



## Alzheimer's Patients Need End-of-Life Care: A Necessity Neglected

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Received: April 27, 2021

Published: May 29, 2021

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### Abstract

Due to the rapid growth of the elderly population, one of the most important challenges in this field is the higher prevalence of age-related degenerative diseases. Alzheimer's disease (AD) is a common disorder with severe and progressive disability in these people, which is eventually referred to as a deadly disease. End-of-life care is care in a situation where the disease leads to death. The purpose of this care is to achieve a good and calm death for the patient, and consolation for the family, therefore, due to the increasing growth of the phenomenon of aging, the high prevalence of this incurable disease, the limitation of special beds, human resources, financial and equipment in medical centers, the provision of end-of-life care is of particular importance. This method of care is considered as one of the important priorities of the health system so that patients and their families can adapt to the disease process and increase their quality of life in the last days of their lives, reduce pain, and experience a quiet death. Therefore, the present study will have a brief overview of the importance of end-of-life care in patients with AD.

**Keywords:** Alzheimer's Disease; Patient; Dementia

### Introduction

Dementia is a general term for a group of symptoms characterized by impaired memory, judgment, thinking, and problem-solving. AD is the most common type of dementia. AD is a type of degenerative brain disease that gets worse over time. It is thought that the disease starts 20 years or more before the onset of symptoms in a person [1-4]. The most common signs of AD are memory impairment and at least one of the signs of aphasia, apraxia, agnosia, and executive dysfunction [5]. It is estimated that by 2030, about 75 million people worldwide will develop dementia, 70% of which is AD. 58% of people with AD live in low- and middle-income countries, which will increase to 68% by 2050 [6].

In addition to the growing trend of this disease, it has brought huge costs to the health system of countries. In 2021, the economic

costs of AD and other cognitive disorders in the United States are estimated at \$ 355 billion, which is up to the year by 2050 and may increase to \$ 1.1 trillion [7]. The diversity of individual, family, and social problems and consequences of AD complicates the care of these patients. Dealing with AD for both patients and family members is very stressful, because there is no cure for this disease and patients will need more care, and support over time [8].

How people with AD die varies from person to person, but there is a basic pattern in the process. In the early stages of AD, caregivers often focus on keeping their loved ones safe and comfortable, but as the disease progresses, patients slowly lose the ability to control the basic functions such as eating, drinking, and toileting [9]. Therefore, patients in the final stages need some form of challenging care. The term "end of life care" is often used interchangeably

with various terms such as terminal care, hospice care, or palliative care [10]. End-of-life care is usually evident in the presence of a progressing chronic disease with prominent symptoms or functional disorders, and the presence of disorders due to underlying conditions leading to death that require care [11]. Patients in the later stages of life need more nursing and supportive care focusing on the body and mind than therapeutic interventions [12]. The purpose of this care is to achieve a good and calm death for the patient and consolation for the family [13].

End-of-life care is a key component of care for the elderly. However, evidence suggested that people over 85 have less access to end-of-life specialist care [14]. Studies showed that the need for critically ill elderly patients and their families for end-of-life care was greater than the need for cardiopulmonary resuscitation [15]. The results of another study comparing cancer and AD patients

receiving end-of-life care showed that patients with AD received fewer analgesics and prescription drugs than other patients for effective pain control and end-of-life management [16,17]. They have also been instructed not to resuscitate and not to be hospitalized, in which patients were more likely to be tube-fed and to receive antipsychotic medications [18,19]. Studies showed that these patients need more social services due to the complex nature of the disease, but they have fewer visits to doctors [20]. Regarding studies, it can be seen that life-end care services for patients with AD are not yet implemented, while according to the guidelines of the World Health Organization, receiving palliative care and life-end care is one of the pillars of human rights [8]. End-of-life care is an integral part of nursing care, but in many countries and medical centers, less attention has been paid to this issue. Table 1 provides examples of end-of-life care to manage some of the terminal symptoms of Alzheimer's patients [21-25].

Symptom	End-of-life care
Pain	<p>Use of accurate and valid tools to measure pain in patients</p> <p>Use of pharmacological interventions such as Paracetamol, metamizole, no steroidal anti-inflammatory drugs and narcotics.</p> <p>The transdermal fentanyl patch may be helpful to patients who are unable to swallow pills.</p> <p>Non-pharmacological interventions may be used to relieve pain, such as massage, exercise, use of heat, or cooling packs.</p> <p>Relaxation techniques or opportunities for relaxation and music therapy and the presence of other people may reduce pain.</p>
Neuropsychiatric Symptoms	<p>Adequate management of pharmacological and non-pharmacological pain is essential to reduce psychological symptoms.</p> <p>There is disagreement about the possible side effects and effectiveness of antipsychotic drugs, such as haloperidol or risperidone, in palliative care patients.</p> <p>Non-pharmacological strategies may be more effective than risperidone or haloperidol.</p> <p>Appropriate non-pharmacological interventions may be more appropriate for treating behavioral symptoms be. For example, aromatherapy, hand or foot massage, the presence of a caregiver and interaction with others, and individual interventions</p> <p>Sedatives or hypnotics to treat sleep disorders</p> <p>Sedatives for stimulation or psychomotor disorder</p> <p>Low-dose antipsychotic drugs for psychotic symptoms</p> <p>A combination of non-pharmacological and pharmacological approaches as well as a targeted treatment of individual delusional symptoms are required.</p>

Delirium	<p>Primary prevention through no pharmacologic measures is preferable to treating delirium after the fact; such measures include frequent reorientation, vision and hearing aids, maintaining good hydration and nutrition status, promoting quality sleep, reducing polypharmacy, encouraging ambulation, and therapeutic activities.</p>
Eating and drinking problems	<p>There is no evidence of tube nutrition benefits in overall survival. For percutaneous endoscopic gastrostomy, there is no short- or long-term improvement or hospitalization rate.</p> <p>Helping to eat and drink is the preferred option. Complications. Tube feeding is associated with the additional burden of hospitalization.</p> <p>Choking can be prevented by avoiding thin liquids, giving boluses of food with sufficient moisture, and keeping patients in a sitting position.</p>
Infection, fever/pneumonia	<p>Antibiotics are very common for respiratory infections and can improve the survival of people with advanced Alzheimer's.</p> <p>There is no improved survival for urinary tract infections. Antibiotic treatment is associated with severe therapeutic intervention with intravenous or intramuscular injection or hospitalization and is associated with reduced comfort for people with advanced Alzheimer's disease for the rest of their lives.</p>
Panting	<p>Symptomatic treatment is most likely to be used for shortness of breath, for example, oxygen in the event of hypoxia, morphine, scopolamine, or hyoscyamine.</p> <p>Morphine is the only drug treatment that has evidence of relieving shortness of breath in advanced disease, but only a small number of people receive morphine.</p> <p>Non-pharmacological interventions such as sitting while standing with arms outstretched to the side or forward.</p> <p>Feel the fresh air to cool the face, cheeks and mouth by open windows, cool fan or wet towel, keep mouth moist</p>
Social dimension	<p>The focus of this dimension is on social support for patients and their families.</p> <p>Creates a sense of belonging, enhances trust, and offers its members the opportunity to move up.</p>
spirituality and religion dimension	<p>The focus of this dimension is on the spiritual support of patients and their families, which solves their religious and spiritual challenges.</p> <p>Help the patient find meaning and purpose in life.</p> <p>Help the patient and his family find a reason to live.</p>
Cultural need	<p>The person's cultural needs should be acknowledged and respected. Cultural needs can be influenced by a range of factors such as where the person lives, their gender and their language.</p> <p>They can include how soon the person would like their funeral, whether they would like to be buried or cremated, and any rituals or ceremonies that are important to them.</p> <p>Talk to care staff about these needs.</p>

Places of death	<p>It can help to make the environment familiar – for example, by including familiar objects and pictures.</p> <p>The space should be peaceful and not too over stimulating (without too much background noise or visual clutter).</p> <p>The environment should support the person to engage in different ways – engaging with other people, any spiritual needs, and with their senses. This may take many forms and should be based on the person and their unique interests. However, it may include: (being near a window, access to nature, familiar smells, music)</p> <p>pressure sensors – these are sensors that can be placed under a bed or chair and can raise an alert when the person moves or gets up</p> <p>fall sensor – a device that registers if the person wearing it falls over</p> <p>sensory lights – lights designed to give a stimulating, engaging or calming effect, which can help the person to engage with the world around them</p> <p>Tablets or computers – images or videos on these can also help the person to engage with the world around them.</p>
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**Table 1:** End-of-life care to management the terminal symptoms of Alzheimer’s terminal patients.

**Conclusion**

The results of this study showed that patients with AD have many problems in end-of-life issues. The existence of these concerns, given the social and cultural context, requires health care providers and families involved in care to focus their care approaches on these concerns. This, in addition to increasing life expectancy, reduces the pain and suffering caused by the dying process of patients and provides them with relaxing moments in life. Besides the beneficial effects of this care for patients, it causes peace and comfort for the family.

**Conflict of Interests**

None declared.

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### Volume 3 Issue 6 June 2021

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