



**NURSING INTERVENTIONS TO ENHANCE THE QUALITY OF LIFE  
FOR THE ALZHEIMER'S DISEASE PATIENT**

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Degree Thesis

Degree Programme in Nursing

May 2016

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| DEGREE THESIS  |  |
| Arcada   |  |
| Degree Programme:  | Degree in nursing  |
| Identification number:   | 16412  |
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| Title:   | NURSING INTERVENTIONS TO ENHANCE THE QUALITY OF LIFE FOR THE ALZHEIMER'S DISEASE PATIENT |
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| <p>Abstract</p> <p>Alzheimer's Disease (AD) is the leading cause of Dementia and it is a gradual memory loss which is associated with the elderly, the prevalence increase with the age. The study aims at finding out the intervention of nurses to help the Alzheimer's Disease patient have a good quality of life. Research Question: What are the interventions of nurses for the Quality of life for Alzheimer's disease patient for the elderly? Framework: Dorothy Johnson's theory of Behavioural system was used. A total of 10 articles was used and the method used was qualitative content analysis: literature review, inductive approach. The findings shows that Nursing caring process for the AD patient involves a lot of planning, It is there important to study more about the disease, stages of change, this give a clear view of how to plan the caring process for the patient. . It is important to identify and diagnose the illness on time in order to know the stage of the patient to administer care, and determine how well they can function by themselves without on the clock supervision. It is indeed an immense responsibility to care for an AD patient and therefore patience is required by the nurse to get a mutual understanding</p> |  |
| Keywords:  | QUALITY OF LIFE, ALZHIMER'S DISEASES, NURSING INTERVENTIONS                              |
| Number of pages  | 41   |
| Language:  | ENGLISH  |
| Date of acceptance:  | May 2016   |

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## FORWORD

My gratitude goes out to my parents for supporting me on this educational journey, secondly to my supervisors Solveig Sundell and Pamela Gray for supervising my work and giving constructive criticisms, corrections and suggestion, also to Lovisa for commissioning this work. And also for the Arcada University of Applied Science for giving the writing guidelines for this thesis and the Arcada University Library for assisting with the materials for this work. To all lecturers who have impacted knowledge unto me, am very grateful. Above all my thanks goes to God for granting me the mercies and favours to get this far.

# 1 Introduction

Quality of life for many people is about living well, for some people it's about having the autonomy to do take decisions on their own. The most important is the definition of quality of care for the nurse or the caregiver of the Alzheimer's disease patient, these patients depend greatly on the nurse to help them on their daily activities since they do not have the autonomy to take decisions for themselves. They cannot refuse or choose the kind of care they should receive, the nurse is therefore to advocate for these patient, and it's therefore very important for nurses to have coping mechanisms for dealing with the stresses of the job. For some nurses quality of life has to do with having a sound mind and body and being able to control ones emotions as sometimes patients' behavioural mood changes, like parses theory on human becoming a theory, quality of life is defined according to every individuals perspective. Among the elderly population about 57 % of people with dementia are diagnosed with Alzheimer disease (Tilly et al., 2004). Alzheimer's diseases (AD) is one of the causes of dementia in the elderly person, according to research it constitutes 60 % of the causes of dementia. Studies shows that it is the seventh leading cause of death in the United States of America, more elderly are dying and the number keep rising every year, whiles in Finland 70% of the population within the ages of 60-65years in the year 2010 are old people of which every third person over age 65 has a diagnosis of Dementia. As the year goes by the number of care homes and housing for the aged with Dementia increased by 27%, (Hynninen et al 2015). Aging is first and for Most the risk factor of Alzheimer's disease, an elderly person of 70 years will experience less symptoms of Alzheimer's than someone who is 80 years, because the disease comes with aging. Healthy aging should be one of the main focus for people now. Alzheimer disease is associated with the loss of memory, which usually happens gradually and in most cases not reversible (Wierenga & Bondi, 2011).

In the years gone by research has shown that the behaviour or attitude changes in the Alzheimer's patient affects the life of the caregiver (Ercole et al., 2007). Nurses face a great challenge in the delivery of care for patients with Alzheimer's disease. This study focus on the various ways nurses use to help patients, sustaining the quality of life, the quality of care giving will determine the life span of these patients. Quality of services being provided depends greatly on a number of factors, these are technology, number of workforce, funding by government and family members. Now with the current work-

force on the decrease it is likely that there would be more workload on the few working staff and therefore quality of care would be compromised. As the years goes by and more people are aging, home developers would pay more importance to building homes which will be conducive for the elderly to live in the comfort of their home and receive care, thereby relieving the stress on nursing home and thus encouraging aging in place system (Simmons, 2011).

This research work is commissioned by Lovisa seek to find the various good interventions for enhancing the quality of life for the AD patient. The process entails definitions in the background, then clear details of the framework relating to the research, then the aim of the research as well as the research question, data collection and analysing process, the finding in relation to the research question and relations to the framework, moving on to the discussions, conclusions and recommendations.

## 2 Background

### 2.1 Quality of life in elderly

Today most of the population is aging quite fast, between 2000 and 2050 the proportion of the old people is estimated to double from 11% to 22%. The number of old people is expected to rise from 605 million to 2 billion (WHO, 2014). In order to explain what quality of life is; there are concepts which measures it in the context of social science. A policy whose main aim focus on quality of life was under the European Union agenda research. In defining quality of life for older people, it defers from person to person thus, an individual may experience different from illnesses and the expectations from each would be different (Bond & corner, 2004).

Abrams (1973) ''explains quality of life as the satisfaction or dissatisfaction experience by people in different aspects of their life''. Thus it's the conditions of life under which people live which determine whether one is happy or satisfied with their life. There are six dimensions to the quality of life for the elderly ''*subjective satisfaction, socio-economic status, quality of the environment, social environment, personal factors, health/cultural factors*''. This has been related in defining the quality of life of people living with dementia. Older people talk about quality of life in different areas; family, social contacts, health, mobility, happiness, activities and living environment however older people's view on their quality of life will be based on their experiences in life, they often make comparisons to their peers, therefore in defining the quality of life, there are no boundaries. Various key domains are associated with quality of life. Some here identified through gerontological research. These give a reflection on physical and social surroundings in which individuals live. There is a need to distinguish between quality of care and quality of life. (Bond and Corner, 2004).

Bond and Corner (2004) identified the following dimensions of quality of life for the elderly:

### **Subjective satisfaction.**

One of the important domains of measuring quality of life is; there has to be some sort of satisfaction to an individual life. One must be satisfied with the life he/she has. There has been several researches on how to measure the satisfaction people have to life but yet there are still arguments on how and what should be measured. Over few years back, there were researches done in the USA in relation to satisfaction of people's daily living. These methods used in assessment still leaves questions marks as every individual has a meaning of what satisfies them in life. (Bond and Corner, 2004).

### **Physical environmental factors.**

Places where people live is one of the relevant factors for quality of life for most people. The quality of homes people depends on the available amenities such as water, electricity, heating systems, and the general outlook of the building in which people live in. Over the last decades gone by these housing units have improved, these improvements in housing structures has come far, nursing homes provide single or multiple rooms for clients, there are now common rooms for people to have recreational activities, provisions have been made for people with disabilities for easy mobility, in that sense physical changes have been made to the buildings for easy accessibility (Bond and Corner 2004).

### **Social environment**

In elaborating on social factors, families and the society comes to play. The family has a major role in supporting the aged, they often get lonely and need all the support from their family members. Recreational activities are created for the aged to keep them active and feeling less alone. Good services are place for them to have good social events. Often people volunteer to spend time with the aged they usually do not get any payment for these services (Bond and Corner 2004).

### **Socio-economic**

When defining socio-economic factors we talk about the income wealth, nutrition and the overall living standard of people. The aged are the most deprived when it comes to the issue of income and wealth. Most of these people are not able to work anymore, leaving them poorer than when they use to work. As basic needs of people continue to rise, meeting these needs becomes a bigger problem everyday (Bond and Corner 2004).

### **Cultural and health factors.**

In dealing with every individual there is the need to think of differences every person has, there are always differences in the beliefs of people. Therefore everyone has their own understanding of quality of life. To maintain the health status of clients is the main aim when defining quality of life. The health status of a person will determine the care given and how well continuous monitoring will be done. The health of a person depends on his own mental orientation, the attitude of a person determines how well a treatment for him prove successful (Bond and Corner 2004).

### **Personal factors.**

The health of a person depends on his own mental orientation, the attitude of a person determines how well a treatment for him prove successful (Bond and Corner 2004).

## 2.2 Alzheimer's disease

Alzheimer's disease is a chronic state of health which affects a lot of people about 58% of Americans, between the ages of 75 and 89, when the condition sets in it affects the cognitive, function and behaviour, these are known as the 3 symptom domains of AD, Some symptoms such as difficulty in speaking, forgetfulness and therefore cannot do anything for themselves, the patient becomes dependent on others. These domains re-lays on each other, cognitive defects promotes functional disabilities and therefore contributes to behavioural changes, an instance would be AD patients who forget how to use some equipment, would be frustrated and unease because of inability to remember how to do certain things. Alzheimer's disease patients' need 24/7 care due to the fact that their mental abilities keep declining daily. In the early stages the elderly person is not able to function on his own. They remember very little detail about their lives especially their home of residence, in the mid stages of the disease the memory begins to forget lots of thing including people close to them, familiar faces become strangers to them, they have no memory of who they are, their names or where they are, they feel lost and begin to wander around either hallucinating or showing delusional behaviours. In the late stages the body begins to shut down, the patient no longer has functionally abilities, as demonstrated in the Figure 1 below, the AD patient losses the ability to speak, walk, basically they cannot take action on their own with regards to activities of daily living. The muscles are weak and activities of daily living have to be supported because the patient cannot do them on their own. (Simmons, 2011)



Figure 1 symptoms of AD (Alzheimerott, 2015)

Assessing people with dementia has being one of the major problems of healthcare providers over the years, most often patients are not diagnosis on time and late diagnosis makes it difficult to manage the disease, being aware of the disease early makes it easier for rehabilitating these patients. People living with Alzheimer's disease (AD) who are able to stay on their own at home and carry out normal activities are able to do so, because of early diagnosis and these give them the opportunity to get medications and treatment which helps to manage the situation, in recent times gone by studies have shown that patients living with AD are able explain in detail their everyday life activities when they are in the early stages An instance is people with AD will always talk about things through their actions attitudes and moods, for an elderly person to stay alone at home and carry out activities of daily living, they considered to be fully aware of their situation and have had early diagnosis and are on treatment (Öhman et al., 2008).

A biopsychosocial framework was introduced by Clare (2004), which highlights the relationship between the levels of damage of the neurons which ignites the process of dementia, the framework lays emphasis on the need to have self-awareness. The social cognitive approach defines oneself as a complex body entailing behaviours, attitudes and beliefs, being aware of oneself is important because it helps to define one's identity, identity changes with time and life occurrences and experiences, the onset of dementia brings changes to individuals to the thinking process of the patient, self-awareness is altered (Naylor & Clare, 2008).

Many dementia patients are unaware of themselves to some extent which gives more stress and pressure on the caregivers, whereas patients who are well aware of themselves to some level end up in distress (Hardy et al, 2008). In the 1990 the Dementia Interactions and conscious Experience (DICE) model was created by Schaefer, which was used by Agew and Morris in 1998 to create different forms of unawareness of in AD patients, in these assessments past memory were measured as against current knowledge, these proved that in the late stages of AD patients no longer have knowledge of present situations, just traces of childhood memories (Hardy et al., 2008). Sustaining the life of older people with AD has been on the increase in recent times as chronic diseases are on the increase as more people continue to age, these diseases are associated with failure of organs in the body accompanied with other complications as well, a study carried in Italy in 2005 proved that every two elderly person out of over 65 years has at least two chronic diseases, 34.6 % males and 47.4% females. Alzheimer's disease is one of the common forms of dementia. Patients diagnosed with dementia have other chronic diseases along with it, usually these diseases are not psychiatry related these include; "neurological, cardio-vascular, musculoskeletal and genitourinary". In the case of severe dementia, patients experience bedsores, hip fractures, malnutrition and other diseases. Studies show 50% of AD patients are diagnosed with osteoporotic fractures. Dementia patients have a higher rate of admission in the hospitals with symptoms such as "atherosclerosis, hypertension, Coronary artery disease". Figure 2 below shows the possible symptoms of associated AD Patients present all the symptoms when admitted to the hospitals, most demented patients die during hospitalisation due to these other infectious diseases, the AD patient present multiple comorbidities and weakness. (Clodomino et al., 2012)

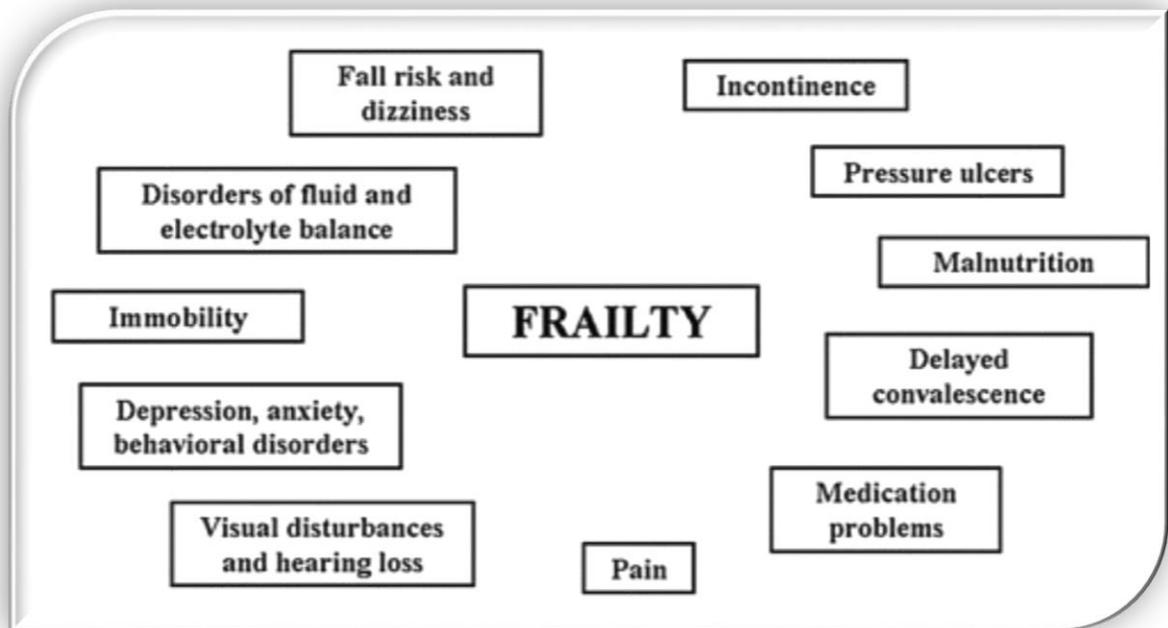


Figure 2. Some complications of AD patients. (Clodomino et al, 2012)

Other health conditions such as hypertension, cardio-vascular diseases that are associated with AD disease as illustrated in Figure 3 below gives the patient different therapeutic treatment and medications; such as inhibitor- donepezil, rivastigmine, galantamine; receptor blockers-: meantime. These medications help to reduce the functional disabilities in people diagnosed of AD. When medications are prescribed the other diseases are considered. The care plans decisions for AD patients considers comorbidities due to the weak nature of the organs in these patients, AD patients consume lots of medications and these are accompanied with different side effects. (Clodomino et al., 2012)

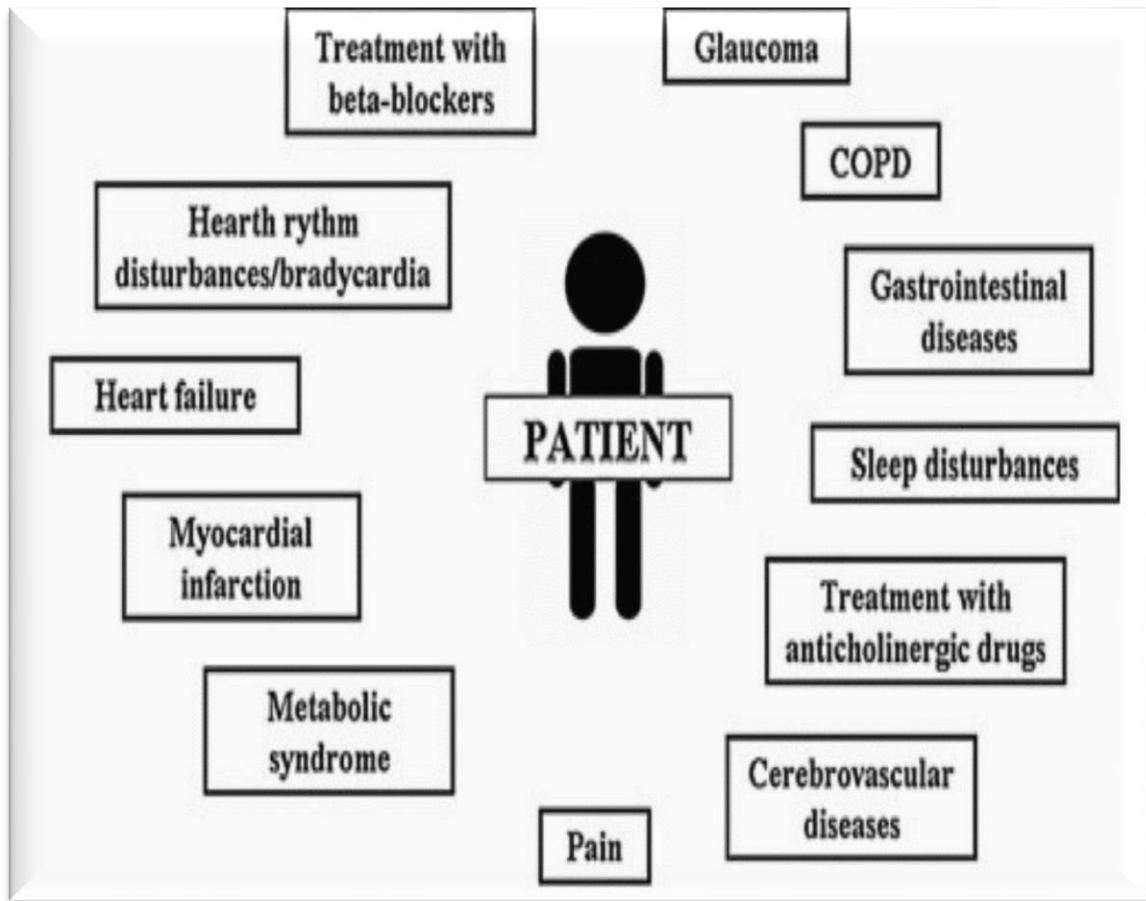


Figure 3. Common diseases related to patients with Alzheimer's disease. (Clodomiro et al, 2012)

### **2.3 Role of the nurse in caring of the Alzheimer's disease patient**

It is the duty of nurse practitioners to recognise the symptoms early, these diagnosis will help prevent the disease from progressing rapidly. It also makes it easier to plan ahead and be ready for the future when the disease progresses; to improve the quality of life for the AD patient. During the diagnosis, neurological, mental state and health status of the patient is obtained, laboratory tests such as blood count, liver, syphilis, and B12 and folate. One of the risk factor of AD is aging, a family history of Dementia and AD is also a risk factor. Most people are always in denial and therefore the diagnosis is not made until it gets to the moderate stage, thus therefore is great reliance on the nurse to help recognise the AD in its early stages. In accessing the cognitive behaviour the mini-mental state examination used (MMSE) these examination take 5 to 10 minutes, the range of points is 0-30 points, a score of 10-26 is moderate impairment, whiles less than 10 means in its severe stages. (Auerhahn, 2004).

Mostly families and AD depend on the nurse practitioner to manage behavioural cognitive changes when they occur. Non pharmacological management ranges from all interventions giving to the patient without the use of medications, such as memory activities to keep the brain active and also creating activities which use to be the hobbies of these patients. Nutrition is an essential part of the AD patient, studies shows the vitamin E is very good for the brain thus fats from fish products are necessary for the brain. Usually elderly people that live alone; it becomes difficult for them to manage the disease due to forgetfulness and this also interfere in the management of some healthcare conditions such as diabetes, heart conditions and the like. Behavioural management systems are in place to help these patients to cope with their daily activities. Nurses must always be patient when caring for them, bearing in mind that their mood changes often as they turn to forget often. It's good to mind them about their past life and also give those things to help them remember their past life and events that has taken place in their lives, these could be in the form of pictures, music, art work, historical events and movies. Recent research has shown that music helps to keep the minds of the AD patient active, and therefore most care homes are adapting the 'music therapy for the patients (Clodomiro et al., 2012).

Nurses always have the responsibility of caring of the AD patient in that they act as advocates and therefore it is essential to examine one's own feelings about Alzheimer and know the different stages of the AD disease and behavioural changes that occur during the different stages. Medication are no always effective in solving the aggressive behavioural changes, its therefore best to ascertain the behaviour of the patient before the disease and after and also the reaction after medication have being administered. It is important to find other means of calming patients down other than drugs. Administering care to the AD patient takes a great deal of patience, it is important to give simple and short sentences of instructions and do not put pressure on them. Due to the memory loss they tend to forget how to perform most activities, they usually mince words when asking for something, nurses must be careful not to make jokes or be harsh on these occasions, they turn to get frustrated and show aggressive behaviours It is very serious issue as most patients resist care from nurses, it is therefore advisable to use different non-violent means to avoid these aggression from surfacing (Lipscomb et al., 2015).

Interventions such as playing pre-recorded music for relaxation is required especially during period of activities of daily living such as eating, dress up, bathing times, this reduces the resistance behaviours and always these music should be the preference of the patients. Interventions which consist of all activities of daily living can be easily achieved without resistance or aggression, it is always important to be patient (Konno et al., 2014)

### 3 Theoretical Framework

Dorothy Johnson's theory was created from philosophical ideas, clinical experience, research, discussions, and years of working with clients. Her work was greatly inspired by Florence Nightingale, Seyle, Grinker, Buckley, most importantly students, faculties and colleagues and all the people she had worked with over the years. Some parts of her theory was from the listed theorists to enable her create a good theory on the behavioral system model. Most importantly the theory was based on the paradigm system (Alligood & Tomey, 2009).

Florence Nightingale, was the first to develop nursing theories, her theory was based on human beings and their needs, and Nightingale's nursing was more of caring about the client and alleviating the suffering of the client. But although Johnson stressed on the importance of care for patients she focused on the behavioral system, she explained seven sub systems that form her behavioral system. She also used the work of Ainsworth and Robson, some aspects of system are ingestion and elimination was used by Warlike, Mead and Sears. Sexual system is also a subsystem of the behavioral system, the theories Kagan and Resnik was used by Johnson to establish the sexual system. The aggressive-protective subsystem was established from the Lorenz and Feshbach, the system seeks to protect and preserve. Another subsystem explained by Johnson is that physical, creative, mechanical and social skills are brought to life by achievement behavior. The restorative subsystem talks about sleep and play and relaxation being a part of behavioral system, Johnson however didn't support this theory developed by the faculty and clinicians because she felt sleep was a natural act, not an act being forced or induced, she further explained the play is more of an achievement behavior, she gave an example of children play in their first years as being some achieved. The theory was created based on several assumptions that had many systems and it also had same characteristics, Johnson also used thinking systems to create her theories but explained the relationships between these systems. Johnson also used the theoretical ideas of Seyle on stress, this theory talked about the stages the body undergoes stress and deals with stress. The first stage is alarm reaction stage, then we have adaptation stage finally a stage of exhaustion, Johnson elaborated this in her theory which focused on how an individual response to stress accompanied by a sickness and how these stresses are coped with. (Alligood & Tomey, 2009).

Johnson's theory is found to be used as the basis for making a care plan for Alzheimer's disease patient by Fruehwirth (1989). In studies done shown that the behavioural systems focus on patient care intervention and improve the quality of life. The neuropsychiatric institute and hospital used the behavioural system model as a guideline for psychiatric nurses. The subsystems are used to plan the caring process for these patients with mental disorders as shown below in figure 4. Upon nursing documentation of the effectiveness of Johnson's theory on patients, a decision was made into a framework which nurses should use as the basis for nursing care. Nurses use the eight subsystems in planning the nursing care plan, action plan and evaluation of the patient. (Allgood &Tomey, 2009).

The subsystems of the behavioural systems (Allgood &Tomey, 2009), perceives a patient to be the whole system and these subsystems needs to be in balance in order to achieve a good quality of care, subsystems are elaborated as follows as shown in figure 4 below:

**Attachment Affiliative system:** this explains the social bond the patient creates with the environment, including relationships with family and friends.

**Dependency system:** it deals with the presence of people around the patient, the physical contact, group therapy is also good to create a support system to give patients support through their ordeal.

**Ingestive subsystem:** this system describes the nutritional needs of the patient, it has to do with what, when and how the patients eats. The whole basis is the input and output mechanisms, nurses monitor how well a patient eats, the nutritional intake is very vital for sustaining the health of a patient, nurses monitor that the patient get a well-balanced diet which is essential for the body to stay healthy.

**Elimination subsystem:** the process the body goes through to get rid of waste products in the body.

**Sexual subsystem:** sex life of the patient has to do with procreation, the sense of feeling loved and appreciated by another person. It consist of dating, sexual acts and development of gender identity.

**Achievement system:** Achievement has to do with creative, intellectual, social and physical skills. A patient accomplishing something give a sense of purpose and reason to feel accomplished and the feeling of acceptance in the environment they live in.

**Aggressive –protective system:** protection is important for every human life, the act of being able to protect oneself from threat situations, the self defence is one of the ways to protect oneself where there is a feeling of a fearful situation, aggressive behaviours are exhibited as self-defence.

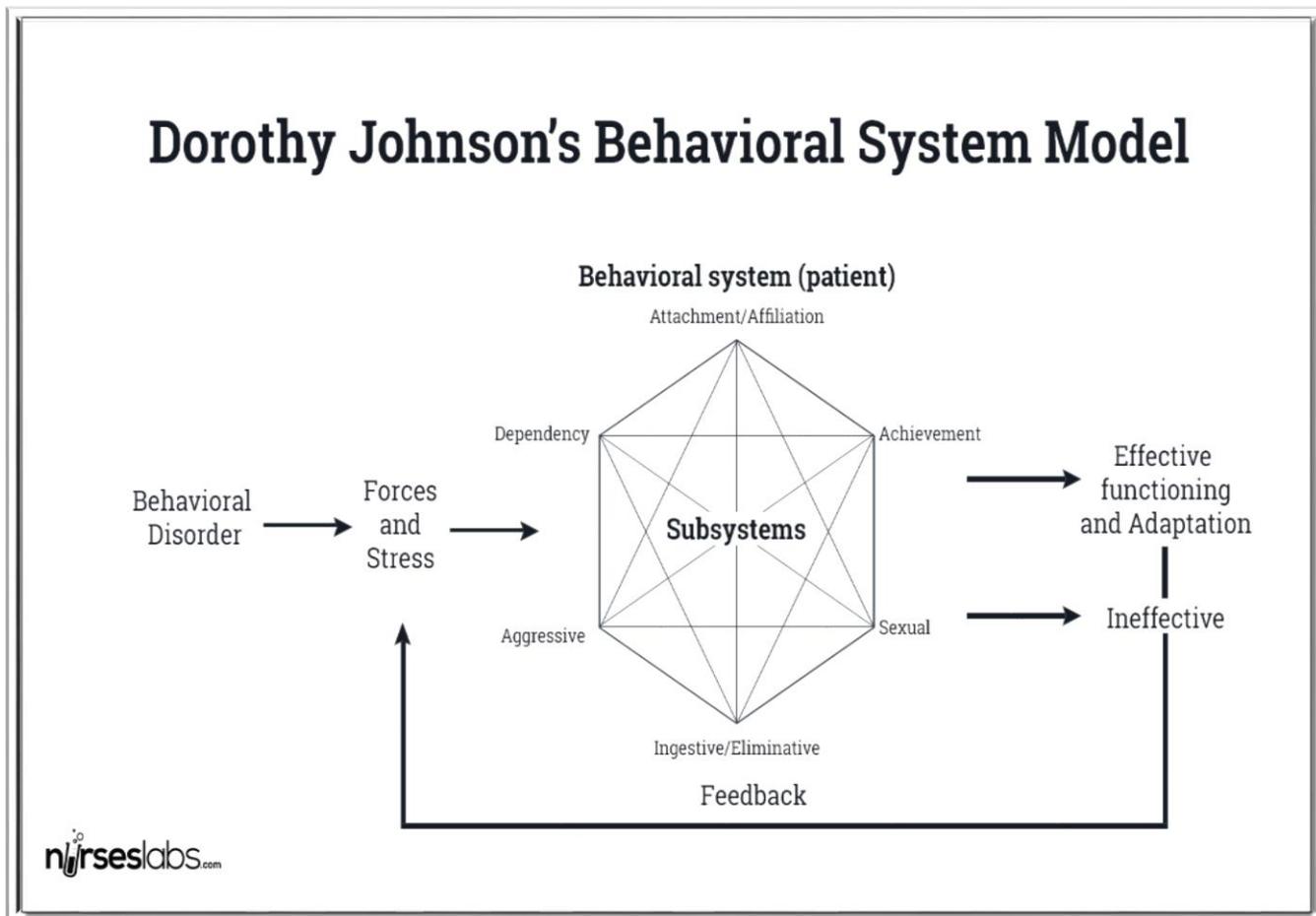


Figure 4 Johnson's behavioural system in the care process. (Nurseslab, 2015).

The behavioural system model consist of assumption and these are the major assumptions (Alligood & Tomey, 2009), they are presented below:

Johnson defined nursing as an act of advocating and monitoring patients by putting measures in place to make sure patient safety is achieved. The person in the model is viewed as a unit on its on which works together with the environment in a circular motion doing the same thing over and over again, for the behavioural system to work and function activity. All the subsystems have to be in balance, an equilibrium is key to keep the patient in a good condition

Health is explained as the total wellbeing of a patient, definitions defers from person to person. In other to achieve a good health these subsystems needs to be in a good proportion. A good balanced subsystem will enhance good health.

Environment factors can affect the health of a person, for an individual to obtain a good health, the environmental factors comes into play. To achieve the main aim of the model environment has a role to play to ensure that the subsystems maintains balance, these environmental factors can be influenced by the Nurses. Johnson's theory emphasis is on two major aspects; the patient and the nursing care. The aspects have elements as drive goal disposition to act and choice, the subsystems will help maintain good health for a patient if relationship between them are harmonise The theory best suits the research as it give various sectors of improving the quality of life of the AD patient. The various subsystems give a clear understanding of the areas which need to be address to improve the caring process of the AD patient.

## **4 Aims of the Study and Research Question**

The aim of the study is to establish interventions of nurses for Alzheimer's disease patient; how nurses help patients to perform daily activities as the Alzheimer's disease progresses.

What is the research question?

1. What are the interventions of nurses for enhancing the Quality of life for Alzheimer's disease patient for the elderly?

## **5 Methodology**

Methodology is a system used in research, it's laid down procedure followed to give a good outline for presenting results of research. Qualitative Content Analysis is a term employed in breaking down qualitative data. In ensuring that the data presented in a qualitative research is original and trustworthy, the researcher has to make sure that in every sector of the analysis process of the content provided that is the preparation phase, the organisational phase, and the reporting phase has to be credible, dependable, conformable, transferable, and authentic. This research is a qualitative content analysis research carried out to find out how nurses can help Alzheimer's disease patients (AD) with living and performing their daily activities without difficulty. Methodology help to outline the process the writer went through and the approaches to get relevant text and what design was used to present these research results. (Elo et al, 2014))

### **5.1 Data collection**

Data collection has to do gathering data and deducing and collecting information which answers the research questions thus testing hypothesis and examining the outcomes. It involves collecting of data from authentic and reliable sources. Data collection is one area that is used by the researcher to uphold his or her claims regarding the trustworthiness of his or her study. Therefore the credibility of data collected is ensured by selecting the appropriate method of collection. Credibility deals with how the data collected addresses the intended focus of the research. Data collection can be structured or unstructured based on the aim of the study, if the content analysis used is induced or deduced (Elo et al, 2014). The author used Arcada University of Applied Science Library's search engine to gather data. The articles were found on Arcada University of Applied sciences' library database. With the help of the search engines Nelli portal, EBSCO, Pub Med, Science direct. The chosen articles in this study were selected based on the inclusive and exclusive criteria. The final articles were chosen based on these inclusion and exclusion criteria; Alzheimer's disease. The following guidelines were followed in choosing relevant articles: Inclusion criteria were based on approved scientific articles, full text, articles related to the study topic and language of article is Eng-

lish. Exclusion criteria included non-academic related articles, paid articles, articles not related to the study topic and articles not in English.

Number of hits with search words

| Search words   | Text limited to  | Number of hits |
|--|--|----------------|
| <ul style="list-style-type: none"> <li>• ``Elderly AND Alzheimer's disease AND Quality of life</li> </ul>            | <ol style="list-style-type: none"> <li>1. Full text</li> <li>2. Scholarly(peer reviewed) journals</li> </ol> <p>Published dates(2000-2015)</p> | 22             |
| <ul style="list-style-type: none"> <li>• Nursing care AND Alzheimer's disease patient AND quality of life</li> </ul> | <ol style="list-style-type: none"> <li>1. Full text</li> <li>2. Scholarly(peer reviewed) journals</li> </ol> <p>Published dates(2000-2015)</p> | 32             |

**The following articles were chosen based on the research question.**

| <b>No</b> | <b>Title</b>  | <b>Author(s)</b>       | <b>Journal and year of publication.</b>           |
|-----------|---|------------------------|---|
| 1         | Dementia and Alzheimer's disease: what we know now  | Wierenga C. e.et al    | Journal of the American Society on Aging, 2011    |
| 2         | Care of individuals with Alzheimer's disease in the new millennium.   | Souder.E et al         | MUEDSURG Nursing journal 2004                     |
| 3         | Appraising the need for care in Alzheimer's disease.  | Schiffczyk et al       | Journal of psychiatry. 2012                       |
| 4         | Home or Nursing Does Place of Residence Affect Longevity in Patients With Alzheimer's Disease?                                      | Bercedis. P et al      | Public Health Nursing. 2008                       |
| 5         | Awareness through interaction in everyday occupations: experiences of people with Alzheimer's disease                               | Öhman A. et al         | Scandinavia Journal of occupational therapy, 2008 |
| 6         | Promoting a good life among people with Alzheimer's disease   | Zingmark.K, et al      | Journal of Advance Nursing, 2002                  |
| 7         | Sustainable living in long term care: for people with dementia/Alzheimer's  | Simmons .D             | Educational Gerontology, 2011                     |
| 8         | ALZHEIMER'S disease   | Schweiger, J. L. et al | Nursing. Jun99, 1999                              |
| 9         | Recognition of risk factors in Alzheimer's  | Auerhan. C, et al      | Mental health. 2008                               |
| 10        | Measuring awareness in people with mild to moderate Alzheimer's disease: development of the memory awareness rating scale-adjusted. | Hardy. R et al         | Aging and mental health, 2008.                    |

## 5.2 Data analysis

Qualitative content analysis was used in the research, inductive content analysis has to do with gathering of information, through searches on Arcada's web based library. Qualitative research is a research that seeks to give an account of something by characterizing the subject of investigation by placing its attention on words rather than numbers. Its focal point involves the gathering of non-numerical data to define a problem and aid in producing ideas for additional research. Most of the time it uses focus groups, interviews, direct observation, or the assessment of archival material, it involves gathering of articles, making notes on articles relating to the research question, and making a list of relevant literature which best suits the study topic. Qualitative research has a holistic description, in which the investigator seeks to attain a complete picture. It also corroborates the research findings not to confirm that people's perceptions are true but to rather accurately reflect people's perceptions, whichever way they may be. (Gale et al., 2013).

In answering the research question articles 2,3,4,6,8 gave a clear definition of what the AD disease is, these articles had similarities of defining what the AD disease is all about, different stages of the disease and most importantly how nurses can help maintain and improve quality of life. These articles clearly gives the role of the nurse in improving and managing the AD patient, life style activities and exercises which improves the brain function ability. These form the main categories which dwells on the role of the nurse in intervention plans for quality of life for the AD patient.

The sub- categories includes articles 1, 5, 7, 9, 10, these supported the main categories. The definition of Benefits of early diagnosis, the risk factors of the disease, explaining the various stages of dementia and the each level and the functional ability of the patients, the characteristics of awareness of consequences of having Alzheimer's disease on everyday life activities as well as experiences they go through on a daily basis having to deal with the disease and how they get adopted to the changes in their lives, as well their interaction with the environment the live in; quality of life and Care of Alzheimer's disease patient and the need to manage behavioural changes and identify ways of dealing with aggressive behaviours, Factors to consider when institutionalise Alzheimer's disease patient.

## 5.2 Ethical Consideration

Ethical consideration is very important in every research work, this involves adhering to rules and regulations set by the institution the research is being done for. It should not include plagiarism and due acknowledgement should be given to researcher whose work were review in the referencing. (Gale et al., 2013). Upon embarking on the research journey, approval was sort from the examiners and supervisors on ways of acquiring information and how to use and present the data gathered, the set guidelines of Arcada university of applied science on gathering information was followed and due acknowledgement was giving to respective authors whose work was used in the research through referencing, the Arcada guideline on thesis writing guided the author in the whole research process, the writing process followed the written guidelines of Arcada University of Applied sciences.

## 6 Findings on Research Question

### **Nursing intervention for the Alzheimer's disease patient**

Nursing caring process for the AD patient involves a lot of planning, before nurses administer care to the AD patient there is the need to not to have a conflict of personal interest, bearing in mind their own values and that of the patients, and care plans made should be for the good of the patients. It is there important to study more about the disease, stages of change and activities which help improve the brain function ability of the AD patient (Wierenga & Bondi., 2011). Another important aspect is to try to ascertain the various activities that these patient are involved in everyday and whether they are able to cope at home. The daily activities of the AD patient is further explained. The daily experiences of these patient are shared in order to get a clear picture of the stage of the disease and the functional ability of the patient and how the changes of their medical condition enable them cope in the environment, with family and friends as well (Öhman et al., 2008). It is important to identity which stage an AD patient is in and the various functional ability, thus we get to know the level of independence, how well the patient can cope alone at home and when to the need arises for transfer to care homes to get care from nurses (Hardy et al., 2008). having mentioned the need for treatment at care homes are crucial because government spend lots of money on proper housing for AD patient and getting personal assistants to homes for those who can stay home alone and the therefore it is important to know at what stage can an AD patient receive care at home, in most cases long term care facilities are the best for AD patients, as the disease progresses nurses help patients get acquainted and adjusted to the environment (Simmons, 2011). it is therefore the duty of the nurse to access the cognitive behaviour of the AD patient using the Mini Mental State Examination( MMSE), this test lasts for about 10 – 15 minutes, if the scores is less than 10points then it relieves the patient is in a severe stage. Usually scores ranges from 0-30, nurses have a great responsibility of helping to identify which stage the patient are in since they do not accept their present conditions (Auerhahan et al., 2004)

The Alzheimer's disease patient faces many challenges when it come to their care plan. Often these patients are expected to be involved in the caring processes, but nurses should bear in mind that there is a limit to the cognitive ability of the patient. Whether

home based or institutionalised the planning for the AD patient are same. The aim of the interventions is to increase the functional ability, quality of life: maintaining the total wellbeing of the patient, these care plans should be done while taking into consideration the opinions of the patients and the family as well. As the disease progresses it becomes more difficult to plan activities for these patients. Taking care of an AD patient is very challenging for nurses to deal with, in order to be able to care for these patients the first most important aspect is the patient history. AD patients will always forget to attend to activities of daily living and therefore the nurse assist them where there is a need. It is important for the nurse to know the activities of daily living of the patient before any care plan is done, this due to the fact that patient is losing memory of his life and therefore needs communication in a direction that would not cause confusion in the mind as behavioural changes occur when environment does not seem familiar anymore (Zingmark, et al., 2002)

First of all, AD patients take time to adjust to new activities around them, it's therefore very important to take time to explain these changes to them, these changes could be in the form of nutrition, new care plans, new nursing personnel, drugs. A daily routine should always be in place to help the patient to familiarise themselves with the daily activities, this makes the patient feel more safe and sure of what to expect. Another important aspect is to keep the patient active all the time, create and plan outdoor activities, these activities should be ones that the patient used to do often, the physical activities help to them physically, emotionally and spiritually sound. Also instead of noisy environments try to keep these patients in quiet places, most preferably play music that are familiar to them, music sometimes joggles the mind and helps their cognitive abilities. Nurses also check the nutrition of the patient, making sure to keep a healthy and balanced diet for them, most of these patients find it very difficult to chew food thus soft food must be available for such cases, and make sure the patient is able to swallow the food if not arrangements should be made for alternative feeding, sense their sense of smell is lost basically because the hypothalamus does not get the signals of hunger. Due to some medications as well their appetite is often not there. it is important to remind them of the , the oral hygiene is also an important aspect as it is good practice to maintain a good routine of brushing their teeth daily, check if there are any denture prob-

lems. Risks of falls is another area to take care of, as they are prone to these risks as they often forget even how to walk or move their legs, anti-slippery shoes should be available for these patient to avoid falls. Make sure the appearance of the patient is clean, dresses up in clean clothes, hair neatly and nicely done and well groomed. Keep in mind that mostly patients do not have control over their bowel or bladder and therefore it's the duty of the nurse to make sure they have diapers on all the time and also maintain a regular schedule for visits to the bathroom and toilets such three times in the morning to the toilets. Another most important aspect is for the nurse not to do for the patient, it is very necessary to make sure simple instructions are given to patients to care out activities of daily living, the AD patient will always need some help with bathing dressing and eating. Simple instructions such as *'' brush your teeth, put one hand in the sleeve, take the spoon''* due to the fact that the patient has loss the functional ability, helping the patient will increase the functional disabilities of the patient. Most often patient try to carry out basic care such bathing without the help of the nurses these may result in injuries like broken hips knees and joints. It is the responsibility of the nurse to share information about care intervention which work with patients with other nurses. The MMSE (Mini Mental State Examination) is carried out by nurse to evaluate the current mental state of the patient. The test which consist of series of questions seeks to gather whether the patient can recall events, dates, time of the year, simple calculations. These tests helps to know the stage of patient, the scores are from 0-30points. When planning activities for these patients be sure to include their personalities in the process, some patients are very outgoing, others are very shy, it is important to know which activities will be suitable for each patient. (Schweiger et al., 1999)

When communicating with patient, it is important for the not to interrupt the patient whiles he or she is talking, instead allow them to express themselves and support them with facial expressions and small gestures, this way the patient feels in control, respected and heard. The usage of short sentences and repetition of messages to patients help the communication process easier, it's better to for instance writes down activities to be done by the patient rather than giving information out verbally. In the later stages nurses can remind the patient on the subject of matter when communicating because patients often lose track of what they are saying. (Souder et al., 2004)

There are general interventions for patient with AD but these interventions do not work all the time and different interventions work on different patients. Behavioural management is often one of the major issues why families institutionalise the AD patient, before addressing the issue it is good to know the history of the behaviour pattern from the family or caregiver. When dealing with a problematic behavioural symptom of a patient it is important to know what exactly is causing these change in behaviour often patients get angry when some needs are not met, proper exam, always make patient aware what you are doing, where they are and how safe the place is, an important aspect is to encourage family visits and the interactions with others thus interactions through group discussions, take patients through activities like walking, watching television, listening to music; these keep the patient distracted in the case of problematic behaviours such as yelling, screaming and aggressive behaviours. On other occasions physical touch also help to calm patients done but be careful when to use that not all patients may respond to it (Peterson et al., 2008).

It is important to examine the situation of every patient especially those receive care at home, most of them are subjected to abuse by the caregivers these abuses come in the form of financial, physical, verbal and negligence. AD patient is always at risk because of loss of cognitive functions, and it's good to evaluate the situation and see whether these patient needs to be institutionalised or have continuous care at home.

In the year 2008 and 2010 a cross sectional studies was conducted for patients with Alzheimer's disease and their care givers, the mini mental state examination and Geriatric depression scale were completed successfully by these patients. The aim of the study was to show whether the AD patient can be dependent and put pressure on caregivers. The article further explains the in 1996 a care insurance for long-term care in Germany shows that a care plan is made based on the fact that the dementia patient should be able to perform some activities of daily living. These criteria has rather being unfair, this is due to the fact that although these patient are able to do everything by themselves the severity of the disease is underestimated. The cognitive symptoms of the disease keeps increasing with time, as these were included as the need for care increases. Recent studies have drawn attention to the fact that most AD patients are institutionalised because

of the decreases in functional ability and therefore assessment should not be based on functional ability but also cognitive function should also be considered when care plans are made for these patient in order to relieve the caregivers, also another important factor to consider is the aspect of depression experience by caregiver who care for patients with less cognitive function and if possible treatment should be given to them (schiffczyk et al., 2012).

The diagram below illustrates a summary of the findings acquired from the research.  
(Figure 5)

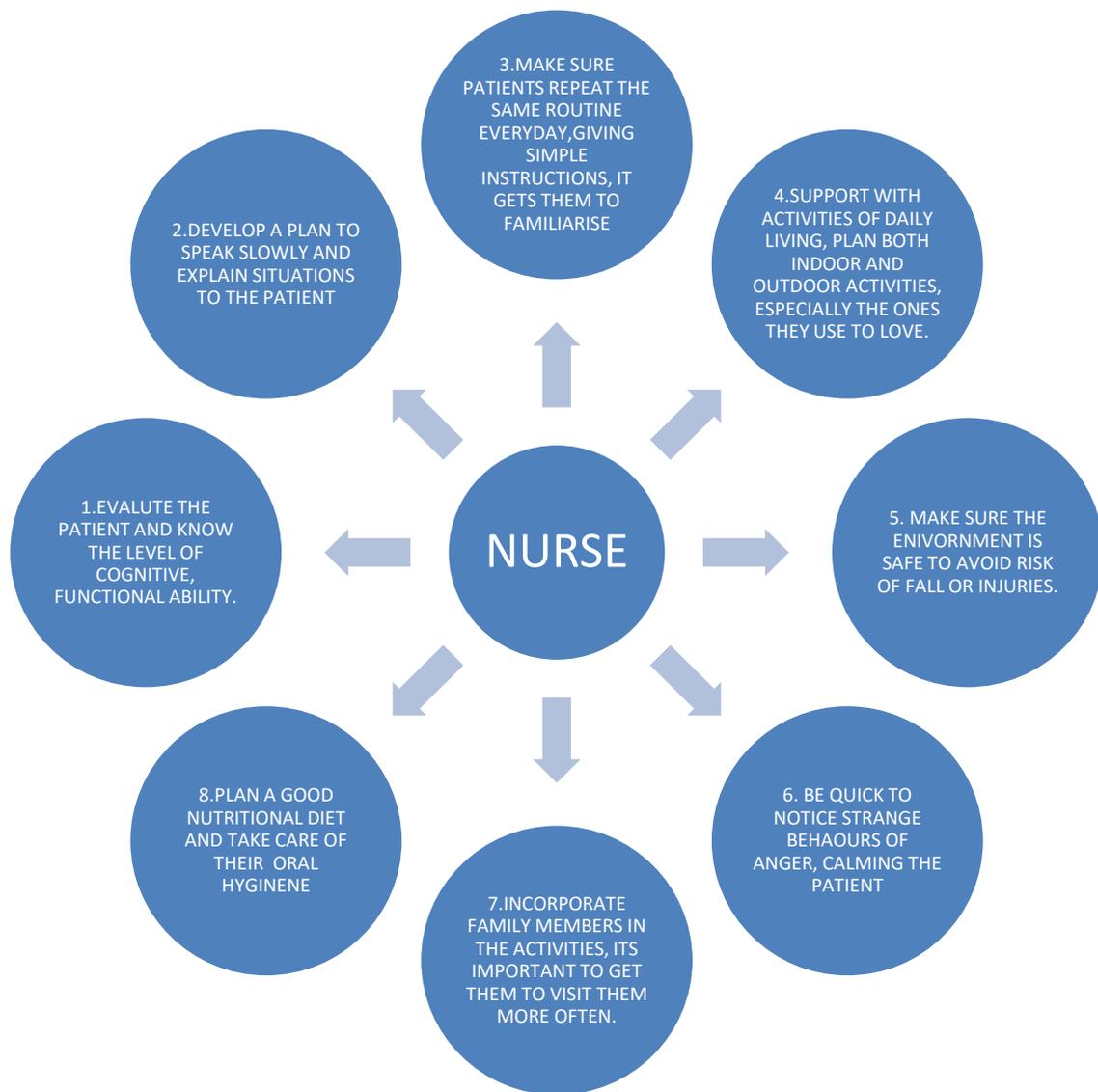


Figure 5 steps to consider in the intervention process of the AD patient.

## **7 Discussion**

### **7.1 Discussion of study findings**

The research showed series of finding on the topic Alzheimer's disease and different opinions on interventions and how best to assist the ad patients in activities of daily living. About 60% of the articles showed that quality of life of these AD patients are very important and critical and must be dealt with accordingly. Intervention for promoting these quality of life of the AD patient were also presented in the articles, looking at these articles showed that both past and present researches done proved to have the same results and opinions on what constitute quality of life and what interventions are in place for the AD patient. Most results showed that these patients need factors like good housing, financial aids, family and societal support and that of the government as well, emotional, spiritual and physical (wellbeing) in order to have a good quality of life. (Evans et al., 2012)

Some intervention which was gathered through the articles revealed that nurses have a great responsibility in planning a good care plan for these patients in order to improve their quality of life, and the nurse's role comes to play with activities of daily living. The author related to most of the findings because of the experience from working with the elderly, mostly dementia patients. Most of the interventions aim at increasing the functional activities of the patients, care plans go as far as caring for nutrition, hygiene, exercise activities to help with physical activities, and cognitive activities such as memory games, simple art work as well as old movies and music the patient used to like, music have a great effect on helping the patient recall. It is important to know the life history of each patient, events in their lives, hobbies, and activities they were involved in before the disease occurred, these help to plan the activities which would be familiar and easy to follow for them. Another important fact to try bringing family members to visit these patients more often, these should ease the feeling of loneliness and depression, knowing they have people to relay on other than just nurses ( Schweiger, et al., 1999).

Usually there are often criteria's for admitting AD patient into care homes, often it depends on the stages of the disease, whether mild or severe stages, mild stages of the disease is considered to alright for the patient to be at home and get occasionally visits from nurses, thus receiving care from home. The patient get institutionalised when the severe stage is in full force where there is complete loss of cognitive function and needs help with all aspects of daily activities, in these cares patients can be admitted in the care homes (Peterson, 2008). The author saw it best to use the theory by Dorothy Johnson which gives areas of the caring process to promote good health as well as quality of life. Looking at the interventions for caring for these patients it appears to have touched on all the areas that Johnson's theory presents, the theory is known to help in planning the daily care routine for the AD patient.it touches on all the areas of cognitive function of the patient, thus helping the patient to cope improving quality of life. It is a good intervention plan to help nurses or caregivers (Alligood & Tomey, 2009).

Nurses have a great responsibility in the administering of care to clients, in the provision of care, nurses are accountable and answerable to the action they take on clients. It is important that every nurse note this concept and its effect on the nursing practice. Accountability has to do with proper documentation of methods, assessments, interventions and implementations made by a nurse on client's health issues. As a nurse your clients, families and the whole society looks up to you to help cure their ailments and improve their quality of life, therefore nurses should be careful with the actions they take when giving care. They own the nursing profession a duty to protect and maintain the good will of the profession. (Stanton, 2012)

Accountability is one of the most important aspect of nursing care, a good professional responsibility consists of five areas: safety, prudence, accountability, integrity and holistic care. As nurse you should always take steps to ensure your clients safety and yours as well by looking out for hazards that may cause health problems. It is very important to know and take helpful ways to maintain the health of clients keeping in mind which actions are ethical. Nurses should make sure to maintain patients' spiritual, emotional, cognitive health, patients need to feel secure with nurses and trust that the will take good care of them. Rending quality nursing care has to do with giving love, assisting,

nurturing people that need care. It has to do with patience and the time a nurse spends to assist a patient. In order for a nurse to give good care individual values and beliefs must be assessed, bearing in mind that everyone has the right to decide what they want to be done to them. (Zaletel, 2008)

## **7.2 Discussion of findings related to theoretical framework**

The framework defines systems which can be used to care for an AD patient. Now these systems work interdependently on each other in that every aspect needs to be satisfied in order to achieve total wellbeing of a person. The framework best suits the findings because it gives areas which need to be addressed when administering care to the AD patient. Although there are often different methods which nurses can use, these give guidelines as to which areas to consider when caring for the AD patient. The framework explains human nature and the need for relationship between the environment in which they exist, as well as the role of nursing in achieving optimal level of good health, as an individual's behaviour is affected by physical, mental, spiritual, social factors. However the subsystems help to keep the behaviour of a person in balance as a decline in any of the systems would cause changes in the behaviour pattern of the patient, it is important to strike a balance by incorporating all the systems. Due to the fact that the AD patient has lost memory of everything, it is then the role of the nurse to step in and attend to their Activities of Daily Living and how does a nurse achieve that without any guidelines, it's therefore important to have a care plan to follow in order to guide the intervention being given to the AD patients which covers areas of physical, mental and social. The Framework gives areas to build more concrete intervention plan. (Allgood & Tomey, 2009),

## 8 Conclusion

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Caring for the AD patient is often difficult, as the disease progresses the activities of daily living becomes difficult to perform and therefore a good care plan is needed in place to create a regular routine for the patients. Usually these routine are repeated every day to make it easier for the patient to follow. Nurses are needed always around these patient to direct them as their sense of reasoning is completely lost. Patients need direct

and planned routines to help them with daily activities in view of this it is important not leave these patients alone at home, they need on the regular checks. It is important to note that before the AD patient is institutionalized often the disease gets to its severe stage where complete loss of function occurs, the severe stage is when these patient are admitted into nursing care homes for nurses to take control over their whole caring processes. There is no need for a patient to be admitted to a care home facility from the onset of the disease, they can stay at home whiles getting regular visits from nurses, therefore promoting aging in place. The author recommends that patients should be assessed to know the stage of the disease before they are admitted to these care homes, it is there good for nurses to study more on how to assess the situation of the AD before organizing a care plan for them. Also, it's also essential for nurses to understand that there is a lot of stress when caring advocating and standing for the patient. For nursing students who are interested in the field of psychiatry it is important to assess yourself and check whether you are emotionally, physically strong to handle the stress that comes with the caring process. It will serve as guide for nursing students, to learn the ways existing working staffs deal with the stress and daily activities of working with Alzheimer's disease patients.

Care intervention are always good to help plan activities for these patients and it also helps to follow a well laid down plan in order not to create any misunderstandings for the patients, easy and simple daily routines to make it easy to follow without reluctance and resistance from the patient. Nurse must endeavor to research new ways and methods also studies which indicates more improved interventions for sustaining the quality of life for the Alzheimer's patient, and also always advocate for them in the areas of care plan formulation process.

## 8.1 Strengths and Limitations and recommendations

The author was able to get the need information to the research questions, but with difficulty, researches showed lots of information relating to the research question but as to finding the exact information to the question was difficult. Most authors had quantitative research styles than qualitative, making the literature review quiet ambiguous. Most articles were not about interventions to sustain the quality of life of the AD patients but figures to prove that patients are having the required care which improves their quality of life. If possible the commissioner of these research should help student to go into the field and conduct quantitative researches therefore encourage and support them on the issue of language barrier. I believe this would bring more practical results from the areas in which the results of these findings would be more useful. The findings in this research has given a clear and simple insight of the caring process of the AD patient, this would ease the burden of caregivers on deciding the care plan for the patient. This research should be a stepping stone for other researches to take up and find more theories and methods on intervention methods for the quality of life for the AD patient.

## References

- Auerhahn.C, 2004. Recognition of risk factors in Alzheimer's disease. Journal of Academy of Nurse practitioners.16 4-5.2p ISSN: 1041-2972.
- Alzheimerrot, 2015. Alzheimer's disease. <http://www.alzheimerott.org>. Accessed on the 17/11/2015.
- Bond.J and Corner.L, 2004. Quality of life and older people. 9<sup>th</sup> edition Pg. 55-74.
- Clodomiro. A, Gareri. P, Puccio. G, Frangipane. F, Lacava. R, Castagna. A, Manfield. L, Colao. R, Bruni. A. 2013. Somatic Comorbidities and Alzheimer's disease treatment.34:1581-1589.
- Elo. S, Kääriäinen. M., Kanste.O, Pölkki. T, Utrianen. K, & Kyngäs.H, 2014, Qualitative Content Analysis: A focus on Trustworthiness, SAGE open, vol. 4, no 1.
- Ercole. V, Giovanni. P,Giulia. V, Avaro.R, 2004.Quality of life for caregivers of person with Alzheimer's disease living in Sardinia, Journal of Advance Nursing 61(2), 222-231.
- Gale. K, Gemma.H, Cameron.E, Rashid.S and Redwood.S, 2013. Using the framework method for the analysis of qualitative data in multi-disciplinary health research DOI: 10.1186/1471-2288-13-117.
- Hardy. R, Oyebode, Clare. L, 2008. Measuring awareness in people with mild to moderate Alzheimer's disease: development of the memory awareness rating scale-adjusted. Mental health. Aging and mental health, 2007, 11(6): 761-767.
- Hynninen.N, Saarnio.R and Isola. A, 2015. The care of older people with dementia in surgical wards from the point of view of the nursing staff and physicians. Journal of clinical nursing, 24, 192-201.
- Konno.R, Hee. S, Kiyoko.M 2014. Minimising resistance to care behaviours for older adults with dementia in nursing homes. Journal of advance nursing, 70(10): 2167-2180.

Lipscomb.C, 2015. Increased in quality of life of nursing home residents, non-pharmacological intervention. ABSN 17(6) 14-16(3p).

Marlene C, 2007. Meaning of quality of life for Sardinian caregivers of people affected with Alzheimer's disease and factors to improve their quality of life. Journal of advance nursing 61 (2), 222-231.

Naylor.E, Clare.L, 2008. Awareness of memory functioning, autobiographical memory and identity in early-stage dementia. Neuropsychological Rehabilitation, 18(5/6), 590-606.

Nurses lab, 2013. <http://nurseslabs.com/dorothy-e-johnsons-behavioral-system-model>, assessed on 20/12/2015.

Peterson .B, Fillenbaum.G, Pieper.F, and Heyman A, 2008. Home or Nursing Does Place of Residence Affect Longevity in Patients with Alzheimer's disease? Public Health Nursing Vol. 25 No. 5, pp. 490–497/0737-120.

Simmons. D, 2011. Sustainable living in long term care: for people with dementia/Alzheimer. Educational Gerontology, 37:526-547.

Souder.E, Rapp.C, Gwynn.V, Beck.C, Liem.P, 2008 Care of individuals with Alzheimer's disease in the new millennium. Muedsurg Vol. 13/No. 1. Pg. 22-31.

Stanton. M and Rutherford. M, 2004. Hospital nurse staffing and quality of care. Agency of healthcare Research and Quality. Issue 14, pg. 2-7.

<http://archive.ahrq.gov/downloads/pub/evidence/pdf/nursestaff/nursestaff.pdf>. Accessed on 17/12/2015.

Schiffczyk.C, Jonas.B, Lahmeyer.C, Müller.C, Friedemann.R, Matthias W. 2012 Appraising the need for care in Alzheimer's disease. Journal of psychiatry Vol.13 Issue 1, p1-7.

Schweiger.L. Huey. R A. 1999, Alzheimer's disease, Nursing. Jun99, Vol. 29 Issue 6, p34-42. 9p.

Tilly.J, and Reed. P, 2004. Evidence on intervention to improve Quality of care for Residents with Dementia in Nursing and Assisted Living Facilities. Alzheimer's Association, <https://www.alz.org/documents/national/dementiacarelitreview.pdf>. Accessed on 5/5/2016.

Wayne .G, 2014. Dorothy Johnson's behavioural system. <http://nurseslabs.com/dorothy-e-johnsons-behavioral-system-model>. Accessed on 8/12/2015

Wierenga C. dementia and Alzheimer's disease, 2006. What we know now. Journal of the American Society on Aging Volume 35 .No. 2 Pages 37–45.

World Health Organisation, 2014. Ageing and life-course: Facts about ageing

<http://www.who.int/ageing/about/facts/en/>. Assessed on 21/11/2015.

Zaletel. M, 2008. Quality of nursing care: A handbook for Teachers, Researchers and Health Professionals. Management in Health Care Practice Vol. 5, 978-3-89918.1753

Zingmark .K, Sandman. P, & Norberg. A (2002), Promoting a good life among people with Alzheimer's disease. Journal of Advanced Nursing 38(1), 50–58

Öhman.A, Stefan.J, Nygård. L, 2008. Awareness through interaction in everyday occupations: experiences of people with Alzheimer's disease. Scandinavia Journal of occupational therapy, 15:43-51.