



The caregiver burden of Alzheimer's patients: an evolutionary concept analysis

La carga del cuidador de los pacientes de Alzheimer: un análisis conceptual evolutivo

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Abstract

Abstract: Introduction and purpose: Due to increased population of the elderly, the risk of developing chronic diseases including Alzheimer's in the society increases. The burden, caused by the elderly care affects various physical, psychological, social, and spiritual dimensions of the caregivers. Although the concept of caregiver burden has been generally used in medicine and nursing, it has no clear and specific definition. This analysis will result in identification of the characteristics of caregiver burden concept, and its developing conditions and outcomes, which may be effective in domain of research and practice to reduce the caregiver burden. The present study aimed to clarify the concept of caregiver burden among caregivers of patients with Alzheimer's disease.

Method: In the present study, through Rogers's evolutionary concept analysis method, all papers published from 2010 to 2017 were reviewed. The search was limited to papers with Persian and English full texts. The data, associated with the attributes, antecedents, concept consequences, surrogate terms and the data, related to nursing context and its changes over time, were summarized and coded.

Results: Concept analysis showed that the caregiver burden concept in patients with Alzheimer's disease has two

major attributes in familial (women as the most important caregivers, increased economic costs) and personal (shortage of time, increased responsibility, and the workload of the caregivers) dimensions.

Discussion: The antecedents are also determined in three dimensions of patients' characteristics (disease symptoms, comorbidity), caregivers' characteristics (knowledge and awareness, caregivers' experiences), and support resources (economic, social, and familial resources). Furthermore, the outcomes were specified in four dimensions including physical diseases, psychological disorders, impaired social function, and development of a sense of pleasure and hope.

Conclusion: The caregiver burden concept is multidimensional and complex and includes a wide range of behaviors and characteristics. Furthermore, it is dynamic and changes over time. This analysis, in addition to identification of the characteristics of caregiver burden concept, will be a starting point for further research and development of this concept and nursing knowledge expansion.

Keywords: Caregiver burden, Alzheimer's, caregivers, concept analysis.

Resumen

Introducción y propósito: debido al aumento de la población de ancianos, aumenta el riesgo de desarrollar enfermedades crónicas, como el Alzheimer en la sociedad. La carga, causada por el cuidado de ancianos, afecta varias dimensiones físicas, psicológicas, sociales y espirituales de los cuidadores. Aunque el concepto de la carga del cuidador se ha utilizado generalmente en medicina y enfermería, no tiene una definición clara y específica. Este análisis dará como resultado la identificación de las características del concepto de carga del cuidador y sus condiciones y

resultados de desarrollo, que pueden ser efectivos en el dominio de la investigación y la práctica para reducir la carga del cuidador. El presente estudio tuvo como objetivo aclarar el concepto de la carga del cuidador entre los cuidadores de pacientes con enfermedad de Alzheimer.

Método: en el presente estudio, a través del método de análisis del concepto evolutivo de Rogers, se revisaron todos los artículos publicados entre 2010 y 2017. La búsqueda se limitó a trabajos con textos completos en persa

e inglés. Los datos, asociados con los atributos, antecedentes, consecuencias conceptuales, términos sustitutos y los datos, relacionados con el contexto de enfermería y sus cambios a lo largo del tiempo, se resumieron y codificaron.

Resultados: El análisis del concepto mostró que el concepto de la carga del cuidador en pacientes con enfermedad de Alzheimer tiene dos atributos principales en el familiar (las mujeres como los cuidadores más importantes, los mayores costos económicos) y el personal (escasez de tiempo, mayor responsabilidad y la carga de trabajo de los cuidadores) dimensiones.

Discusión: Los antecedentes también se determinan en tres dimensiones de las características de los pacientes (síntomas de la enfermedad, comorbilidad), características de los cuidadores (conocimiento y conciencia, experiencias de los cuidadores) y recursos de apoyo (recursos económicos, sociales y familiares). Además, los resultados se especificaron en cuatro dimensiones, incluidas las enfermedades físicas, los trastornos psicológicos, la función social deteriorada y el desarrollo de una sensación de placer y esperanza.

Conclusión: El concepto de carga del cuidador es multidimensional y complejo e incluye una amplia gama de comportamientos y características. Además, es dinámico y cambia con el tiempo. Este análisis, además de la identificación de las características del concepto de carga del cuidador, será un punto de partida para una mayor investigación y desarrollo de este concepto y la expansión del conocimiento de enfermería.

Palabras clave: Carga del cuidador, Alzheimer, cuidadores, análisis conceptual.

The policy of birth control, reduction of mortality, increased life expectancy, growth of healthcare services and diagnostic and treatment technologies have generated a considerable rise in the elderly population, which is known as graying of the population or population aging etc¹. Increased life expectancy implicitly suggests elevated number of the elderly in the society, which is notable, as the elderly frequently use healthcare services. Alzheimer's disease or aging-induced dementia is a degenerative and progressive chronic brain disorder, which is associated with a huge impact on the memory and cognitive abilities of a person in doing self-care activities. This disease has usually unfortunate consequences for the patients and their family, and nowadays, is considered as one of the most serious disorders, such that it is also known as an endless funeral ceremony².

Many references, due to the important status of families in providing care for the elderly, consider them as "the

goalkeepers of the elderly's life", and generally, families undertake a significant but hidden part of providing support and care for the elderly³. The caregiver burden is one of the negative outcomes of providing care for the elderly suffering from Alzheimer's disease, which has recently gained a great deal of attention. Researchers stated that the caregiver burden adversely influences caregivers' physical, psychological, social, and spiritual dimensions, and even their quality of life^{4,5}. The term "Caregiver burden," is most frequently used when measuring the impact of the caring experience, which has been found to be highly associated with poor outcomes for both the caregivers and the patients⁷. Providing care for the elderly suffering from Alzheimer's disease is an overwhelming duty. Providing care for these patients has been called as the 36-hour day, which influences different aspects of life of the caregivers⁸.

Although the concept of caregiver burden of Alzheimer's patients has generally been used in medicine and nursing, it has no clear and specific definition¹⁰. Across all scientific fields including nursing, scientists need concepts for a systematic study and analysis of the facts and the phenomena that exist in their own special scientific profession, and accordingly, they invent and define them¹². Discussing the concepts helps in reaching consensus and reduces the risk of their thoughtless use. In fact, concepts are considered as building blocks forming theories, leading to development of the nursing knowledge body¹³. Concept analysis provides the researchers or the theorists with the underlying characteristics of concepts, so that by achieving a clear definition of the problem, they can develop hypotheses reflecting the trueness of interrelationships between the concepts. Concept analysis is considered as one of the important stages in scientific advances of a discipline⁹. Roger's evolutionary concept analysis approach is a deductive approach, which is based on the fact that concepts are constantly changing. The caregiver burden concept of Alzheimer's patients is used in various disciplines, and studies have suggested changes in the concept over time. Through time, caregiver burden concept has been defined in different ways^{12,13}, such that this concept was divided into subjective and objective dimensions, and various instruments have also been proposed to assess the caregiver burden¹²⁻¹⁵. Accordingly, the present study has been conducted with the aim of clarifying the concept of caregiver burden among caregivers of patients with Alzheimer's disease as well as further understanding of its characteristics, antecedents, and consequences in the context of nursing as well as its changes over time.

In this study, Rogers evolutionary concept analysis has been adopted. After determining the concept, the researcher began with collecting data, analyzing, and then, interpreting them. Rogers believes that many of these activities in the study are performed concurrently, and that, the study process has a nonlinear, cyclic, and flexible nature. In this method, the study focus is on collecting and analyzing raw data, and the concepts are examined in the social, cultural, and specific contexts of each profession¹¹. Although concept analysis is an iterative process in which the researcher goes back and forth between various activities of the study, the first activity is always determination of the concept of interest and relevant statements¹⁶.

Sampling setting

After determining and identifying the concept, the suitable range for data collection should be selected. The main researcher's objectives in using the evolutionary concept analysis method have a great impact on selecting the setting and samples for data collection. In text-based analysis, the setting refers to the time interval that the search is conducted in as well as the disciplines or different types of texts that are selected. The decision on what disciplines have been selected is made based on similarities with texts, as well as what fields of the study are of interest and have frequently used the studied concept¹⁶. The sample texts were selected from nursing, psychology and medicine in a time interval of 2010-2017, as in this period, the interested concept had been more investigated.

Samples for data collection

Once the special areas of the texts, which were to be included in this study, were determined, the next activity involved selecting study samples. For data collection, the researcher referred to credible scientific databases including CINAHL, Medline, and the search engine Google scholar was used to achieve this purpose, as well as Persian databases including SID and Iran Medex. The search of related studies about caregiver burden among caregivers of patients with Alzheimer's disease was performed with keywords of "caregiver burden", "caregiver strain", and "caregiver stress". Due to the high number of the papers, the search was constrained only to the texts, in which these terms had been presented completely either in their title or the abstract, and had been published and indexed after 2010. All review and research articles were collected. Next, the articles whose full texts were not available were excluded. Then, remaining papers were screened, based on the research objectives and papers abstracts, and the repeated and irrelevant papers were eliminated. Overall, out of 958 texts, 110 that contained the main keywords in abstract, whose full texts were available, and those that were relevant to the research objective, were chosen. In

the next stage, 43 texts, which were closer to the research title of the present research, were chosen for the final examination. Rogers also recommends selection of at least 20% of the texts as suitable. The search in Persian databases with English keywords and their Persian meanings yielded nine papers.

Analysis and management of data

In Roger's evolutionary concept analysis method, the emphasis is on exploratory and deductive approach focusing on determining concept associated aspects where the analysis concentrates on collecting and analyzing raw data rather than on creating sample cases (which is observed in the approach of Walker and Avant, and Wilson). Although data collection and retrieval of texts are performed concurrently, the researchers may find that formal analysis is more effective, if delayed until the time near the end of data collection, which is different from qualitative research in this regard. This approach in concept analysis prevents jumping conclusions and premature closure¹⁶. Generally, in Rogers method, intrinsic analysis is used as the thematic analysis strategy. In the present research, the analysis was conducted as intrinsic analysis and similar to content analysis. For this purpose, all of the chosen papers were first coded, and then, deeply inspected and reviewed. Based on that, the suitable and relevant points regarding the characteristics, antecedents, consequences, relevant concepts, and interchangeable terms for caregiver burden were extracted and placed below them. The researcher searched the papers by the following questions: "What causes the occurrence of the concept of interest?" "What are the necessary prerequisites for occurrence of the concept?" And what are the outcomes and consequences of this concept?" Based on Rogers method, every class of data (characteristics, background information and references) was separately investigated to determine the themes, presented in the texts. This stage of analysis is a constant process of organization and reorganization of similar points in the texts until a relevant, understandable, and coherent system of descriptors is developed¹⁶. For this purpose, the researcher read the data several times in order to be immersed in them in each category and to extract the key points and labels for providing clear characteristics of each dimension. In this way, the major themes emerging in the texts could be determined. Thereafter, the obtained data were categorized and organized, and for each category, a label was selected in order to perform the reduction process.

Attributes of caregiver burden in Alzheimer's patients

Identification of attribute is the first stage of performing analysis, which results in a real definition of the concept¹³. The attribute of caregiver burden concept among caregivers of patients with Alzheimer's disease is categorized into familial and personal characteristics dimensions. In the USA, around 4.5 million people have Alzheimer's, most of whom are kept at home and the familial caregivers undertake the task of care provision, as the most important care source of patients and the healthcare system in almost 80% of cases³. In India, most of the caregivers are the family members of the patient¹⁴. The familial dimension of caregiver burden has been characterized with two features: women as the most important caregiving group and the increased healthcare costs (Table 1).

Women as the most important caregiving group:

Women are the most important caregiving group for Alzheimer's patients, and account for 60% of the caregivers. Studies show that women are more affected by care than men are, and are more predisposed to fatigue and sense of responsibility burden⁸. Caregiving women, alongside the challenges associated with caregiving issues, have also responsibilities such as the family care, working outside home, and household duties resulting in development of high stress, depression, low self-efficacy, and eventually, the risk of developing physical and psychological disorders. Furthermore, with an increase in the age of Alzheimer patients, the level of their dependence and associated disorders, length of the need for physical care, familial problems related to care, and physical and psychological problems of caregiving women increase¹⁰. On average, women provide the care for 10.84 h per day, and experience various problems including sleep disorder, fatigue, high responsibility, problems in establishing communication with the elderly, damage to familial and social relations, defects in household issues, academic studies, and various financial problems. Some references have mentioned that women constitute more than 84% of Alzheimer's patients' caregivers. If there are both a girl and a boy in the family, typically girls undertake the role of a caregiver. Most women are involved in physical problems including frequent headaches, nausea, sleep disorders, and altered habits associated with eating in long term. On the other hand, depression and sense of distress are among the emotional problems of these individuals¹⁷.

Increased costs of families with Alzheimer's patients:

With the increase in hospital healthcare costs, providing care for the Alzheimer's patients becomes further challenging. On the other hand, these patients have also other chronic diseases, which can further raise economic costs. Therefore, increased economic costs and burden of the family is one of the characteristics of Alzheimer's patients^{18,19}. Specifically, 80% of the care, provided for Alzheimer's patients, is offered by their family, which according to American Alzheimer's Association, is estimated at over 202.6 billion dollars²⁰.

Shortage of time:

Providing care for the patients with Alzheimer's is an overwhelming task and the caregivers of this elderly group have various problems for correct and appropriate care. Most of the caregivers claim to have very little time and not being able to accomplish their other responsibilities⁴. Even, some texts have called this care as the 36-hour day²¹. One of the major causes of this shortage of time is the 24-hour and continuous care for the patients²². These patients are completely dependent on the caregivers and need long-term care due to their diminished function as well as degradation of cognitive and behavioral activities in severe stages of the disease²³.

Increased responsibility and work of the caregiver: Most caregivers of Alzheimer's patients have reported increased life responsibilities. Following this higher responsibilities and workload, they have noted a restless life without quality sleep²⁴. Following increased responsibility, they do not have enough time for performing daily activities and do not well deal with their social life⁴. Sometimes, this increase in burden of responsibility also causes changes in their personal life²⁵. The caregivers face practical problems and issues of care for a long time²⁶, resulting in a chronic care stress²⁷. Responsibility for the patients and long-term care can lead to physical diseases^{18,28}, for which, the caregivers adopt coping strategies to handle the situation in their daily lives²⁹. These strategies for the caregiver are the most complex, and these individuals seek to find ways to get rid of this situation. One should note that care for Alzheimer's patients should be constant, close, and high quality³⁰. The increase in responsibility workload will result in physical, psychological, and economic stress³¹.

Table 1. Caregiver burden in Alzheimer's patients

Attributes		Antecedents		Consequences
	Increased responsibility		Gender	Physical disease of the caregiver
			Knowledge and Information	
Personal dimension		Characteristics of the caregiver	Care experience	Psychological disease
	Shortage of time			
			The relationship between the caregiver and the patient	Impairment in social function
	Women are the most important caregiver group		Disease symptoms (cognitive and behavioral)	Sense of pleasure and hope
familial dimension	Financial costs	Characteristics of the care receiver	Co morbidity	

Antecedents of caregiver burden in Alzheimer's patients Rogers proposes that review of texts should lead to identification of antecedents and consequences of a concept, as both of these activities help in the greater clarity of the concept. Antecedents refer to the prerequisites for the concept under analysis, and influence the incidence of the concept¹⁶. In this study, the concept antecedents were identified in three dimensions of the factors, associated with the patient (patients' characteristics), caregivers' characteristics, and sources of support.

Cognitive disorder: The patients with Alzheimer's have vast disorders because of diminished function of their brain. One of these disorders is cognitive the factor including degradation of memory, hallucinations, delirium, location disorientation, aggression, and emotional imbalance²⁴. Sometimes, a person with Alzheimer's may experience weakness of expression and even forget simple words, and substitute them with improper words, whereby their sentences become unsound^{24,32}. Cognitive disorders such as memory impairment result in inability of the person to perform daily activities including inability in eating, walking, and bathing, as a result of which, the patient becomes dependent to care, that consequently, acts as a reason for increased caregiver burden^{33,34}.

Behavioral disorders: A patient with Alzheimer's manifests symptoms such as diminished physical activity^{35,36} and irritability^{32,27} due to cognitive disorders and their impact on the behavior. It seems that toleration of their behavioral disorders is very difficult for the caregivers, leading to an increase in caregiver burden³⁸.

Inability in performing daily activities: The extent of dependence of the patients in daily activities^{29,31} and their inability in performing them independently²⁷ are among the very important factors behind increased caregiver burden^{24,34}. On average, these patients need 10.8 hours of close care, which raises the caregiver burden.

Comorbidity of the care receiver (Alzheimer's patient): Other studies have indicated that comorbidity in addition to Alzheimer's can also increase the caregiver burden, as this group of patients are mostly senile^{5,30,33,38}.

Among the other factors, which can influence the caregiver burden concept, are the demographic characteristics of the caregivers including gender, psychological characteristics such as level of knowledge and information, coping strategies, and the experiences of the caregiver experience of the caregiver themselves. Other conditions also include the elements such as the relationship between the caregiver and the care receiver.

Gender: Caregiving women endure a greater caregiver burden, compared to men^{27,38,39}. They need time management and changing their lifestyle due to their various roles for care, which increase the caregiver burden. On the other hand, psychological characteristics of women and taking emotions-focused adaptive methods also lead to increased caregiver burden²⁷.

Defective knowledge and information: The need for relevant information on diagnosis and treatment of the disease has been counted as one of the important factors for giving care to these patients^{4,40}. Receiving technical information about supportive services and awareness of the way care should be given reduce the caregiver burden^{2,21}. Generally, defective knowledge and information of the caregivers can increase the caregiver burden^{5,28,29,41,42}.

The experiences of the caregiver: The experience of the caregiver for a senile patient can have a significant impact on the caregiver burden⁴³. Greater levels of experience help the patient cope with the caregiver burden²⁴.

The relationship between the caregiver and care receiver: Among caregivers of Alzheimer's patients, spouses endure greater caregiver burden^{19,28,33,40}.

Economic support: Poor economic status increases the caregiver burden^{4,19,26,29,33,42}. A better economic situation may decrease the possibility of using and fulfilling health-care needs, leading to an increase in caregiver burden⁴⁴.

Social support: The caregivers who have no support in providing care for Alzheimer's patients are at risk of fatigue and depression⁴⁵. Formations of supportive groups and participation in NGOs have positive impacts in promotion of caregivers' health. Furthermore, it has been suggested that caregivers of the elderly are those who are interested in developing support networks with their peers to resolve their educational and social needs¹. The support program is important for improving and enhancing of the caregivers' skills to lead temporary care⁴⁶. Suitable social support involving support groups for cognitive and consultation treatments can significantly diminish the workload stress and pressure^{25,26,29,47}.

Family support: In nuclear families, due to the decrease in the number of family members, the responsibility of caregivers has increased⁴⁸ leading to raising the workload among them.

Consequences of caregiver burden in Alzheimer's patients

In the present study, the consequences were categorized in four dimensions of physical disease of the caregiver, psychological disease of the caregiver, diminished social function of caregivers, and a sense of pleasure and hope in the caregivers.

Physical disease of the caregiver: Increased caregiver burden of Alzheimer's patients results in development of chronic diseases, physical problems, and fatigue^{4,8,49}. Frequent headaches and nausea⁷, not meeting physical needs⁴, developing chronic diseases and increased risk of mortality^{31,32,40,43}, and an increase in the risk of cardiovascular diseases³⁴ are among other complications of increased caregiver burden. Some researchers have considered familial caregivers as the hidden patients^{50,51}.

Psychological disease: Among the caregivers of Alzheimer's patients, if caregiver burden increases, depression^{23,24,26,45},

anxiety and distress^{10,26,34,45,48,52}, indifference, helplessness¹⁷, insomnia^{31,34}, despair, and sense of loneliness occur and they usually use sedative drugs^{28,52}. Furthermore, in long term, this workload pressure brings about increased aggressive behaviors³⁸.

Impairment in social function: Caregivers of Alzheimer's patients complain of their diminished social functioning. It is manifested in form of disruption of previous relations of the patient with the family and friends^{4,25}, sense of loneliness, high responsibility and the occurrence of the problems in performing familial affairs, increased workload and preoccupations, leaving job^{24,30}, losing opportunities³⁶, losing peers⁵, and disruptions in daily activities in long term^{4,35}.

Sense of pleasure and hope: In spite of its problems, taking care of the patient is a source of hope and joy for the caregivers and gives them the feel of a clear conscience⁵³. Taking care of the patient results in sense of assurance, personal adequacy, self-respect and coping with personal challenges in the caregiver. The experience of pressure in care provision is a predisposing factor for caregivers' growth and self-esteem⁵³.

Surrogate terms and related concepts:

Surrogate terms represent expression of the concept with other terms or statements, selected by the researcher, to focus on a study. Related concepts also contain some connections with the concept under study, but not all of them have the same characteristics. Indeed, one should differentiate between them. Surrogate terms originate from the fact that perhaps various methods may exist for expressing the same concept, and the aim of determining the related concepts is based on the philosophical assumption that any unique concept is as a part of a network of relevant concepts. In this study, the surrogate terms are caregiver stress and caregiver strain which have appeared in all nursing and non-nursing articles. The related concepts for caregivers burden also are family caregiver stress and spouse caregiver strain.

Model cases

Examples are useful for practical representation of the concept. The aim of such an activity is specifying the important characteristics of the studied concept concerning the main context and theme, which will result in clarity and effective use of the concept⁵⁴. The patient is a 65-year-old man whose spouse is a 55-year old caregiver. In addition to Alzheimer's, the patient also suffers from heart failure. In addition to taking care of the patient, his spouse also has to work outside home to meet the economic needs of the family. They have a daughter and a son who leave separately due to marriage. The patient is aggressive and has the chance of leaving the house. He is fed by the spouse, cannot express his needs of defecation, sleeps late and wakes up early, and most of the times, has hallucinations and delusion, and talks constantly. His spouse locks the house door. She has fenced the steps and kept any dangerous tools away from him. She has no

adequate information about the treatment and support system of the patient. She complains about chronic fatigue and says that during nights, she needs sedative pills for sleeping. She also has a sense of pain in the body and muscle cramps, and is anxious about the current situation of the patient. Signs of depression are evident in her and she is constantly complaining of shortage of time. She also mentions the delay in paying the house rent because of purchasing auxiliary tools and medications for the patient. She always states that she is less able to go to other houses for work. As she describes, several years ago, the patient's condition was milder, and sometimes, he could do his personal activities such as defecation and eating. However, now his condition has worsened and she constantly talks about helplessness and loneliness.

Discussion

The caregiver burden is various physical, psychological, emotional, social, and financial problems, experienced by the family members in providing care to the elderly patients³³. On the other hand, caregiver burden stress has also been defined as chronic fatigue²⁴. This condition has not only a negative effect on caregivers' body and spirit but it causes disruptive effects on caregivers' employment, economic status as well as their quality of life, and the caregiver experiences all these problems in providing care for Alzheimer's patients³⁷. The caregiver burden, as a source of stress, significantly threatens the health dimensions of the caregivers. Familial Care Association of the elderly with Alzheimer's has mitigated this pressure to some extent in developed countries through presenting various support programs for the caregivers. Generally, these interventions are based on easy implementation, accessibility, and efficacy²¹. Formation of support groups and facilitation of participation of the caregivers in such a group have been confirmed by the world Alzheimer's Association. These interventions are majorly performed to reduce stress and diminish caregiver burden of the family members¹.

Conclusions

In the present study, its attribute was detected in two dimensions of familial (women as the most important caregivers, increased economic costs), and personal characteristics (shortage of time, increased responsibility and work of the caregiver). The antecedents were also specified in three dimensions of patients' characteristics, caregivers' characteristics, and sources of support. Further, the consequences were determined in four dimensions including physical as well as psychological and mental diseases, diminished social functioning, increased

hope, and sense of pleasure. The results, obtained by the present study, which are in line with the study of Lanico on interpreting the characteristics, antecedents, and consequences of concept (workload and burden of Alzheimer's patients' caregivers) suggest a practical similarity of wisdom of expression of these two concepts. The major characteristics in this study included chronic accompanying diseases, lack of support, diminished social functioning, patient's cognitive behavioral and functional factors, and increased physical diseases, depression, anxiety, and leaving the job.

Limitations: Among the most important limitations of this study, with regard to the nature its methodology (use of 20% of papers), is that some relevant and rich papers may have been removed. Inavailability Unavailability of some papers full texts was another limitation.

Implications of the results in clinical setting: The findings of this study can not only increase the current knowledge about the concept of caregiver burden of the patients with Alzheimer's but lead to more deeply nurses' understanding of Alzheimer's patients' caregivers' needs as well. It can also found a background for Alzheimer's patients' and their caregivers' scientific promotion of care. On the other hand, the family can be considered as the best source of support and care for Alzheimer's patients. Healthcare policymakers' attention to allocate the necessary facilities and equipment, in form of an official support, presenting free medical and counseling services to the caregivers of the elderly as well as provision of family-oriented plans can reduce caregiver burden, and eventually, improve the quality of the elderly care.

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