize 95.3% of the patients with limitations in the ADL. According to the study the two items 'bowel continence' and 'transferring from bed to chair' are also limiting ADL. Strong correlation exists also between the two items of ADL 'ascend and descend stairs' and 'walking on a corridor' and the two items of IADL 'shopping' and 'food preparation'.

It has been discovered that 57.8% of patients with limitations in the IADL also had limitations in the ADL. On the other hand, patients with limitations in the ADL had a 73.3% chance to be limited in the IADL. Moreover, only 20.9% of the patients without limitations in the ADL had limitations in the IADL and 11.7% of patients without limitations in IADL were limited in the ADL. (Roehrig et al. 2006.)

7 ASSISTED LIVING FACILITY

ALF is living arrangement that people with special needs especially older people with limitations utilize a facility that provides help with everyday tasks such as bathing, dressing, and taking medication. It is based on the objectives of meeting customers' needs that promotes independency and dignity and allowing customers to age in an environment like home. It is another arrangement for delivering long-term care service that combines care and housing in a congregate but less restrictive setting than a nursing home, i.e., assisted living or adult care homes. An assisted living setting combines a homelike environment and the capacity for health-care services, while offering private living space and greater control and choice. (Cleary 2003.)

The Assisted Living Federation of America defines this brand of long-term care as the combination of housing, personalized support services and health care designed to meet the individual needs of residents who require help with ADL and IADL. (Cleary 2003.)

ALF is also the part of elderly residences with level of care ranging from independent living apartments to nursing home care. It provides residential housing and personalized supportive services including non-acute health care services. (Linto & Lach 2007, 863.) ALF has an important contribution to the care of older people, both in institutions and at home. ALF can improve older people's safety, security and ability to cope at home. (Miskelly 2001.) For instance, visual accommodation plays a critical role in one's visual perception and activities of daily living. Age-related physiological changes increase risk to older people's safety and independence. (Mollaoglu et al. 2010.)

8 FACTORS INFLUENCING DEPENDENCY

The study conducted by Mollaog˘lu et al. (2010) has been introduced that elderly people mobility is influenced by age, gender and chronic diseases. For instance, chronic diseases increase the level of dependency in the ADL. A study conducted by Arslantas et al. (2009) related to life quality and daily activities in elderly people, has explained the relationship between life quality and others factors. Women were more dependent in particular on IADL issues such as housework, shopping, traveling, transporting and bathing. Furthermore, the situation for men revealed that they are more dependent on meal preparation. Factors such as old elderly, bedridden and illiterate women who have medically diagnosed disease have a contribution to make the quality of life worse. (Arslantas, Unsal, Metintas, Koc, & Arslantas 2009.)

A study conducted by Hacıhasanoglu Yildirim, & Karakurt (2011) has explored that different other factors that have statistical relationships between aging and ADL. For instance, factors such as being old, a female and having a chronic disease can increase the level of the dependency in the ADL. The depressive symptoms more strongly affected higher ADL among the old-old adults compared to the young. (Kondo, Kazama, Suzuki & Yamagata 2008.)

A study conducted by Pennathur, Sivasubramaniam and Contreras (2002) stated that age and gender both have significant effects on daily living tasks. Bayer and Harper (2000) survey shown that older population (65+) have great difficulty in performing one or more common self care activities such as eating, using toilet, dressing and bathing. Moreover, ill health, physical or psychological disability in all ages may impact on an individual's ability and become independent on the daily activities.

Stenzelius, Westergren, Thorneman and Hallberg (2005) conducted a study in relation to quality of life and needs of help among older people with a mean age of

84 years. It revealed that women are more dependent in ADL and IADL compare to men. Furthermore, dysfunction in mobility and psychological aspects observed to be the most prominent factor in determining low quality of life and being in need of help in daily living activities.

Kabir, Parker, Szebehely and Tishelman (2001) explored that increasing age has an effect with increased use of help in performance of all the ADL and IADL tasks. Furthermore, elderly women need more help in certain ADL tasks such as taking medication, toileting and dressing. However, elderly men need more assistance in IADL tasks than women, apart from shopping.

9 PREVIOUS RESEARCH

The previous research revealed that the aging situation has statistically significant inverse relationship with the accomplishments of daily living. (Mollaog̃lu et al. 2010; Arslantas 2009; Hacıhasanog̃lu et al. 2011.) As aging is a physiologic process which happens gradually, the situation in aging corresponds with gradual dependency in the ADL along the course of time. (Hacıhasanog̃lu et al. 2011.)

A study conducted by Hacıhasanoglu et al. (2011) in Turkey has revealed that there are statistical relationships between aging and the ADL. The study generated different other factors that have statistical relationship with aging. For instance, having a chronic disease in old age can worsen the level of dependency in the accomplishment of the ADL. It has shown that lack of visits by relatives has statistically significant relationship with the level of loneliness.

A study conducted in life quality and daily life activities in elderly people by Arslantas (2009) in Turkey, showed that statistical relationship between life quality and other factors. For instance, quality of life is worst among old elderly, bedridden, illiterate woman who has medically diagnosed disease. As indicated above, gender has statistical significance in the results of the Arslantas's (2009) study. Women were more dependent in particular on IADL issues such as housework, shopping, traveling, transporting and bathing. On the other hand, the situation on men revealed that they are more dependent on meal preparation. In the majority of the ADL, gender has no influence. These include activities such as dressing, toileting, eating, urinary and bowel continence.

Demographic variables also have statistically valid relationships between aging and the ADL. For instance, study conducted by Mollaog̃lu et al. (2010) in Turkey with objective of examining mobility, disability and life satisfaction in elderly people living in nursing home residences revealed that elder's mobility is influenced by

age, gender and chronic diseases. Disability is a factor that has a significant effect on the life satisfaction of elderly people.

In the studies conducted by Mollaog̃lu et al. (2010) and Arslantas's (2009) demonstrated there existed statistical relationship between chronic illnesses and increased dependency in ADL. According to Rioux (2005) on "The Well-Being of Aging People Living in Their Own Homes" elderly people has demonstrated their preference staying at homes than living in institutions. The results of this study had valid statistical significance. Linton and Lach (2007) stated that home safety problems have major impact on elderly's daily lives. Among the most encountered safety problems were falls and driving. Falls were common safety problems due to cognitive loss and decline in physical functioning.

10 RESEARCH PROBLEM

The main goal of this study was to assess the needs for assisted living facilities among elderly population. The purposes of the study were to determine the demanding ADL and IADL as well as to explore the influencing factors contributing for elders' dependency. The research problem aimed to provide answers to the following questions:

1. What are the demanding Activities of Daily Living (ADL) /Instrumental Activities of Daily Living (IADL) in elderly care?
2. What are the associated factors influencing dependency of elders?

11 IMPLIMENTATION OF THE RESEARCH

The study was conducted in Kokkola, Finland. According to Kokkola City Administration (2010), the city's total population was 45,896. The target population for the study was nurses and practical nurses caring for elderly people age 80 and above working in nursing homes and home care facilities. Statistical information from the same source indicated the number of people above the age of 80 was 2,045 which constitute 4.5% of the total population. Among these females were 23,382 and males were 22,514.

The rationale for choosing this age group was because this was the most vulnerable age group that needs assistance in ADL and IADL (Delaune & Ladner 2002, 267.) Besides that, Jemes (2004) indicated that 31% of people within the age group of 80 – 84 and 50 % of people above the age of 85 need assistance for ADL. Moreover, Jemes (2004) discovered that the average year of residents profile in ALF has been 84 years for female and 82 years for male.

11.1 Study design

Quantitative study design was used in this study. A questionnaire was developed and used for collecting data. The questionnaire was developed from standard indexes and tools that are developed for the use of geriatric functional assessment. The questionnaires included 17 closed questions and five background questions. A convenient sampling technique was used to ease the access of elderly people. Data was collected from elderly people who are living in nursing home and home care facilities. The researchers distributed 96 questionnaires with the knowledge and support of Kokkola City Administration. The questionnaire was first developed in English language and then translated to Finnish by the help of the Finnish teacher and revised by the research advisor to confirm the technical language usage in the study.

11.2 Data collection

Data was collected by nurses and practical nurses (caretakers) who know the elder's situation for evaluating ADL and IADL parameters included in the questionnaires. The variables and hypothesis were a daily routine words and terminologies for the caretakers. There was no ambiguity encountered to fill the questionnaires and the data was filled neatly. In particular, the inquiries on ADL and IADL variables were filled without missing values.

Data was collected from nursing home and home care facilities that operate in Kokkola. Stamped postages were distributed together with questionnaires for recollection of the filled questionnaires from each facility. An amount of 14 postages that contain 79 filled questionnaires were collected. Questionnaires were filled and returned to the researchers through Unit of Health, Welfare and Culture, Centria University of Applied Sciences. The postages and individual questionnaires were coded and the information was encoded to SPSS data processing software. Rechecking of the original information was possible as codes were provided to the individual questionnaires. The encoded information was analyzed by using IBM SPSS version 20 and MS-Excel 2010 programs.

An inclusion criterion was set before analyzing the data. These include variables such as age or sex must be without missing value and age limit must be greater than or equal to 80. Moreover, only those variables that met the normality test (kurtosis and skew-ness test) involved in data analysis.

11.3 Ethical considerations

Ethics has been described as a systematic attempt to understand moral conceptions. It consists of ethical rules and principles, virtues and values. The most important ethical consideration is the respect for human dignity such as the right to self-determination. (Parahoo 2006.)

The researchers requested permission to Kokkola city administration to conduct the study. The responsible unit of the city's administration wrote a correspondence letter to home care and nursing home facilities through ensuring anonymity of the participants, confidential handling of the data collected and a confidential disposal of the data after the thesis accepted. Besides that the title and purpose of the study, research questions and the expected duration of answering the question as well as informing about voluntary participation in the study was stated. Moreover, different kinds of information were obtained from the HONKA project before commencing the study.

The collected data was used only for the intended purpose of the study; the confidentiality and anonymity of participants were up hold throughout the process as promised by the researchers. Moreover, researchers were not in contact with the respondents. The data of the study was collected by the nurses. The researchers did not collect any forms of personal identification such as address and social security numbers during the research work. Therefore, the anonymity of the participants were uphold throughout the research work. The researchers' telephone number and electronic mail address were delivered to the data collectors in case of enquiries from the participants.

The results obtained from the data collection were handled with confidentiality and the researchers will discard entire data gathered after thesis publication. The researchers followed the thesis guidelines provided by the Centria University of Applied Sciences for securing permission to conduct the research. The questionnaires were prepared in English language and then, it was translated to Finnish language by a professional language instructor in order to limit translation errors.

In this study, previous studies were achieved through reliable sources such as Ovid, Medline and SAGE and focused on evidence based. Research contains questioners regarding with socio-demographic features such as age, gender, marital status, education and so on. On the other hand, everyday activities are

also examined by using the ADL and IADL scales. SPSS was used to analyze the information collected in this study.

11.3.1 Reliability

Reliability is the extent of an instrument yields consistent responses between tests. There were various tools used to keep the reliability of this thesis work. Normality test was carried out for variables in the inclusion criteria. In this regard, an SPSS Version 20 was used to evaluate the Skewness and Kurtosis Tests ($-2 \leq x \leq 2$) applied for all 38 variables which resulted in only 24 variables were normally distributed. The frequency distribution results also indicated some inconsistencies for those variables not normally distributed. Correlation tests with Spearman's Correlation Coefficient (ρ) were also carried out between demographic indicators (independent variables) and ADL, IADL and chronic illnesses (dependent variables). Furthermore, the results in frequency distribution showed consistently related in correlation tests. (Long & Johnson 2000.)

11.3.2 Validity

Validity is the degree to which a study accurately reflects or assesses the specific concept to be measured by the researchers. The researches assessed the needs of elderly people who were dependent or needs some help in the activity of daily living. Therefore, the researchers used a questionnaire to assess the level of dependency for recommending appropriate ALF. The questionnaire was constructed from Standard Geriatric Assessment Index that was being used internationally. Many previous accomplished researches indicated variables such as age, gender and chronic illness were factors in order to determine dependency. Therefore, demographic variables, presence of chronic illness as well as ADL and IADL Indexes were used to assess the dependency of elders in this study. (Long & Johnson 2000.)

12 FINDINGS OF THE RESEARCH

The study was carried out in Kokkola, Finland. A total of 96 questionnaires were distributed and 79 filled questionnaires were collected. Hence, the response rate was 82.3%. Four questionnaires didn't meet the inclusion criteria: one questionnaire was not filled the age data, two others were filled the age under 80 and one was not filled the gender data. Therefore, the analysis of the research was performed with 75 questionnaires that meet the inclusion criteria. Information of demographic factors such as age, gender, marital status, education level and loneliness level as well as the presence of chronic illness were collected.

TABLE 1. Frequency distribution of demographic data and chronic illness.

Variables	Frequency	Percent	Valid Percent	Commutative Percent
SEX				
Male	27	36	36	36
Female	48	64	64	100
MARITAL STATUS				
Married	24	32	32.4	32.4
Not Married	14	18	18.9	51.4
Widow	36	48	48.6	100
Missing Value	1	1.3		

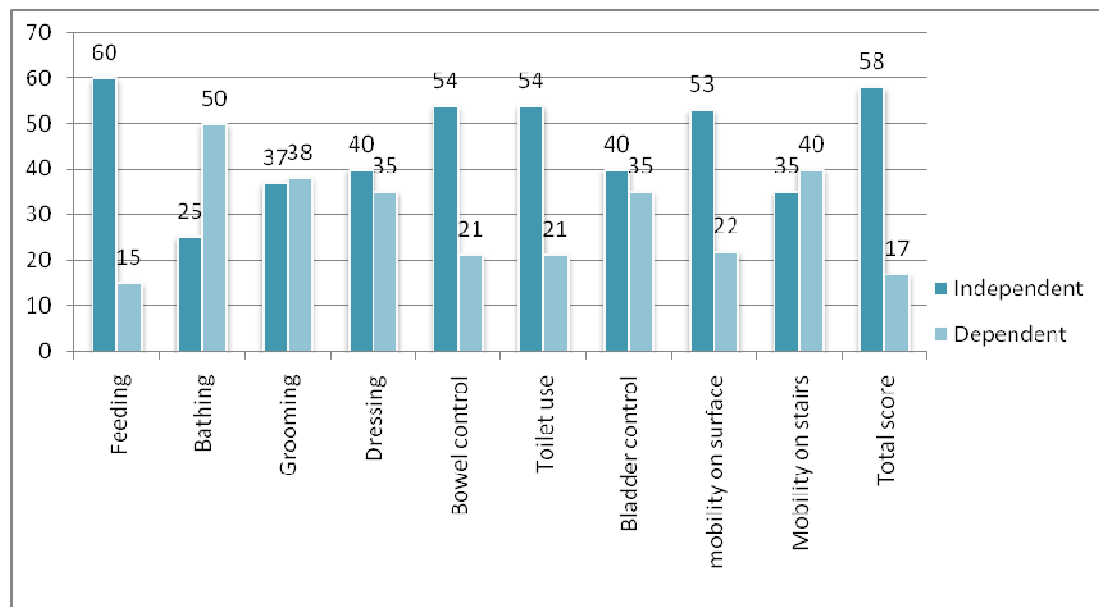
Variables	Frequency	Percent	Valid Percent	Commutative Percent
LEVEL OF LONLINESS				
Alone	43	57.3	57.3	57.3
Live with partner	24	32	32	89.3
Live with Children	6	8	8	97.3
Live with siblings	2	2.7	2.7	100
CHRONIC ILLNESS				
Coronary Heart Disease	31	41.3	41.3	6 missing value
Hypertension	45	60	60	
Alzheimer	25	33.3	36.2	
Diabetes type I or II	28	37.3	37.3	
Heart Failure	24	32	32	

Table 1 reveals that 48 out of 75 clients (64%) were females. The mean age of the respondents was 85 years and standard deviation was 4.723. The respondents consisted of, widow (48.6%), married (32.4%) and unmarried (18.9%). The highest percentage of the respondents lived alone (57.3%) and 42.7% lived with their family members. The most prevalent chronic illness was hypertension (60%).

12.1 Demanding ADL and IADL in elderly care

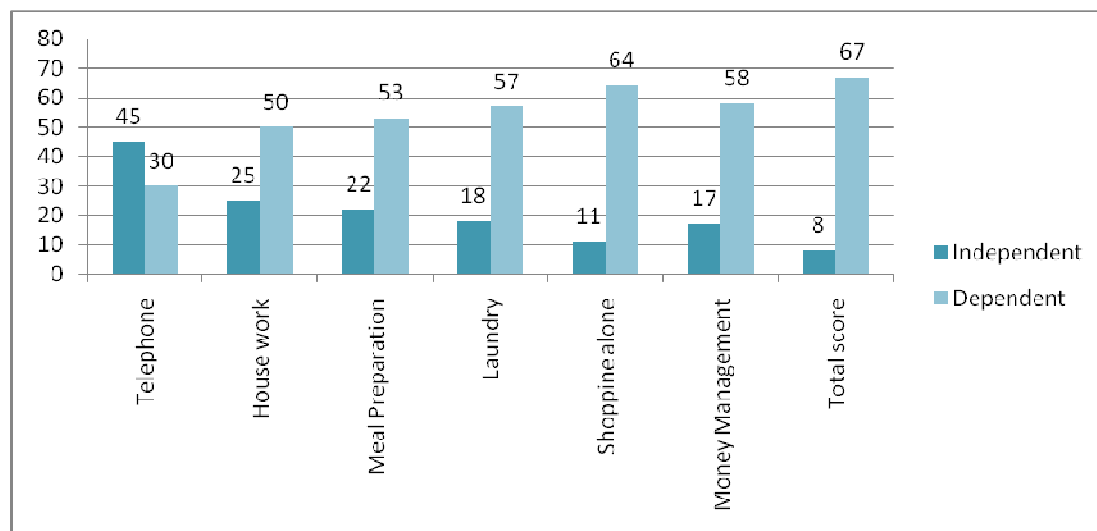
The results of this study demonstrated that elderly people have demanding ADL and IADL. Activities such as “bathing” (66.7% dependent), “dressing” (55%), “bladder control” (53.3%) and “mobility on stairs” (53.3%) were among the most demanding ADL whereas the activities such as “shopping” (85%), “house work”(80%), “money management” (77.3%), “laundry” (76%) and “meal

preparation" (69.7%) were among the most demanding IADL. Hence, the majority of elderly have dependency in IADL than ADL.



GRAPH 1. Demanding ADL.

Graph 1 reveals that 58 out of 75 clients (77.3%) had limitations in ADL. The majority of the respondents (n = 60, 80%) were independent in the ability of feeding. On the contrary, the high percentage (n= 50, 66.7%) of the elderly was dependent for bathing activity. Above half of the elderly (n=38, 50.7%) were dependent for grooming activity whereas above half (n=40, 53.3%) were independent for dressing activity. More than two third (n=54, 72%) of the elderly were continent for bowel activity and more than half of the elderly were continent (n=40, 53.3%) for controlling bladder. More than two third (n=54, 72%) were independent in using toilet.



GRAPH 2. Demanding IADL

Graph 2 shows that 67 out of 75 respondents (89.3%) had limitations in IADL. For instance the activity of “telephone use” in which 45 out of 75 respondents (60%) were independent, the respondents in all other IADL validated more dependent. The activity “Shopping alone” was appeared the most dependent IADL activity (n=64; 85.4%) followed by “money management” (n=58; 77.4%) and then “Laundry work” (n=57; 76%). Majority of the respondents were dependent for “house work” (n=50; 70%) and “meal preparation” (n=53; 70.6%).

12.2 Factors influencing dependency

Variables such as age, gender and chronic illness have shown connection with ADL and IADL. Previous study also revealed the same result. (Hacihasanoglu et al. 2011; Arslantas et al. 2009; Mollaoglu et al. 2010.)

12.2.1 Effect of age on ADL and IADL

The results of the study have revealed that age has more correlation with IADL than ADL. According to Spearman’s Correlation Coefficient (ρ), age is

significantly correlated with two ADL and two IADL as well as highly significant with three IADL.

TABLE 2. Correlation test results between age, ADL and IADL

Variables	N	Spearman's rho	Significance	Strength
ADL				
Bathing	75	-.268	0.023	*
Mobility on the stairs	75	-.231	0.048	*
IADL				
House Work	75	0.398	0.00	**
Ability to shop alone	75	0.389	0.01	**
Money Management	75	0.365	0.01	**
Meal Preparation	75	0.268	0.20	**
Laundry	75	0.244	0.35	**

* Satisfactory level of correlation among the variables;

** Strong correlation among the variables

Table 2 describes the correlation between “age” and ADL. Activities such as “bathing” and “mobility on the stairs” was significant at the level of $p = 0.05$. The correlation of “age” with IADL activities such as “meal preparation” and “laundry” was significant at the level of $p = 0.05$. The correlation between “age” and IADL activities such as “the ability to do house work”, “shopping alone” and “money management” has revealed very high correlation at the level of $p = 0.05$.

12.2.2 Gender, ADL and IADL

The results of the study revealed that males are more dependent for ADL activities than females. The frequency distribution of the study revealed that males are dependent for 3 ADL activities while females are dependent for one ADL activity. Males ($n=14$; 51.8%) were more dependent or need help than females ($n=21$; 43%) for dressing activity, likewise for bathing activity ($n=20$; 74%) and for

controlling bladder activity (n=15; 55.6%). On the other hand, females are dependent for mobility on the stairs (n=27; 56.2%) than males (n=13; 47.1%).

In general, females were dependent in the majority of IADL than males. The frequency distribution results of the study shows females were dependent for house work activity (n=40; 83.9%), for shopping (n=42; 87.5%) and for the activity of money management (n=38; 79.2%) whereas males were dependent for the activity of laundry (n=23; 85.2%).

12.2.3 Effects of chronic illnesses with ADL and IADL

There exist statistically significant correlation between chronic illnesses and ADL and IADL. Coronary Heart Disease (CHD) is correlated with five ADL items namely feeding, grooming, bladder control, mobility on level surface and mobility on stairs. Moreover, CHD is correlated with two IADL items such as house work and meal preparation. The correlation was significant at the level of $p= 0.05$ with Spearman's Correlation Coefficient.

TABLE 3. Correlation test results between chronic illness, ADL and IADL

Variables		N	Spearman's rho	Significance	Strength
ADL	CHD vs. Grooming	75	.233	0.045	*
	CHD vs. Mobility on the stairs	75	.250	0.032	*
	CHD vs. Mobility on level surface	75	.249	0.031	*
	CHD vs. bladder control	75	.243	0.035	*
	CHD vs. feeding	75	.381	0.001	**
IADL	CHD vs. House Work	75	-.289	0.012	*
	Alzheimer vs. Money Management	75	-.345	0.004	**
	CHD vs. Meal Preparation	75	-.270	0.019	*
	CHD vs. telephone use	75	.256	0.027	*

* Satisfactory level of correlation among the variables;

** Strong correlation among the variables

Table 3 describes the correlation between chronic illnesses, ADL and IADL. The correlation between CHD and feeding has discovered very high correlation at the level of $p= 0.05$. The correlation between CHD and ADL activities such as grooming, bladder control, mobility of level surface and mobility on stairs was significant at the level of $p= 0.05$. Moreover, the correlation between CHD and IADL activities such as house work, meal preparation and telephone use was significant at the level of $p= 0.05$. Chronic illness such as Alzheimer has statistically high significant correlation with the ability to manage money at the level of $p= 0.05$.

13 DISCUSSION

The purpose of the study was to assess the demanding ADL and IADL in elderly care and to identify the influencing factors contributing for dependency of elders. Furthermore, this study also recommends the appropriate ALF to resolve the problems.

A number of findings were identified from the obtained results. The results demonstrated that the most demanding ADL were bathing, dressing, bladder control and moving on the stairs among elders. On the other hand, the most demanding IADL were shopping, house work, laundry and money management. The study explored the most demanding ADL activities were ascend and descend stairs, urine continence, walking on a corridor and taking a bath or a shower which is similar to the results obtained by Roehrig et al. (2006). Moreover, the two IADL items shopping and food preparation identified that 97.4% of elders with limitations in IADL.

Previous researches have shown that the most demanding IADL items are shopping, meal preparation, housekeeping and laundry and these four items were used for an assessment of the IADL among elders (Overcash et al 2005; Roehrig et al 2006.) It was reported in other studies that dependency was the highest for control of bladder, use of stairs, shopping and having a bath (Ulusel et al. 2004; Gunes, et al. 2005; Guler et al. 2009.)

The results explored that dependency of elders is influenced by age, sex and chronic illness. In this study, it was investigated that the level of dependency in ADL and IADL increased significantly as age increased. In many previous studies examining the elderly in performing their daily activities, it was discovered that the level of dependency in ADL increased with age significantly (Hacihanoglu et al. 2011; Arslantas et al. 2009; Mollaoglu et al. 2010). Spearman's rank correlation was examined between the demanding ADL/IADL items and age. The results presented highly significant correlations between age and two ADL items such as ability of bathing and mobility on the stairs. On the other hand, it presented very

high correlation with five IADL such as ability to do house work, meal preparation, laundry, shopping alone and money management.

Another variable affecting elder's dependency significantly was the sex. The result of the relationships between sex and ADL/IADL is similar with the study of Roehrig et al. (2006) that women had significant higher frequencies of limitations in shopping and taking a bath or a shower than men. The result showed that males are more dependent in ADL than female for instance, bathing dressing and bladder control. On the contrary, females are more dependent in IADL such as shopping, money management and house work. Arslantas et al. (2009) stated that eating and shopping were the most leading activities to dependency. Moreover, they also discovered that women are more dependent in cleaning, shopping, transportation and bathing. On the other hand, men were more dependent in food preparation.

This study has shown that another variable affecting dependency is the chronic illness. The most frequent diseases were hypertension (60%), CHD (41.3) and diabetes (37.3). The study conducted in China explored hypertension as the most frequent chronic disease (Beydoun & Popkin, 2005) similar to the results of this study. This finding is similar to many other results (Hacihanoglu et al. 2011; Arslantas et al., 2009) stated that old people with chronic diseases experienced significant dependency in performing their ADL as compared to those with no chronic disease.

It was noticed in the study of Sanbaz and Tel (2006) that a large portion of the elderly had problems in performing their activities for reasons such as loss of sight and hearing, skeletal system diseases and cardiovascular diseases. In this study, coronary heart disease was found correlation in five ADL including feeding, grooming, bladder control, mobility on level surface and mobility on stairs. In addition, it was correlated with two IADL namely house work and meal preparation. In this study, Alzheimer was correlated with ability to manage money. A study conducted by Wlodarczyk et al. (2003) stated that Alzheimer's disease affects the cognitive function and capacity of independent living of the elderly. Hypertension has correlation with feeding and telephone use.

It was observed that ALF need to be directed towards those demanding ADL and IADL help resolve elderly problem. The researchers explored that appropriate ALF need to be developed based on demanding ADL and IADL. In an aging society, it is extremely important to develop devices that can support and aid the elderly in their daily life. A study performed in United Kingdom discussed the devices which facilities bathing and showering. It can help the older person to bathe and shower more safely and independently. For instance, there are various bath designs that incorporate an access door in the side of the bath including bath board, swiveling bath seat, wall-mounted and free standing shower stools. (Hepherd 2011).

The findings have important implications of practical support to older people at home. It creates the awareness of the demanding ADL and IADL among elderly people. It also pointed out the most required ALF according to elders' demand and need. Appropriate ALF would be highly beneficial to elderly people to stay at home and able to perform everyday tasks with minimal help. It helps to maintain strong value for independences among older. Furthermore, the HONKA project can also utilize the need assessment process of this study for future use. The finding of this study will be used for planning interventions to assist elders and help them to live independently among nursing home and home care facilities areas.

This study has maintained its validity through the usage of standardized measuring index. Validity was assessed in terms of questionnaire's content and constructs validity. For instance, the use of Barthel Index for the assessment of ADL and Lawton and Brody Index for IADL was an internationally accepted geriatric assessment tools. Besides that, demographic variables and the presence of chronic illness were included in the data collection. This suggests the comprehensiveness of the questionnaire. As regards the construct validity, research theory, variables, hypothesis and results were supported by reliable sources. The results of the research were similar with previous research.

Various tools were used to maintain the reliability of the measurements. Frequency distribution, normality test of the variables, percentages, correlation tests and other different data analysis tools were used with the help of IBM SPSS 20 and Microsoft-Excel 2010.

Further research is recommended for those correlation results between CHD and ADL/IADL. Hence, the correlation of CHD with feeding was evidenced with high correlation. Besides that the correlation results of this chronic illness with grooming, bladder control, house work, meal preparation, and telephone use needs further research in the future.

14 CONCLUSIONS

The goal of this study was to identify the demanding ADL and IADL in elderly care and to provide information about the appropriate ALF to assist elders to perform daily activities. Furthermore, this study also discovers the influencing factors contributing for dependency of elders.

The methodology used in this study was quantitative descriptive approach by survey design. The collection of data was carried out over a period of five weeks. The questionnaires were distributed in nursing homes and home care facilities areas. Nurse and practical nurses filled the information required in the questionnaires. The filled questionnaires were sent by post to the researchers.

It has been determined that ALF should be directed towards the most demanding ADL and IADL to assist elders to perform daily activities independently. Moreover, age, sex and chronic illnesses were the variables that increased the elders' dependency. 77.3% of the elderly had dependency and 22.7% had independency in their daily life activities.

The ADL activities that restrained them the most were bathing, dressing, bladder control and mobility on stairs. While, the demanding IADL were shopping, house work, money management, laundry and meal preparation. Being old, sex and having chronic illnesses were identified as affective factors for dependency. In the view of this result, it is suggested that ALF need to be constructed based on the elders' demand and help them to stay at their own home as long as possible.

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QUESTIONER**I. SOCIO-DEMOGRAPHIC INFORMATION**

1. Age:
2. Gender:
3. Marital Status:
4. Educational Status:
5. Living:

II. INDEXED DEPENDENCY IN THE ACTIVITIES OF DAILY LIVING

Score

A. FEEDING (Choose only one among the following)

- 0= Unable
- 5= Needs cutting, spreading butter etc. or requires modified diet
- 10= Independent

B. BATHING (Choose only one among the following)

- 0= Dependent
- 5= Independent (or in shower)

C. GROOMING (Choose only one among the following)

- 0= Needs care with personal care
- 5= Independent face/hair/teeth/shaving

D. DRESSING (Choose only one among the following)

- 0= Dependent
- 5= Needs help but can do half unaided
- 10= Independent

E. BOWELS (Choose only one among the following)

- 0= Incontinent (or needs to be given enemas)
- 5= Occasional accident
- 10= Continent

F. BLADDER (Choose only one among the following)

- 0= Incontinent, or catheterized and unable to manage alone
5= Occasional accident
10= Continent

G. TOILET USE (Choose only one among the following)

- 0= Dependent
5= Needs some help, but can do something alone
10= Independent (on and off, dressing, wiping)

H. TRANSFERS (BED TO CHAIR AND BACK) (Choose only one among the following)

- 0= Unable no sitting balance
5= Major help (one or two people, physical), can sit
10= Minor help (verbal or physical)
15= Independent

I. MOBILITY (ON LEVEL SURFACE) (Choose only one among the following)

- 0= Immobile or <50 yards
5= Wheelchair independent, including corners, >50 yards
10= Walks with help of one person (verbal or Physical) > 50 yards
15= Independent (but may use any aid, e.g. Stick) >50 yards

J. STAIRS (Choose only one among the following)

- 0= Unable
5= Needs help (verbal, physical, carrying aid)
10= Independent

III. RATED DEPENDENCY IN THE INSTRUMENTAL ACTIVITIES OF DAILY LIVING**INSTRUCTION:** Choose only one from the available boxes for each of the following Questions

- a. Does the client able to use the telephone?
- b. Does the client able to do house work?
- c. Does the client able to prepare meals?
- d. Does the client able to do laundry?
- e. Does the client able to shop alone?
- f. Does the client able to manage money?

IV. PRESENCE OF DIAGNOSED CHRONIC ILLNESS

Among which of the following chronic diseases does the client currently has diagnosed (You can choose more than one if the patient has been diagnosed)

<input type="button" value="None"/>	<input type="button" value="Rheumatic Disease"/>
<input type="button" value="Hypertension"/>	<input type="button" value="Diabetes"/>
<input type="button" value="Coronary Disease"/>	<input type="button" value="Heart Failure"/>
<input type="button" value="Cerebro-Vascular Disease"/>	<input type="button" value="Disability"/>
<input type="button" value="Chronic Obstructive Pulmonary Disease COPD"/>	<input type="button" value="Asthma"/>
<input type="button" value="Other; _____"/>	

KYSELYLOMAKE

I. TAUSTATIEDOT

1. Ikä:

2. Sukupuoli:

3. Siviilisääty:

4. Koulutus:

5. Asuminen:

II. RIIPPUVUUS PÄIVITTÄISESSÄ TOIMINNOISSA

Pisteet

A. SYÖMINEN

(Valitse vain yksi vaihtoehto)

0= Ei kykene syödä itse

5= Tarvitsee apua ruoan palottelemisessa, leivän voitelemisessa jne. tai vaatii muunneltua ruokavaliota

10= Syö itsenäisesti

B. KYLPEMINEN

(Valitse vain yksi vaihtoehto)

(saunominen/suihkussa käynti)

0= Riippuvainen

5= Suoriutuu itsenäisesti

C. PESEYTYMINEN

(Valitse vain yksi vaihtoehto)

(kasvot/hiukset/hampaat/parran ajo)

0= Tarvitsee apua

5= Suoriutuu itsenäisesti

D. PUKEUTUMINEN (Valitse vain yksi vaihtoehto)

0= Riippuvainen

5= Tarvitsee apua, mutta pärjää osittain itse

10= Itsenäinen

E. ULOSTEEN PIDÄTYSKYKY (Valitse vain yksi vaihtoehto)

0= Pidätyskyvytön (tai tarvitsee laksatiivejä)

5= Satunnainen vahinko

10= Pidätyskykyinen

F. VIRTSAAN PIDÄTYSKYKY (Valitse vain yksi vaihtoehto)

0= Pidätyskyvytön, tai katetroitu, ei pärjää yksin

5= Satunnainen vahinko

10= Pidätyskykyinen

G. VESSASSA KÄYMINEN (Valitse vain yksi vaihtoehto)

0= Riippuvainen

5= Tarvitsee apua, mutta pärjää osittain yksin

10= Itsenäinen (istuutuminen/nouseminen, pukeutuminen, pyyhkiminen)

H. SIIRROT (SÄNGYSTÄ TUOLILLE JA TOISINPÄIN)

(Valitse vain yksi vaihtoehto)

0= Ei pysty istumaan

5= Tarvitsee paljon apua (Yhden tai kahden henkilön fyysinen apu), pystyy istumaan

10= Tarvitsee vähän apua (Sanallinen tai fyysinen apu)

15= Itsenäinen

I. LIIKKUMINEN (KERROKSESSA/EI PORTAITA) (Valitse vain yksi vaihtoehto)

0= Liikkumaton tai kykenee liikkumaan <50 metriä

5= Riippuvainen pyörätuolista, myös kääntymiset, >50 metriä

10= Kävelee yhden henkilön avulla (Sanallinen tai fyysinen apu) > 50metriä

15= Itsenäinen (mutta saattaa käyttää apuvälineitä, esim. keppi) >50 metriä

J. PORTAAT (Valitse vain yksi vaihtoehto)

0= Ei pysty liikumaan portaissa

5= Tarvitsee apua (Sanallinen tai fyysinen apu, apuväline)

10= Suoriutuu itsenäise

III. RIIPPUVUUS PÄIVITTÄISINSTRUMENTTIEN KÄYTÖSSÄ

OHJE: Valitse vain yksi vaihtoehto rivin laatikosta

1. Kykeneekö asukas/asiakas käyttämään puhelinta?
2. Kykeneekö asukas tekemään kotitöitä?
3. Kykeneekö asukas laittamaan ruokaa?
4. Kykeneekö asukas pesemään pyykkiä?
5. Kykeneekö asukas käymään ostoksilla yksin?
6. Kykeneekö asukas hallitsemaan rahan käyttöä?

IV. DIAGNOSOITUJEN PITKÄAIKAISTEN SAIRAUKSIEN ESIINTYMINEN

Mitkä seuraavista pitkäaikaisista sairauksista asukkaalla/asiakkaalla on todettu (Voit valita enemmän kuin yhden vaihtoehdon)

<input type="button" value="Ei diagnosoituja pitkäaikaissairauksia"/>	<input type="button" value="Reumaattinen sairaus"/>
<input type="button" value="Verenpainetauti"/>	<input type="button" value="Diabetes / Sokeritauti"/>
<input type="button" value="Sepelvaltimotauti"/>	<input type="button" value="Sydämen vajaatoiminta"/>
<input type="button" value="Aivoverenkierron häiriö"/>	<input type="button" value="Vammaisuus"/>
<input type="button" value="Krooninen ahtauttava keuhkosairaus (COPD)"/>	<input type="button" value="Astma"/>
<input type="button" value="Muu: _____"/>	



KOKKOLAN KAUPUNKI
KARLEBY STAD

SAATE
30.1.2012

Vanhuspalvelut

OPINNÄYTETYÖTÄ VARTEN HAASTATTELULOMAKE

Opiskelijat Birhane Gebreyohannis ja Kamala Kharel tekevät opinnäytetyön Honka-projektiin liittyen.

Kohderyhmä on yli 80-vuotiaat ja heidän kotona selvitymisen kykynsä. Tutkimusaineiston keruu tapahtuu kyselylomakkeella.

Kyselylomakkeen täyttää sairaanhoitaja, lähihoitaja tai terveydenhoitaja. On tärkeää, että lomakkeen täyttävä tuntee asiakkaan ja hänen toimintakykynsä.

Lomakkeet kerätään palautuskuoreen ja kuoret voi jättää postin kuljetettavaksi, koska niissä on leima, postimaksu maksettu.

Lomake tulee palauttaa 20.2.2012 mennessä.

Toivon, että jaatte lomakkeet ao. hoitajille ja motivoitte heidät täyttämään ne sekä postittamaan keskitetysti tutkijoille.

Meille on tärkeää, että saamme tutkittua tietoa työmme tueksi.

Kiitos!

Terveisin Maija Juola

KOKKOLAN KAUPUNKI
 Sosiaali- ja terveystoimi

 Viranhaltija ja virka-asema
 Juola Maija
 Vanhustyön palvelujohtaja

VIRANHALTIJAPÄÄTÖS
 Muut

1

 Päivämäärä / pykälä
 16.01.2012 / § 17

Asia	Tutkimuslupa
Päätös ja sen perustelut	<p>Myönnetään tutkimuslupa Birhane Gebreyohannis Kamala Kharelille, joka opiskelee sairaanhoitajaksi K-P:n AMK:ssa. Tutkimuksen nimi on Needs Assessment for Assisted Living Facility.</p> <p>Tutkimus on kvantitatiivinen ja sen kohderyhmä on yli 80-vuotiaat henkilöt. Tutkimus tehdään Honkaharjun palvelutalossa meneillään olevan Honka-hankkeen puitteissa. Tutkimuksen tiedonkeruu toteutetaan living-lab toimintaympäristössä kyselylomakkeen avulla. Tutkimukseen osallistuminen on vapaaehtoista. Tutkimuksessa noudatetaan hyvän tutkimustavan toimintatapoja. Tutkimukseen osallistuvan henkilöllisyyttä tai ominaisuuksia ei voi voida yksioida.</p>
Allekirjoitus	<p>Vanhustyön palvelujohtaja  Juola Maija</p>
Oikaisuvaatimus-oikeus	Päätökseen tyytymätön voi tehdä kirjallisen oikaisuvaatimuksen. Oikaisuvaatimuksen saa tehdä se, johon päätös on kohdistettu tai jonka oikeuteen, velvollisuuteen tai etuun päätös välittömästi vaikuttaa (asianomainen) sekä kunnan jäsen.
Oikaisuvaatimusviranomainen	Sosiaali- ja terveyslautakunta
Oikaisuvaatimusaika ja sen alkaminen	Oikaisuvaatimus on tehtävä 14 päivän kuluessa päätöksen tiedoksisaannista. Kunnan jäsenen katsotaan saaneen päätöksestä tiedon kun pöytäkirja on asetettu yleisesti nähtäväksi. Asianosaisen katsotaan saaneen päätöksestä tiedon, jollei muuta näytetä, seitsemän päivän kuluttua kirjeen lähettämisestä. saantitodistuksen osoittamana aikana tai erilliseen tiedoksisaantitodistukseen merkittynä aikana.
Oikaisuvaatimuksen sisältö ja toimittaminen	Oikaisuvaatimuksesta on käytävä ilmi vaatimus perusteluineen ja se on tekijän allekirjoitettava. Oikaisuvaatimus on toimitettava oikaisuvaatimusviranomaiselle ennen oikaisuvaatimusajan päättymistä.
Päätöksen nähtäväksi asettaminen	Sosiaali- ja terveystoimi, tiistai ____ / ____ 201__ klo 9-16.
Tiedoksianto asianosaiselle	<p><input checked="" type="checkbox"/> Lähetetty tiedoksi kirjeellä Asianosainen Annettu postin kuljetettavaksi, pvm / tiedoksiantaja 16.2.2012/M.Juola</p> <p><input type="checkbox"/> Luovutettu asianosaiselle Asianosainen Paikka, pvm</p> <p>Tiedoksiantajan allekirjoitus ja virka-asema Vastaanottajan allekirjoitus</p> <p><input type="checkbox"/> Muulla tavoin, miten</p>
Lisätietoja	
Liitteet	
Sisäinen jakelu	

 Postiosoite / Postadress:
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 67101 KOKKOLA / KARLEBY

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 Kaupungintalo / Stadshuset
 Kauppatori 5 / Salutorget 5

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APPLICATION FOR RESEARCH PERMISSION

The application is directed to (Name of the organisation) Central Ostrobothnia University of Applied Science Unit of Social & Health

The person responsible in the organisation Anita Hollanti

Applicant(s) Birhana Gebreyohannis
Kamala Kharel

Address Pengerkatu 2, 67100 / Kokkola

Telephone +35840638 5588

E-mail birhgy@gmail.com ; Kamala.kharel@cov.fi

Name of the research A Needs Assess for Assisted living facilities Among Elderly population

Purpose of the research To determine the demanding ADL & IADL as well as to explore the influencing factors contributing for elder's dependency.

Target group of the research Nurses and practical nurses

Estimated period of time for collection of data One and half month

Research method Quantitative

Research plan accepted 15 / 12 20 11

Supervisor of the research Marja-Liisa Hironen

Permission granted
Place Kokkola Date 19 / 12 20 11

according to the application with amendments refused

Permission granted by (signature) Anita Hollanti

ATTACHMENTS

- Research plan
 Inquiry/Interview form
 Other attachments _____