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FAMILY CAREGIVER´S OF PEOPLE WITH ALZHEIMER´S DISEASES AND NURSE´S SUPPORT

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ABSTRACT

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Alzheimer´s Disease is the most common type of dementia, and it is a progressive disease that begins with mild memory impairment and may lead to loss of the ability to continue the conservation and react to the environment. More than 25million people worldwide are affected by dementia, most of them who suffer from Alzheimer's disease, and about 5 million new cases occur each year. The aim of this thesis is to study the sources of stress in the family caregiver's patients with Alzheimer´s disease and to investigate the nurse's role in supporting family caregivers to enhance their quality of life (QoL). A literature review method was used to investigate existing literature, which clarifies the research questions. The research questions in this study were as follows: 1) What are the sources of stress to family caregivers? And 2) How can the nurse support their family caregivers?

Key findings in sources of stress to family caregivers of patients with Alzheimer´s Disease (AD) in three categories. This thesis is based on a literature review of 10 articles. The analysis of included articles is conducted with the inductive content analysis method. The transition theory by Afaf I. Meleis was used to support this study because this transition theory helps nurses to recognize appropriate strategies to support and prepare family members to improve their well-being. The finding from the study indicates that family caregivers of Alzheimer´s patients face a myriad of challenges that lead to having physical, psychological, emotional, and financial strain, which lead to a decrease in the family caregiver's quality of life (QoL). There is a nurse's significant support to reduce the family caregivers' strain and to enhance their QoL. The study reviewed that nurse has an important role in helping and supporting the family caregivers such as by guiding, providing emotional support, and teaching them to understand about the AD.

Keywords: Alzheimer Disease, Caregiver burden, Quality of Life, Nurses support

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ACRONYMS

AD- Alzheimer Disease
QoL- Quality of Life
HRQoL- Health related quality of life
Et al. – Et alia meaning "and others"
EU – European Union
US – United States
WHO- World Health Organization
EBP – Evidence Based Practice

1. INTRODUCTION

Alzheimer´s disease (AD) is the most common cause of dementia and is a seriously considered condition that affects learning, thinking, and memory beginning with the deterioration of periodic memory. The term “Alzheimer´s disease” is reserved for patients with typical brain changes that are hallmarks of the disease. Brain changes include damage and loss of nerve cells and their connection, protein fragments, and inflammation. Dementia affects more than 25 million people worldwide, most of them are suffer from Alzheimer´s disease, and about 5 million new cases occur each year (Qui et al., 2009). The exact cause of AD is unknown, but researchers believe it is usually caused due to a combination of several genetic, hereditary, and environmental factors (Ballard et al., 2011).

According to Durán-Gomez et al., (2020) dealing with Alzheimer´s patients every day with normal activities, can be particularly challenging for their family caregivers and decrease their quality of life (QoL). It is well confirmed that family caregivers suffer from physical strain, psychological stress, depression, anxiety, emotional harm, and financial pressure. Action to enhance the family caregivers general QoL, nurses have an important role to support them. Studies suggest that the main needs of family caregivers are information and training about the disease and support from others experiencing the same situation (Romero-Mas, et al., 2021).

Furthermore, to support this study, this paper has used the transitions theory by Afaf I. Meleis model presented in the theoretical framework has been used in this chapter to support this study. The methodology chapter includes methods in which the various methods used in the study have been discussed and described. The results chapter includes the most significant findings which the author has found while reviewing the literature and have been recorded down in a summary chapter. The discussion and conclusion chapter consists of a detailed review of the family caregiver burden of Alzheimer´s disease patients and the nurse’s intervention to support them along with answering the research questions.

The main objective of this study is to determine the challenges faced by family caregivers while caring for their families who have AD. This thesis also seeks to explore the role of nurses in coping with and managing the stress of family caregivers. In addition, the reason for getting inspiration and choosing this topic for the further study came from the workplace. Alzheimer´s disease is a chronic disease where patients need high-quality care, which is time-consuming. As an experience by the author, caring for Alzheimer´s disease patients are challenging. The author has seen and cared for the people who suffer from Alzheimer´s disease and has also seen the burden on family caregivers. Family caregivers are stressed out from Alzheimer's patients who is hospitalized even though they have nurses to care.

2. BACKGROUND

Alzheimer´s Disease (AD) is the most common cause of dementia in older adults and an important public health problem. AD is a progressive neurodegenerative brain disorder that affects a significant disruption of normal brain structure and function which especially affects memory, communication, and behavior (Camacho et al., 2013). The German psychiatrist and neuropathologist Dr. Alois Alzheimer is credited with describing for the first time a dementing condition that later became known as Alzheimer´s disease. In his landmark 1906 conference lecture and a sub-sequent 1907 article, Alzheimer described the case of Auguste D, a 51year-old woman with a peculiar disease of the cerebral cortex, ´who had presented with progressive memory and language impairment, disorientation, behavioral symptoms (hallucinations, delusions, paranoia), and psychosocial impairment (Grabher et al., 2018).

2.1 Epidemiology of Alzheimer´s Disease

The UN Aging Program and the US Centers for Disease Control and Prevention had reported that older people over the age of 65 are expected to develop Alzheimer´s Disease from 420 million in 2000 to nearly a billion by 2030 (Qui et al., 2009). Combined data from European population-based surveys suggest that the aged 65 and over is 6,4 % for dementia and 4,4 %for AD and in the US aged 70 years over yielded a prevalence of 9,7 for AD. The combined data from eight European studies suggested geographical dissociation across Europe, with a higher prevalence among the elderly in the northwest than in southern countries. A long-term follow-up study also showed that AD was associated with a relative mortality risk of 2,6, although the strength of the combination was diluted after the control of multiple diseases (Qui et al., 2009).

According to the report, Finland is one of the EU countries where the population is aging alarmingly. In Finland, an estimated 190,000 people have some form of memory impairment, and 14,500 Finns suffer from Alzheimer´s disease or connected disease every year (Memory disorder 2020). In 2019, more than 10,000 Finns died from dementia, including Alzheimer´s disease, the mean age leading to death from dementia was 86 years for men and 89 years for women (Pajunen et al., 2019). However, almost two-thirds of those who die from this group of diseases are women. Finland is creating a “memory friendly” atmosphere all over in Finland, which aims is to promote brain health and early detection of serious symptoms by the Ministry of Social Affairs and Health (Alzheimer's Europe).

2.2 Impact of Alzheimer Disease on family members

Alzheimer´s Disease is a critical public health issue in most of the countries of the world, with significant health, social and economic burdens on society. The diagnosis of AD affects not only the patient but also the whole family. A family caregiver is defined as a relative with great responsibility for the care of AD patients (Korolev et al., 2014). In the initial stages of the disease, patients need constant monitoring, care, and supervision in their daily lives as they perform all the basic functions that go mostly to their relatives. Most of the family caregivers are unknowing of the problems that they may be facing and consequently, they are unable to find the solutions. But somehow most of the family caregivers easily adapt to the new situation and later may seriously affect their health condition. Alzheimer´s disease patients´ need 24/7 care due to the fact that their mental abilities keep declining daily life. Caring for a person with AD is associated with significant risk to the caregiver´s health and well-being (Grabher et al., 2018; Cotelo et al., 2015).

According to Lam (2020), a family member may experience a variety of feelings rather than others, since they strongly feel the daily changes that are related to the disease. Thus, it is known that there are several changes in the daily lives of family caregivers, sometimes associated with overload and difficulty with the person being cared for. Each person may experience the burden of care differently, depending on how the caregiver copes with the care requirements, his or her stress level may also fluctuate (Nguyen et al., 2009). Although it has been reported that family caregivers need a support where a nurse can help them to meet the challenges of caring, which mean introducing the family caregiver to support group, such as providing community resources such as educating the family caregivers to meet the personal health needs. Also, educating the caregiver on ways to cope with the stress is a good way to reduce feelings of family caregiver burden (Leblanc, Driscoll, & Pearlin, 2004). Furthermore, nurses are in excellent situations to detect the family caregiver’s presence stress and can intervene through the training and by giving information of their ongoing relationships with patient and caregivers (Lu & Wykle, 2007).

2.3 Quality of Life of Alzheimer´s patient family caregivers

The World Health Organization (WHO) has defined quality of life as a person´s own perception of his or her life situation in relation to his or her expectations, and goals within a frame of reference defined by his or her culture and values.

Globally, family members are the most common caregivers, which leads to a decline in their quality of life (QoL). Family caregivers suffer from physical strain, increased sense of burden, psychological stress depression, and anxiety (Andreakou et al., 2016). In addition, family caregivers’ health-related quality of life (HRQoL) is mainly affected by their subjective experiences such as a feeling of burnout, depression symptoms, sense of hope and patient-related factors. Moreover, the lower HRQoL also depends on the patient´s level of dependence and time-consuming in the activities of daily caring (Välimäki et al.,2016). Many families caring for their members with Alzheimer´s are overwhelmed with those daily activities, emotional strains, and the severity of the illness.

3. TRANSITION THEORY BY AFAF L. MELEIS

The theoretical framework of this study is strived to provide insight into the role of nursing for supporting family caregivers of Alzheimer´s patients by doing significant academic work by Professor of Nursing, Dr. Afaf I. Meleis. The theory of these transitions was developed in the mid-1960s when Meleis was working on her Master´s and Ph.D. dissertation research, phenomena of design, programs, and process of involving the new parent and meet the parental roles (Meleis et al.,2015).

The aim of this theory is to train the nurses to prepare patient´s families for developmental, situational, health care transitions and to improve their quality of life and well-being. Objectives are to make sure that families can cope with the changes, experience in their health and environment, and appear to be able to work to their full potential. Therefore, this theory has been used in this study to provide a framework that recognizes the universal aspects of nursing, to increase potential nursing support in identity issues and lifestyles and support the nurses to concerns about system changes and societies, and to challenge nurses to evolve positive feelings and healthy results (Meleis et al.,2015). This theory improves from clinical practice, is supported by research data, and provides a framework for application in practice, research, and theory building. This study looks to identify components of interventions necessary during the transition from nursing care to a family caregivers' model. Dr. Meleis highlights that during this transition, there are critical points and milestones that require proper supportive care (Meleis et al.,2010).

In 2010, Meleis compiled all the theoretical works in the literature connected to Transitions theory and published them in a book entitled Transitions theory: Middle-Range and Situation-Specific Theories in Nursing Research and Practice. Meleis claims to identify the need for milestones and defined the model of care in tandem developed with tasks with different transition phases that make a difference for such as quality of life (QoL), Sense of well-being, integration, and improvements of roles are cultivated and tested. Consequently, Dr. Meleis awaited that transition theory will lead to the development of health care policies that ensure healthy transition processes and outcomes.

The model includes four defining concepts: the nature of transitions, transition conditions, patterns of response and nursing therapeutics (Figure 1). Each of the four concepts are explained according to the subcategories.

Nature of transitions: The nature of transition describes by its type, pattern, and one or more properties. Transition types include developmental, situational transitions, patterns, health/illness or organizational. Patterns including single, multiple, or simultaneous transitions and the properties includes awareness, change and difference and critical points and events (Meleis et al., 2010).

Transition conditions: It refers to a several factors that can either facilitate or inhibit a healthy transition, such as socioeconomic status and societal factors (Meleis et al., 2010).

Patterns of response: It represents indicators of healthy transitions which are conceptualized as process indicators such as feeling connected and developing confidence and coping. Outcome's indicators which include mastery of skills and fluid integrative identifies (Meleis et al., 2010).

Family caregivers of patient with Alzheimer disease meet variety of changes as they move into the role of caregiver. According to transitions theory (Meleis et al., 2010), transitions are trigger change episodes in which a new condition is entailed into human´s life, they can be multidimensional, complex, and fluid. While transitions can be positive in nature, some are disruptive and not able to be predicted, often leading in uncertainty and distress. The nature of transitions experienced by Alzheimer´s caregivers can affect by many factors. Changes and differences are at the heart of transition experiences and can influenced the relationship and routines, ideas, perceptions, and identities (Meleis et al., 2010).

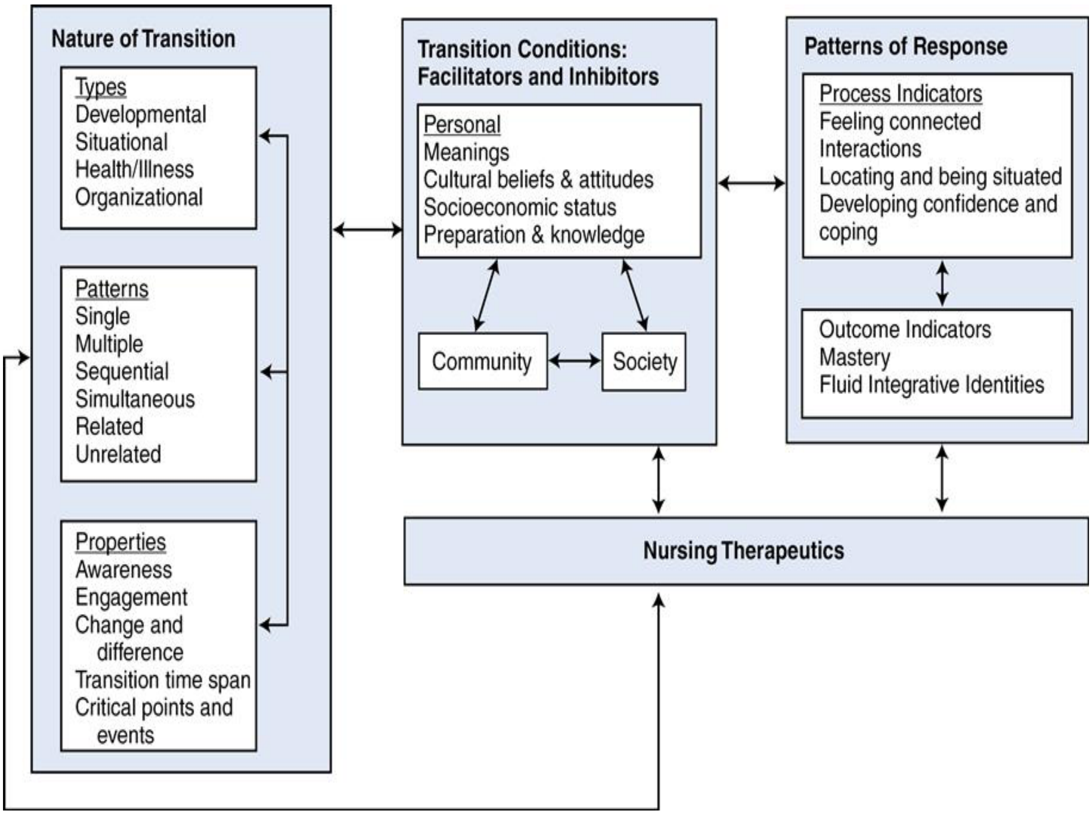

Figure 1 *Meleis Transition Theory: Published with reusable license by Rhonda Misfeldt (June 3, 2016)*

4. AIMS OF STUDY AND RESEARCH QUESTIONS

The aim of this study is to investigate how Alzheimer´s disease (AD) affects the patient´s family caregivers’ quality of life (QoL) and the nurse's support to enhance family caregivers' life.

Research questions:

- What are the Sources of stress to family caregivers?
- How can the nurse support their family caregiver?

5. RESEARCH METHODS AND THESIS PROCESS DESCRIPTION

Literature review method was selected in this study. Literature review is the comprehensive study and interpretation of literature that relates to a specific topic. It makes sense of a body of research and present an investigation of the available literature (Aveyard et al., 2010).

Literature reviews are important in health and social care because it can be used to review information and research related to health and social care in its specific content and set amid other similar information and research. It helps identify the main methods and data collection process that has been used in the previous studies, and also provides tremendous support for the authors 'own research findings. Furthermore, the available information is vast and expands on daily basis and the increasing information which is available in this field on evidence-based practice (EBP). EBP is the use of best scientific evidence to support the clinical decision making. (Aveyard et al., 2010).

With literature review, author can identify a research question then look to answer this question by searching for and analyzing relevant literature using a systematic approach. It is important that the review is approach systematically, to recognize the most efficient means of generating coherent and best results.

5.1 Identifying research questions

The Evidence based practice (EBP) offers to the clinical problems that emerge from practical care, teaching or research be organized by using PICO strategy. PICO represent an acronym for Patient or Problem, Intervention, Comparison, and Outcome, which used to construct the research questions. Research questions and keywords were identified by using the PICO tool (Santos et al., 2007). The author used this PICO tool with the help of Diaconia University of Applied Science librarian to identify the research questions. First author resolved the question in her own words:
How Alzheimer Disease (AD) affects the family caregiver's quality of life (QoL)?
Then, researcher split this research questions into 3 categories:
"Alzheimer´s Diseases" AND "Caregiver burden" AND "Quality of life"

Part of PICO	**P** **Alzheimer´s Disease**	**I** **Quality of life**	**O** **Caregiver burden**
Keywords and MeSH-terms	• Alzheimer patient´s caregiver • Family caregiver stress • Caregiver burden	• Psychological support • Physical & emotional support • Providing education	• Overload of activities • Poor well-being • Satisfaction of life • Lack of education

Table 1: PICO format

5.2 Data Collection

Data collection is the process of gathering, measuring, and analyzing accurate insights for research using standard proved techniques. The author used Diaconia University of Applied Sciences Library´s search engine to collect the data and the articles were found with the help of internet sources such as The Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMed. CINAHL is a database that indexes magazines, books, audiovisual materials, pamphlets, software, dissertations, and research tools for all health professions and it emphasizes nursing and related health care (Wright et al.,2015). PubMed is a database that indexes life science journal articles focusing on biomedical information, and it is a free resource that supports the search and retrieval of biomedical and life science literature to enhance health, both globally and personally (Williamson et al., 2019)**.**

Furthermore, these databases were used as they contain scientific and peer-reviewed articles written by credible authors, such as journalists, researchers, and experts in their field. In addition, these databases provide a critical summary of systematic reviews and provide powerful search tools for narrowing results. Inclusion and exclusion criteria for literature review are explained in the below table:

Inclusion criteria	**Exclusion criteria**
Published in English language.	Other languages.
Published after the year 2010	Published before the year 2010
Related to family caregiver stress of Alzheimer´s patient and the nurse's support.	Paper with no mention about family caregiver stress of Alzheimer´s patient and the nurse's support.
Full-text articles	No access to full text.
Related to home care and support to family caregiver	Articles with no mention home care and support to family caregiver

Table 2: Inclusion and exclusion criteria to literature search

5.3 Search outcomes and selecting articles

Below figure 2, The progress of Literature selection is clarified with PRISMA diagram. This figure shows the process of database search and the total number of hits that were obtained during search. Firstly, the authors collected the total 272 articles by using the two search engines CINAHL and PubMed. Secondly, the author narrowing down year to 2010-2021, selecting the articles that were written only in the English language and selected the full-text articles, which hits 89. Thirdly, the author chooses the 10 articles which gives the answer of the topic and research question.

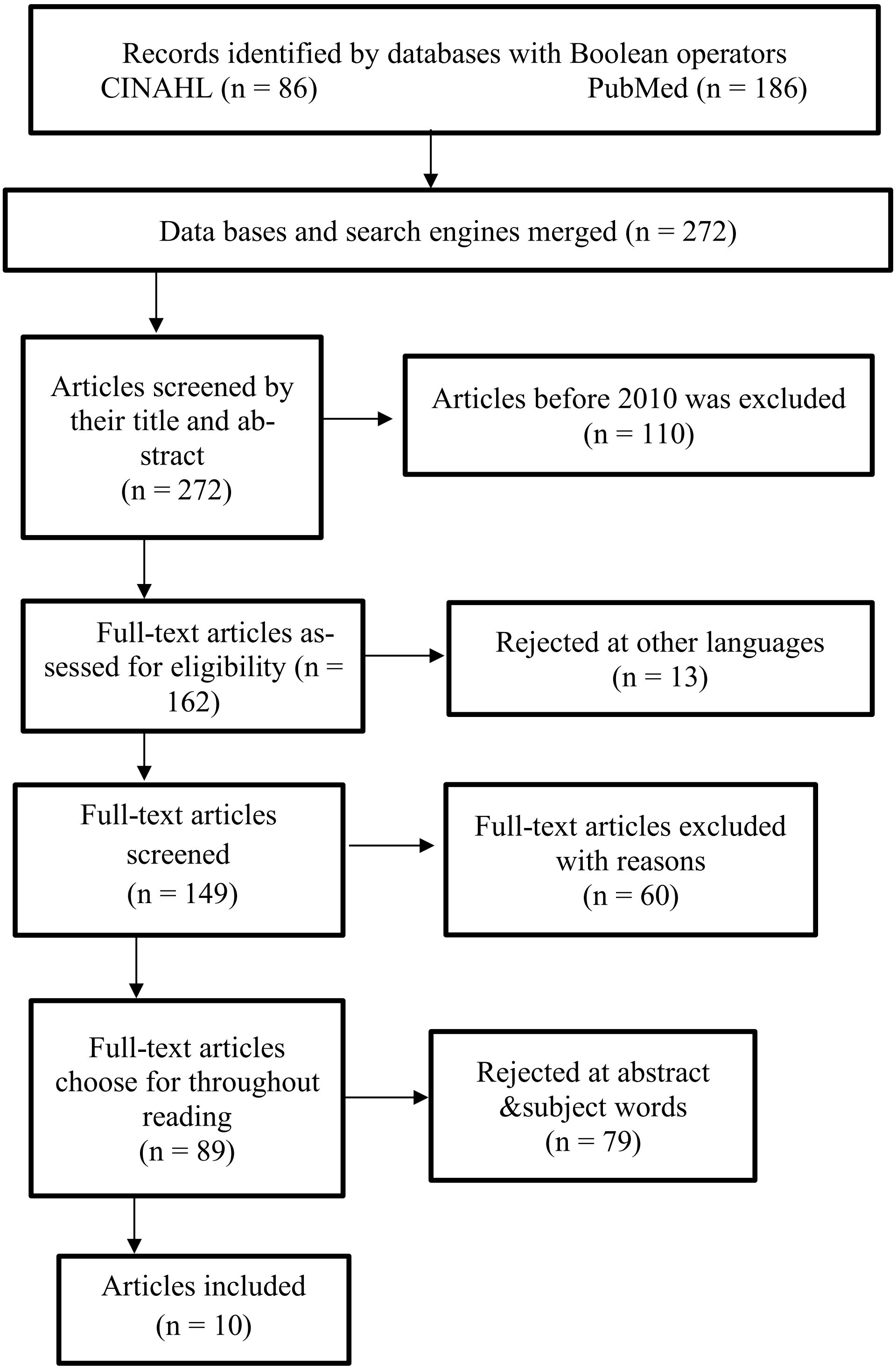

Figure 2: Illustration of Data Collection Process

Total 10 articles were selected to literature review and for content analysis. The search was started from CINAHL databases. By using 3 keywords: **“Alzheimer´s Diseases” AND “Caregiver burden” AND “Quality of life”** the researcher got 86 results from the first line of search. With additional searches by selecting only articles released in last 10 years, where 53 results found and choosing only English languages, 42 results were found. From these articles 6 articles were selected by their abstract and title to fit in this study. The articles which did not answer the topic and research questions were excluded.

After searches from CINAHL second selected data base was PubMed, which gave 186 results by using same keywords. After this author selected the articles, which was released in last 10 years were found 109 results and further limited was done by choosing only English languages were got 107 results. From these articles 47 was chosen by selecting full text and for further reading 4 articles selected for this study. The articles which did not answer the topic and research questions were excluded.
Detailed description of how articles are collected and narrowed down to get the most relevant articles the study is illustrated in above figure 2.

It shows the process in database search and the total number of hits received during the search. Besides, the author has also followed the inclusion and exclusion criteria to obtain necessary information for the research. Considering the above-mentioned criteria, the sum of 10 articles was chosen and 79 articles were rejected to get the current up-to-date literature on the subject matter, and to find the relevant answer to research questions.

The following articles were chosen based on the research question:

Author (1) Publication Country	**Aims of Articles**	**Study Method**	**Result / Findings**
1) Ferreira, D.P.C., Aguiar, V.S., Meneses, R.M.V. (2014). Portugal	To analyze the QoL of family caregivers of Alzheimer patients.	Integrative review article, answering the question, which was collected by LILACS databases and Virtual library.	Living in same home with Alzheimer´s patients influence negatively the QoL of their family members and the importance nurses´ support to family caregivers.
2) Corrêa, M. S., Giacobbo, B. L., Vedovelli, K., Lima, D. B. D., Ferrari, P., Argimon, I. I. D. L., & Bromberg, E. (2016). Japan.	To hypothesized that the younger caregivers show qualitatively similar cognitive and psycho-physiological alternations to those of older caregivers.	Research articles	Even though the younger caregiver had milder impairments in memory and executive functions than old caregivers, their performances fell to the same or lower levels as those of the healthy older controls.
3) Andreakou, M. I., Papadopoulos, A. A., Panagiotakos, D. B., & Niakas, D. (2016). Greece.	To evaluate the health-related quality of life for family caregivers of AD patients.	Observational study	A strong negative correlation between the dimensions of HRQoL and the scores of the depression scale was revealed.
4) Fowler, N. R., Head, K. J., Perkins, A. J., Gao, S., Callahan, C. M., Bakas, T., Suarez, S. D., & Boustani, M. A. (2020). USA.	To examine the benefits and harms of AD screening for family members of older adults.	Study protocol	The need for early detection of ADRD is frequently debated as important care for old adults, which includes the need to support their family members to prepare the needs for caregiving.
5) Fernández, M. D. R., &	To know the health	Cross-sectional descriptive study	Mainly anxiety and insomnia have been observed

Galán, Á. M. O. (2018). USA.	perceived by the family caregivers of AD, according to the relationship of kinship.		specially in the spouse and the children, severe depression, and social dysfunction in the period of care between 2 & 5 years.
6) McKenna, S. P., Rouse, M., Heaney, A., & Hagell, P. (2020). UK.	To develop a new outcome measure to assess QoL in AD family caregivers.	Qualitative research	Articles revealed that spousal caregivers had worse QoL when the person with AD was confused, couldn't left alone, did not recognize the caregiver, and wandered around the house.
7) Romero-Mas, M., Ramon-Aribau, A., Souza, D. L. B. D., Cox, A. M., & Gómez-Zúñiga, B. (2021). Spain.	To improve the quality of life of family caregivers of people with Alzheimer´s Diseases (AD)	Quasiexperimental study	Highlighted the caregivers' main needs are information and training to support family caregivers to enhance their QoL.
8) Ruiz-Fernández, M.D., Hernández-Padilla, J.M., Ortiz-Amo, R., Fernández-Sola, C., Fernández-Medina, I. M., & Granero-Molina, J. (2019). Spain.	To examine the factors related to ´perceived health´ and ´presence of new-onset mental health problems´ in family caregivers of people diagnosed with AD.	Cross-sectional observational study	When people diagnosed with AD, intervention programs for caregivers should aim to regulate emotions and promote positive coping strategies must allow them to adapt caregiving demands that arise with the progression of AD.
9) Durán-Gomez, N., Guerrero-Martin, J., Pérez-Civantos, D., Jurado, C. F.	To access the resilience of caregivers of people with AD.	Cross-sectional design	Most of the caregivers reported symptoms of anxiety and depression.

L., Palomo-Lòpez, P., & Càceres, M. C. (2020). Spain.			
10) Araújo, C. M. M. D., Vieira, D. C. M., Teles, M. A. B., Lima, E. R., Oliveira, K. C. F. (2017). Brazil.	To describe the repercussions of AD on the family caregiver´s life.	Descriptive research with qualitative approach	Five categories emerged: caregiver knowledge about AD, Feelings unveiled by the caregiver, caregivers´ overload, major difficulties encountered in caring for Alzheimer´s patient, coping behavioral.

Table 3: Chosen articles for research study.

5.4 Data analysis

This study uses inductive and qualitative content analysis method. Data analysis is the most crucial part of any research, and it summarizes the collected data. Its aim is to provide objective and systematic means to valid inferences from data when explaining a particular phenomenon. The inductive content analysis method utilizes the process of abstraction to reduce and group data so that researchers can answer the study questions using concepts, categories, or themes (Kyngäs et al., 2014).

Firstly, the author read the data word by word to obtain codes by identifying information that appears to reflect key ideas or concepts in the research questions and becomes familiar with the articles by reading of the entire data set actively and repeatedly. The generated codes were then sorted into two categories according to the research questions. In addition, a list of codes that identified all properties of the data was interesting and noteworthy.

Categories for research question 1: **What are the sources of stress to the family caregivers?**
• Family caregivers have overload of activities (10) • Family caregivers face the physical, psychological, and emotional harm (1,2,3,4,6,8,9,10) • Financial pressure (1,3,10) • Depressive symptoms (3,7,4,5,9) • Lack of knowledge of AD (7)
Categories for research question 2: **How can the nurse support their family caregiver?**
• Nurses have skills to support the family caregiver to enhance their quality of life (QoL). (1) • The advice and support of professional nursing to the family caregivers (7) • Nursing intervention should be aimed for improving coping mechanism and emotional regulation. (8)

Table 4: Categories and analyses for each research question

6. FINDINGS

6.1 Sources of stress to family caregivers of AD Patient´s

Findings of study done by Ferreira et al., 2014 revealed the negative effects of the family caregivers of AD that decrease the quality of life (QoL) in following aspects: physical, psychological, emotional, and financial strain. Studies have indicated that the family caregivers have mainly the physical and emotional distress such as to the patient´s spouse (Corrêa 2016; Mckenna 2020). Mostly, the family caregivers face a myriad of challenges that lead to cause more problems, in addition to increase in psychiatric symptoms, personal relationship with existing conflicts between family members while caring the AD patients at home (Durán-Gomez 2020; Araújo 2017). Family caregivers knows that caring for Alzheimer´s patients are myriad challenges, even though they often care much more to providing good care to their loved one rather than caring for themselves, such things may lead to change their behavior their daily life activities (Corrêa 2016; Mckenna 2020; Durán-Gomez 2020).

Although the patient is in the early stages of AD, the caring of people with AD lead to chronic stress and psychological suffering, which affects their QoL (Fowler 2020). In some cases, family caregivers are forced to change their lifestyle and behavior to adapt to their new role and obliged to perform physical, psychological, and social care activities to meet the people needed (Ruiz-Fernàndez 2019; Durán-Gomez 2020). A combination of problems ranging from social stress and financial problems in caring for AD patients that can ultimately ruin a career's own professional and social life, physical and mental health, and financial well-being (Andreakou 2016). According to Romero-Mas, many family caregivers may have inadequate knowledge about Alzheimer’s disease, perhaps they do not fully understand the common characteristics or symptoms that can exacerbate their own Quality of life (QoL). That´s why family caregivers need education about the Alzheimer´s Diseases as well as the support services and caring information which helps to enhance their QoL (Romero-Mas 2021).

Fowler et al., 2020 have mentioned that due to the lack of effective treatments the emotional and social cost of screening are too high. Furthermore, by overly focused on providing personal care to the exclusion of their own well-being, some family caregivers were reduced their social activities (Fowler 2020; Romero-Mas 2021). Family-Caregivers of Alzheimer Diseases patients suffer more from anxiety and depression, even as they begin to take care the minor stages of the AD (Fernàndez 2018). The provision of home care involves a wide variety negative consequence for the family caregivers of AD, such as emotions stress, social isolation and also more likely to experience depression, sleep disorders (Mckenna 2020).

6.2 Nurses support to their family caregivers of AD

Nurses should be concerned with several problems which affect the patient safety and quality of care as the reliance on their family caregiving grows. This is the second research questions which aimed is to reveal that how or in which condition the nurses can support their family caregivers to bear their stress and can improve their QoL. According to Ferreira et al., 2014 the nurses have the art of caring and the have the possibility to intervene, which recognize their needs to enhance the family caregivers Quality of life (QoL). Moreover, Romero-Mas et al. identified that the nurse could stimulate cognitive activity by reducing anxiety and agitation, securing, and promoting physical activity safety, improving communication, and promoting the individual independence in self-service activities to meet the social needs, promoting activity and rest, and promoting nutritionally balanced. Along with this family caregiver’s main needs are information and training about the Alzheimer disease, and the support from the nurses and others experiencing people. (Ferreira 2014; Romero-Mas 2021; Ruiz-Fernàndez 2019).

In addition, the involvement of nurses can helps understand their need for high-quality care and can improve their strategies to implement effective interventions. Furthermore, nurses can help them with appropriate strategies to cope with difficult situations by noticing their depression, sadness, and fatigue (Romero-Mas 2021; Ferreira 2014; Ruiz-Fernàndez 2019).

7. DISCUSSION

7.1 Discussion of study findings

Most of the findings from the ten (10) articles reviewed agree with the aim of this study is to investigate the sources of stress to family caregivers of patients with Alzheimer´s disease (AD) and the nurse´s support to their family members.
In the process of integrative content analysis of each article to answer question one (1): “What are the sources of stress for family caregivers of Alzheimer´s disease patients?”

Numerous articles have shown that family caregivers often become physically and emotionally overburdened and experience high rates of physical illness, social isolation, and emotional distress including depression. Furthermore, although the patient is in early stages of AD, family caretakers perceive as a worse health condition and being dissatisfied, which lead to decline their QoL (Fernandez et al., 2019). But according to Välimäki (2016), over a three year follow up period this article found that family caregivers had significantly lower QoL than other peoples in seven of fifteen, such as in usual activities, depression, anxiety, etc. In addition, this study also shows that long-term caring of patients with Alzheimer disease constitutes a risk to physical health and these caregivers are more likely to report fair or poor health than non-caregivers. Also, Välimäki (2016) revealed that family caregivers HRQoL can influenced by their subjective experiences, such as feeling exhausted, depressive symptoms, feeling hopeful and patient-related factors. Increased patient dependence and more-time consuming daily treatment were associated with lower HRQoL for caregiver. However, Välimäki (2016) proven that family caregivers have lower HRQoL, according to fowler (2020) this mental quality of life and the depressive consequences of informal caregivers are both closely correlated with the severity of AD, which may increase the burden on the family members and may rise his/her physical and psychological exhaustion. Along with this, due to inadequate knowledge and skill family caregivers may be unfamiliar with the type of care they must provide, or the amount of care needed, which can affect the family caregivers HRQoL (Ferreira 2014; Andreakou 2016; Araújo 2017)**.** In addition, the caregivers who are unemployed or have low incomes experience more distress because if they have fewer resources to meet the care demands. Overall, financial concerns cause distress for caregivers during the long period's treatments, as resources become depleted (Ferreira 2014; Andreakou 2016; Araújo 2017)**.**

To answer research question two (2): "How can the nurse support the family members of AD patients?" Most of the studies revealed that the nurse has an important role in helping and supporting the family members, as well as their contributions, which are valuable to the patient (Ferreira 2014; Romero-Mas 2021; Durán-Gomez 2020). Moreover, some articles emphasized the major role that nurses play in providing holistic intervention to the family caregivers, the benefits of emotional connection, and a better understanding of the need for high-quality care, while the family caregivers feel gratitude when they receive support (Ferreira 2014). The importance of planning and implementation of nursing interventions aimed at family caregivers, as it needs to feel good and supported to achieve a higher quality of life (Cordeiro et al.,2014). In addition to dealing with normal activities of everyday life, family members must also provide guidance, support, knowledge, and skills applicable in order to seek a better quality of life (QoL). Exposing the family members to multicomponent intervention can increase knowledge and can reduce depression levels. The nurse´s support to the family caregivers directly reducing caregiver distress and the overall impact on their health and well-being (Romero-Mas 2021).

As an experienced nurse, the author also had the opportunity to interact with Alzheimer´s patients as well as with their family caregivers. The author had noticed that family caregivers were feeling good after receiving the nurse´s supports and information about the diseases. As an author experienced, Family caregivers feel unprepared to provide care, and they don´t have a sufficient knowledge to provide appropriate care to their patient. If family caregivers get help from the health care professionals to managing their tasks and emotional demands of caregiving, it helps to improve their QoL.

The scope of transition theory was viewed in this study which was established by Dr. Afaf L Meleis in 2010. Based on the concepts of transition theory, it was hypothesized that setting goals and educating the caregivers about likely transition are fruitful approaches in enhancing care transition for Alzheimer´s patients family caregivers. According to the transition theory, the findings of this study confirm what was expected.

The strong advice and support of professional nursing are possible to reduce family caregivers' burden and depressive symptoms (Romero-Mas 2021). In addition, providing additional counseling that demonstrates long-term benefits for the whole monitoring of family caregivers of people with Alzheimer´s disease.

Secondly, based on the concepts of transition theory, nurses were expected to have skills to prepare families, communities, and children to navigate across and adapt to transition experiences that improve health results. Nursing intervention may support family caregivers during the transition following Alzheimer´s diagnosis with tools and resources such as information, education, psycho-social support, and improving problem-solving skills. All these targeted interventions are significant to this transition to support better outcomes for family caregivers (Ruiz-Fernández, et al., 2019; Ferreira, et al, 2014; Romero et al., 2021).

Lastly, when nurses support the roles and responsibilities of family caregivers, there is a role that enhances the family caregiver´s identity. These results support the theoretical claims that the experienced level of burden or stress by family caregivers depends on their expectations of care roles. Due to this approach, there was a difference in disease-related stressors and other burdens between family members of Alzheimer´s disease patients. This approach demonstrated that effective nursing intervention and guidance on planning and implementation actions, support, knowledge, and skills are essential to achieve a better-quality life for both patients and families (Ferreira 2014; (Romero-Mas 2021; Ruiz-Fernandez 2019).

7.2 Professional Development

Before author did this research, author only know that Alzheimer's disease is a type of dementia that affects a patient's memory, behavior and thinking. Author never think that the Alzheimer´s disease patient´s behavior can affect their family caregivers too. When author started first job in Finland, author had seen lots of families care takers who face the myriad challenges while caring their loved ones with AD even though patient was hospitalization.

When author started this thesis, author had read many articles related to this thesis topic, where found that in 2018 more than 10,000 people died of this Alzheimer´s disease in Finland. Globally, approximately 44 million people have AD which affects their family caregivers too while caring them. Even though the patient is admitted in the hospital or lives in nursing home, family caregivers experienced lot of stress such as mental, physical, psychiatric harms and also affect their family-relationship. As a result, family caregivers have low QoL. In such a case if family caregivers receive the support from the nurse or others experience people, then it helps them to improve their QoL. From this thesis author learned that nurse has the biggest role for improving the people´s QoL by giving the information about the diseases, support them in every condition and nurses can work with families and doctors to improve strategies towards effective interventions.

Furthermore, Nurse has an inherent obligation as patient advocates to inform society to improve habits that hinder the onset and progression of Alzheimer´s disease. And also, nurses have a fundamental role in promoting health and preventing disease through the training of client and their family caretakers. Author has built knowledge base on this disease and the writing skills too. After all, in future author will do concerns with patients as well as their family caregivers to enhance their HRQoL.

8. ETHICAL CONSIDERATION

Ethical consideration is very important in every research work, which involves adhering to rules and regulations set by the institution the research is being done for. An ethical perspective is a set of guidelines that researchers must follow when writing a research paper. Moreover, there should not include plagiarism and due acknowledgement should be given whose work were review is referencing (Gale et al., 2013).

This research paper is based on literature review where qualitative research design has been used. Considering and adhering all the ethical guidelines which is crucial to follow while writing a research paper, an equitable behavior to the obtained information has been done by the author (Lachman et al., 2006). Furthermore, the materials which are chosen for literature review has already considered the ethics in their articles and the ethical values was also indicated.

The thesis was conducted by following Diaconia University of Applied Sciences' guidelines for Bachelor´s theses, it can be found on the official website. Together with this, this thesis has been done under the guidance and experience of librarian teachers.

9. CONCLUSION

At the onset of the thesis, the main goal was to find out the sources of stress for family caregivers of Alzheimer´s patients and the role of nurses to support the family caregivers to enhance their QoL. The author decided to make a qualitative review of literature by using two questions that are guided by Transition theory to conduct this study. The thesis focused on literature that touch on the challenges faced by family caregivers of Alzheimer´s patients and the nurse's support.

In this study, the evidence and results gathered show that caregivers of families with Alzheimer´s face challenges (physical, psychological, emotional, financial pressure, depressive symptoms), and there are significant support and mitigation measures to address these challenges. Stress can cause many negative consequences for both Alzheimer´s patient and their family caregivers. In fact, patients with AD become increasingly dependent on their family caregivers and this brings negative influences on the lives of caregivers. Action to reduce those strains, nurses have a crucial role to support the family caregivers which helps to enhance the family caregiver's quality of life. Moreover, health education of Alzheimer´s diseases to both the patients and family caregivers is useful and relevant in enhancing the quality of life.

The findings of the study showed that supporting family members through daily activities, emotional support, psychological support, and providing information and knowledge in health professionals, provides a buffer against the burden and stress on family caregivers. Furthermore, nurses should make sure to maintain patient´s families spiritual, emotional, cognitive health, where family members need to feel secure with nurses and trust them to share their feelings. Recently, Alzheimer´s disease is incurable, but nurses can use a variety of mitigation methods that support family caregivers to prevent and prolong the disease process.

The strength, limitations, and recommendations are also found in this study. The study provides in-depth knowledge about sources of stress and the nurse´s support for family caregivers of Alzheimer´s patients. The preunderstanding about the topic and the experiences had gained by the author while working in hospitals in Finland. The author found enough articles for sources of stress to family caregivers and the nurse's support. The author has conducted a qualitative literature review for this study. In accordance with the results, the author noticed that Alzheimer's patient family caregivers have higher levels of stress, depression, self-efficacy, and anxiety symptoms. Whereas nurses can support them to enhance their life by giving emotional support, trained them to understand about the AD.

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