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REVIEW

Comprehensive Care and Challenges of Alzheimer's Disease

Cuidado Integral y Desafíos de la Enfermedad de Alzheimer

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ABSTRACT

Introduction: Alzheimer's disease (AD), described by Alois Alzheimer, constituted the most prevalent type of dementia, accounting for 60% to 70% of global cases. This progressive neurodegenerative disorder affected higher cognitive functions such as memory, language and reasoning, causing a gradual loss of autonomy. Its prevalence doubled with age, especially in those over 65 years of age. AD had a significant impact on the quality of life of patients and their caregivers, posing increasing challenges for healthcare systems.
Development: AD was characterized by progressive cognitive, physical and social deterioration, with stages ranging from pre-dementia to severe dementia. In its advanced stages, patients became completely dependent and vulnerable to complications such as pressure ulcers and infections. Comprehensive care strategies highlighted the need for multidimensional approaches, encompassing physical, psychological and social interventions. Caregivers, mostly family members, faced a significant emotional burden, which highlighted the importance of providing them with support. For their part, multidisciplinary health teams, led by trained nursing professionals, played a crucial role in disease management.
Conclusions: AD demanded a comprehensive approach focused on improving the quality of life of the patient and their caregivers. Although there was no cure, interventions focused on quality of life and humanized care were essential. Research and public policies continued to be fundamental to address the growing impact of this disease on society.

Keywords: Alzheimer's disease; dementia; quality of life; care; dependence; quality of life.

RESUMEN

Introducción: La Enfermedad de Alzheimer (EA), descrita por Alois Alzheimer, constituyó el tipo de demencia más prevalente, representando entre el 60% y 70% de los casos globales. Este trastorno neurodegenerativo progresivo afectó funciones cognitivas superiores como la memoria, el lenguaje y el razonamiento, ocasionando una pérdida gradual de autonomía. Su prevalencia se duplicó con la edad, especialmente en mayores de 65 años. La EA implicó un impacto significativo en la calidad de vida de los pacientes y sus cuidadores, planteando retos crecientes para los sistemas de salud.

Desarrollo: La EA se caracterizó por un deterioro cognitivo, físico y social progresivo, con fases que iban desde la pre-demencia hasta la demencia severa. En sus etapas avanzadas, los pacientes se volvieron completamente dependientes y vulnerables a complicaciones como úlceras por presión e infecciones. Las estrategias de cuidado integral destacaron la necesidad de enfoques multidimensionales, abarcando intervenciones físicas, psicológicas y sociales. Los cuidadores, mayoritariamente familiares, enfrentaron una carga emocional significativa, lo que resaltó la importancia de brindarles apoyo. Por su parte, los equipos de salud multidisciplinarios, liderados por profesionales de enfermería capacitados, jugaron un rol crucial en la gestión de la enfermedad.

Conclusiones: La EA demandó un abordaje integral enfocado en mejorar la calidad de vida del paciente y sus cuidadores. Si bien no existió una cura, las intervenciones centradas en la calidad de vida y la atención humanizada resultaron esenciales. La investigación y las políticas públicas continuaron siendo fundamentales para afrontar el impacto creciente de esta enfermedad en la sociedad.

Palabras clave: Alzheimer; demencia; calidad de vida; cuidados; dependencia.

INTRODUCTION

Alzheimer's disease (AD) represents one of the most significant challenges in public health due to the progressive aging of the world's population. This neurodegenerative disorder, first described by Alois Alzheimer, affects higher cognitive functions such as memory, reasoning, and language, causing a progressive loss of autonomy in those who suffer from it. It is the most common form of dementia, accounting for approximately 60-70% of global cases, with an incidence that increases significantly from the age of 65 and doubles in age groups every five years. Given this situation, the implications for the quality of life of the patient and his or her family environment become a priority focus of attention and research.

The increase in life expectancy has led to an exponential growth in chronic diseases, including Alzheimer's disease, which generates significant challenges for healthcare systems. People with Alzheimer's require continuous and multidimensional care that includes physical, cognitive, emotional, and social approaches. At the same time, caregivers, mostly family members, face a considerable physical and emotional burden that affects their well-being, highlighting the importance of designing support strategies for both the patient and those caring for them.

In this context, health-related quality of life (HRQoL) emerges as a central concept to guide interventions for patient well-being. This approach integrates physical, psychological, social, and cognitive dimensions, promoting comprehensive and humanized care. Various studies have identified determining factors in HRQOL, such as nutritional status, mobility, family support, and environmental management, highlighting that people who receive adequate care have better outcomes in terms of general well-being.

Understanding the different stages of AD — from the initial to the severe phase — is crucial to adapting interventions to the patient's changing needs. Advanced stages require specific care to prevent complications such as pressure ulcers and infections, the leading causes of mortality in this population. Likewise, the progression of the disease highlights the need to strengthen multidisciplinary health teams and to train healthcare personnel in geriatric and gerontological skills.

This paper seeks to address the challenges and strategies in caring for Alzheimer's patients, emphasizing the importance of a comprehensive approach that considers both the needs of the patient and those of their caregivers. This analysis aims to contribute to developing more effective and humanized care practices that positively impact the quality of life of people affected by this disease.

General objective

To analyze comprehensive and humanized care strategies for patients with Alzheimer's disease, with an emphasis on improving their quality of life and supporting their caregivers, considering the physical, cognitive, psychological, and social implications of the disease.

DEVELOPMENT

Alzheimer's disease and quality of life

Increased life expectancy has brought an aging population in developed countries with a consequent increase in the incidence and prevalence of pathologies derived from aging. AD is a degenerative, incurable, and slowly evolving pathology where "the role of nursing has a specific weight from primary and specialized care" due to the high degree of dependence of the patient. It is the most common type of dementia, accounting for approximately 75% of dementia with a prevalence of 5-10% in people over 65 (Balbás Liaño, 2005). Martínez Lage (2004) states that the prevalence "doubles in arithmetic progression in the population if studied in age groups with five-year intervals: 2% in the population aged 65 to 69 and 32% or more in those over 85," and there would be incipient or already declared Alzheimer's in one out of every two people over 80.

Balbás Liaño (2005) warns that although dementias generate a wide range of health problems on a physical, psychological, and social level, AD exacerbates these characteristics in particular because it affects areas of the brain where higher cognitive functions such as logical reasoning, language, abstract thought, and emotional response are found. Even with a team of professionals and expensive treatments, AD will not allow for significant improvements in the patient's state of health, and periods of stabilization will be short. The nurse's role becomes fundamental as the treatment is exclusively symptomatic, and a team of professionals is involved.

This deficit in the state of knowledge of AD leads Martínez Lage (2004) to express the need to discover the biological basis of cerebral aging that allows us to understand the disease's deterioration process. "We need to know why neurons lose their ability to conduct stimuli from one another - the basis of the life of these cells - and why they die, which is not simply a result of senility." Without this knowledge, it will not be possible to prevent the disease or understand its epidemiology. In order to achieve early diagnosis, research efforts must find "diagnostic markers of the disease in bodily fluids (blood, saliva, urine, and cerebrospinal fluid), neuropsychological tests that detect subtle cognitive changes, and neuroimaging tests that detect incipient lesions."

Nurses need to work to develop interventions that complement and compensate for the deficits in needs that arise and to contribute their perspective in finding new tools to manage the cognitive deterioration and behavioral problems of the patient. Faced with this need to focus on a better sense of perceived well-being when the condition cannot be cured, Lluesma Vidal (2017) proposes to talk about "health-related quality of life" (HRQoL). This concept incorporates multiple dimensions, such as physical, psychological, cognitive, and social. To this end, she determined and analyzed the variables influencing the quality of life of patients with mild-moderate dementia in-home care from a theoretical position that articulated the Primary Health Care (PHC) strategy with Marjory Gordon's Functional Pattern Theory. It used a series of validated questionnaires associated with each pattern in 54 patients selected by intentional sampling who attended a Day Center of the Association of Relatives of Alzheimer's Patients in Valencia. The results showed a statistically significant relationship ($p < 0.05$) between HRQOL and mobility, state of health, anxiety, nutritional status, sleep satisfaction, family support, and optimism.

In comparison to the perception of quality of life that patients and caregivers had, in the same study, it was observed that people with dementia who lived at home lost less weight and experienced more pain and more depressive symptoms than people with dementia who lived in a long-stay institution. On the other hand, people with dementia living in a long-stay institution had more pressure ulcers and greater use of physical restraint measures. In the eyes of the caregivers, the home caregivers self-perceived a high degree of overload and a poor quality of life-related to their health, possibly because more than 80% of the home caregivers who participated in the study were relatives of the patient. There was no correlation between this self-perceived overload and the characteristics of the patients they cared for, "but rather they were directly associated with the mental and psychological state of the caregiver and their relationship to their experience as a caregiver."

Finally, just as there are theoretical gaps in some areas of health research development - already mentioned in the justification section - there are highly innovative developments to overcome the subjectivity of quality of life in people with AD and advance a more specific understanding of the disease. López Perales et al. (2020) are nurses with a master's degree in science, and they publish a series of instruments to evaluate the quality of life of patients with AD. It should be borne in mind that, regardless of what has already been stated regarding the problem of the subjective construction of the perception of quality of life and the validity and reliability of the measuring instruments, the obstacle of this disease is the difficulty in communicating with the patient as his or her deterioration progresses; therefore, information on this final phase is collected from the primary caregivers. Below, we have outlined the specific assessment tools to be used only in patients with dementia, translated into Spanish and most used in the Hispanic world.

Pre-dementia and mild dementia stage.

In order to propose a nursing care process that improves the quality of life of patients with AD, it is necessary to understand the physical, mental, and social changes that will occur during its evolution. Traditionally, AD is divided into stages, and we find those who state three stages (initial stage or mild dementia; second stage or moderate dementia; and third stage or severe dementia) such as the Alzheimer's Foundation of Spain (2022). Other authors describe four stages when they incorporate the first stage of pre-dementia (Fernández Rodríguez, 2014). On the other hand, Miguel González (2017) uses the stages of dementia according to the Clinical Dementia Rating (CDR), a scale used by most healthcare professionals to assess the progress of dementia and where five stages or phases are identified. The CDR scale uses a score from 0 to 3 to measure the ability of the person affected by dementia to carry out functions in cognitive and functional areas such as orientation, memory, reasoning, domestic and leisure tasks, personal care, and relationships with their environment.

Table 1. Stages of dementia according to the Clinical Dementia Rating (CDR).

Stage or phase	CDR	Interprets	Quality of life
1	CDR 0	without affectation	There is no impairment of the person's abilities. There are no memory problems, they are oriented in time and space, they present normal reasoning, have good functionality, a good environment at home, can take care of themselves and their needs.
2	CDR 0,5	minor affectation	Very mild impairment. The person may have minor memory inconsistencies. However, these limitations can have consequences for their usual dynamic. At this stage, the person can continue to take care of themselves without major problems.
3	CDR 1	minor affectation	The person has limitations in their short-term memory that can interrupt some aspects of their daily life. Episodes of geographical disorientation and time orientation problems appear.

			They suffer from severe memory lapses and need to be constantly reminded of things in order to carry out different activities.
4	CDR 2	moderate affectation	There is moderate cognitive impairment. The person needs help with personal hygiene, although they can still manage social activities or various tasks that require company. There is greater disorientation in terms of time and place and they become easily lost, having to make an effort to understand time relationships. Short-term memory is seriously affected and it is difficult to remember new things, including people they have just met.
5	CDR 3	severe affectation	The person cannot function without help and the loss of memory is extreme. Furthermore, there is no sense of direction in time or space. A social life is almost impossible and they need help to cover their personal needs.

Source: Miguel González (2017). Quality of life and quality of care for people with dementia and their informal caregivers.

In general terms, Fernández Rodríguez (2014) relates that the first deficits will impact instrumental activities of daily living, such as shopping or taking transportation. Then, self-care activities such as washing, dressing, and feeding oneself will be affected. Finally, the deterioration leads the patient to total dependence. In the pre-dementia phase mentioned by this author, it is suggested that AD has symptoms that can begin 10 to 20 years before the onset of the disease; an initial symptom of memory loss not expected for their age can go unnoticed or be seen as an exceptional event. Mejía Díaz (2018) also publishes this gradual onset that becomes more visible as time passes. When the mild and mildly low phase sets in, symptoms from different areas can be distinguished:

Table 2. Mild and early stages of Alzheimer's disease.

Higher cognitive functions		
Compromised area	**Symptoms**	**Observation**
Abstraction capacity	Loss of the ability to concentrate Neglected physical appearance of the patient	They become more carefree and less interested Difficulty learning new things
Report	Momentary forgetfulness of what has just happened Tries to hide or cover up the memory loss	Forgets names and objects Forgets document and telephone numbers Forgets appointments and calls

Language	Forgets words. Has withdrawal, shame and feelings of self-exclusion	Does not remember words or uses them inappropriately Has problems expressing himself, uses short sentences
Space-time orientation	They don't know where things are or even where they are themselves. They feel restless and frustrated.	They lose track of the time of day, the month, the year They don't recognize where they are They tend to dress inappropriately for the ambient temperature
Functions of self-care and organization of daily life		
Activity and movement	Slight lack of motor coordination Tries to hide or conceal the loss	Clumsiness appears in habitual activities
Autonomy	Preserved They continue to have autonomy and to work	They complete the activities of daily living
Psychological functions		
Trial	Changes in personality control Unexpected reactions	They express anxiety disorders, depression, hostility Abrupt changes in mood They throw food, shout, insult, attack
Social functionality		
Social life	Social disinterest	Refuses to meet

Source: Review based on Mejía Díaz (2018) Care and communication with Alzheimer's patients; and Fernández Rodríguez (2014) Approach to nursing care in Alzheimer's.

The Alzheimer's Foundation of Spain (2022) describes mild dementia as the initial phase in which memory alterations occur. Patients have difficulty learning new things, show sudden changes in mood, and become angry when they lose control of the situation. They reason and communicate well, but they have problems following a conversation and resort to short sentences. They continue to have autonomy in activities of daily living and continue to work.

Moderate dementia stage.

The patient's status gradually changes from mild to moderate, and the cognitive, physical, psychological, and social changes become more pronounced. Short-term memory is more affected, so sufferers forget recent events - for example, that they have just eaten - but retain memories of distant events, although they may place them in the wrong time frame. They have difficulty or are unable to recognize their loved ones - agnosia - and have difficulty performing learned functions - apraxia - such as choosing clothes. Fears appear - unjustified - as a result of hallucinations and delusions, and aggressive reactions are characterized by being disproportionate to the cause. Increased muscle weakness alters posture and gait, making loss of balance more evident and increasing the number of falls. There are language difficulties, and they have trouble speaking, making communication more difficult and deteriorating; they must speak slowly and repeat sentences or cannot finish them. They appear apathetic and need encouragement to do activities they find challenging to complete. They become imprecise and need help getting around, so the loss of autonomy is significant and means they need to be supervised for a long time (Fernández Rodríguez, 2014).

Table 3. Moderate stages of Alzheimer's disease.

Higher cognitive functions		
Compromised area	**Symptoms**	**Observation**
Abstraction capacity	Becoming aware of their shortcomings Renunciation to cover it up	Inability to do maths and to manage their own expenses
Report	Total loss of recent memory Resignation to cover it up	They don't remember if they've just eaten They suffer temporary lapses of memory about the last thing they did or said They can believe that someone who has already died is still alive
Language	They have problems expressing themselves and understanding correctly Communication is ineffective	They can read, write or hear, but without understanding any of these three skills. They display linguistic incoherence. Impoverishment of vocabulary
Space-time orientation	Spatial confusion increases	The wake-sleep rhythm is altered
	Develops illogical behavior	He gets up at night to go to work Lost in the environment He doesn't recognize himself in the mirror
Functions of self-care and organization of daily life		
Activity and movement	Greater motor incoordination Apathy	They cannot tell the temperature of the water They cannot handle cutlery
Autonomy	Limited, dependent Needs help and supervision	Difficulty in carrying out daily activities Requires assistance with feeding, hygiene, using the toilet and walking
Psychological functions		
Trial	Behavioral disturbance Appearance of psychiatric symptoms Abnormal reactions that are not recognized by the patient	They scream in public They try to escape from their own home They walk and talk non-stop They hide objects and accuse others of losing them They are aggressive towards their loved ones They go from aggressive moments to calm and kind, from laughing to crying, for no apparent reason They may experience hallucinatory symptoms (hearing, seeing, smelling or feeling things that do not really exist), paranoia (believing that they have been burgled or that someone wants to hurt them), depression (they feel sad and dejected) suicidal thoughts (they become aware of their condition and try to hurt themselves)
Social functionality		
Social life	Avoidance of social contacts Isolation	He says he feels misunderstood and self-conscious He becomes anxious when social contact is suggested

Source: review based on Mejía Diaz (2018) Care and communication with Alzheimer's patients; and Fernández Rodríguez (2014) Approach to nursing care in Alzheimer's.

Severe dementia phase.

The final stage of severe dementia is summarized by Mejía Díaz (2018) as the stage where symptoms appear in an "exacerbated or full" manner and "patients lose all their autonomy, becoming almost entirely dependent on their caregivers until the moment of their death." The patient has become entirely dependent to the point of losing all higher brain functions. Fernández Rodríguez (2014) states that, although they do not recognize their partner or children, they retain the emotional memory to recognize their caregiver. Prostration can lead to pressure ulcers (PU), and respiratory infections are the most common cause of death in Alzheimer's patients. Mejía Díaz (2018) argues that strokes can be associated at this stage.

Table 4. Severe stages of Alzheimer's disease.

Higher cognitive functions		
Compromised area	**Symptoms**	**Observation**
Abstraction capacity	Deficit of higher brain functions Evidence of pseudobulbar features	Some primary reflexes appear: sucking, pressing or sleeping curled up in the fetal position Involuntary emotional expression such as shouting or laughing
Report	Total loss of recent and distant memory	They don't know those around them
Language	Marked deficit in ability to express and understand self Responds to affectionate looks and gestures	They stammer, repeat the words they are told and do not understand what is explained to them. They use monosyllables or noises.
Space-time orientation	Complete time-space confusion. Develops illogical reactions.	They do not distinguish between day and night, month, year, day and time. They do not recognize the room they are in
Functions of self-care and organization of daily life		
Activity and movement	Loss of basic motor functions Muscle rigidity	Prostration Mobility reduced to a minimum
	Total apathy	Difficulty swallowing They cannot sit on their own
Autonomy	Absence of personal autonomy Shows total dependence on the carer	Urinary and fecal incontinence Strict hygiene requirements to prevent the risk of infections and pressure ulcers
Psychological functions		
Trial	Loss of personal identity They lose the sense of what they feel	They don't know who they are They don't recognize feelings
Social functionality		
Social life	Isolation and prostration	-

Source: review based on Mejía Diaz (2018) Care and communication with Alzheimer's patients; and Fernández Rodríguez (2014) Approach to nursing care in Alzheimer's.

To recap, it has been necessary to understand the functions and areas of deterioration of the disease so that the role of Nursing incorporates care that favors the quality of life of the patient with AD and can be expressed in the Nursing Care Process, the foundation of their professional practice. The specific functions and needs of food, nutrition, fluid and electrolyte balance, pharmacotherapy, rest, and sleep, among others, have been included in the concept of autonomy to focus attention on the deteriorations responsible for the evolution of the disease. This way, less obvious aspects of the Nursing Care Process can be more easily recognized when presented.

The body of knowledge that disciplines nursing is the product of paradigms and theoretical elements that allow it to construct itself as an autonomous profession. These theoretical approaches — expressed as philosophies, models, and theories — have taken on increasing prominence in nursing training programs and have prompted them to lay the foundations for naming the reality of care, understanding it, embracing it, and being able to describe and explain what is happening. It constitutes the prelude that allows for predicting and controlling situations or phenomena that occur in professional practice. Arriving at the construct of the present theoretical framework does not aim to impose a standard of care but to organize and outline the complex picture of the clinical evolution of these patients where the nursing professional identifies the principal axes of clinical intervention and nursing diagnoses in order to plan care that favors quality of life.

Alzheimer's disease and the nursing care process.

Between 1950 and 1960 - coinciding with the rise of psychoanalytic theory in the United States - a group of theories for nursing were generated, labeled as the school of interaction because of their contribution to the approach to care based on interpersonal and nurse-patient relationship links for the development of the therapeutic relationship. This paradigm opens up the consideration of care in the structural complexity of its human and social nature (Elers Mastrapa & Gibert Lamadrid, 2016). According to León Romás (2017), Hildegard Peplau's Theory of Interpersonal Relations - also known as psychodynamic nursing - is the pioneering work in this field and an obligatory reference for consultation. It is precisely the work that started the interaction school, where the communicative phenomena of interaction and nursing roles are studied. Another reference that integrates this school is Ida Jean Orlando Pelletier's Theory of the Nursing Process, which is highly regarded in the profession as it has become established as the conceptual framework of professional methodology.

The Nursing Care Process - comprised of its five interrelated stages of assessment, diagnosis, planning, implementation, and evaluation - has nursing diagnosis as its distinctive feature. Around the 1960s, Faye Glenn Abdellah made her first contribution as a theorist with a classification system for identifying 21 clinical problems in patients, to which she applied the problem-solving method, with a tremendous didactic impact in schools. The idea of solving a health problem based on a hypothesis (diagnosis) constructed by critical judgment (assessment) and subjected to testing (evaluation) grew and matured until 1973, when the first Nursing Diagnoses were approved by the American Nurses Association (ANA). Around the 1980s, the ANA adopted the North American Nursing Diagnosis Association (NANDA) nursing diagnoses as the "official system of diagnoses for the professional discipline.” This compilation of diagnoses has an operational definition for each and is updated every two years. As the diagnosis is the start of an intervention process, the list associates each diagnosis with a classification of nursing interventions (NIC) and a classification of the expected results (NOC) through the application of these interventions (Reina, 2010).

To guide the comprehensive approach to Alzheimer's disease, Balbas Liaño (2005) proposes criteria for the different phases. In the search for early diagnosis, he suggests using interdisciplinary diagnostic tools such as the Minimental test or the Barthel test and proposing a complete diagnostic study to the person and their family. In the initial phase, it is advisable to start educating the primary caregiver on adapting to the environment to reduce the factors that favor accidents and falls. The patient's daily activities should be organized to favor autonomy and participation, the activities of daily living should be routine, and the first order of planned implementation should always be respected. Monitoring the patient's safety should be discreet, and the stimulation of cognitive therapies with specialized professionals should be planned. When moving on to the moderate phase, it is important to regularly assess the patient's deterioration and residual capacities to compensate for the deficits. Daily activities continue to be supervised, and routine is maintained. This is a good time to start working on sphincter control techniques and to verify the need for assistance in walking. Cognitive stimulation techniques are adapted to the deterioration, and functional rehabilitation programs can be developed. Pharmacological treatment has become more complex, and it is important to assess sleep functionality. In the severe phase of Alzheimer's disease, there is more psychomotor stimulation, and passive mobilization is used to avoid disuse syndrome; in addition, the consequences of this immobility, such as constipation or pressure ulcers, must be prevented. The primary carer is assisted, trained, and evaluated in their adaptation to the role throughout the process. In the terminal phase of AD, the patient's daily activities depend on others. They are bedridden, with varying degrees of disconnection from the environment, and care is palliative. The death of the patient requires professional activity toward grief support and recovery of the family and their primary carer.

Finally, the tabulation of a nursing care process is presented for the progressive approach to care that favors the quality of life of the institutionalized AD patient. As mentioned, it is not offered as a norm but as a guideline for the primary clinical axes to be considered in a changing, complex, and irreversible situation.
General guidelines for a Nursing Care Plan to improve patients' quality of life with AD.
1.- Health-related quality of life -HRQOL-. Self-care and organization of daily life.
Table 5.

Activity and movement
Nursing diagnoses according to progressive evolutionary phase [DX]: Impaired ambulation (00088) - Impaired standing (00238) - Impaired ability to transfer (00090) - Impaired physical mobility (00085) - Risk of disuse syndrome (00040). Related to [r/c] neurological disorder (AD). Manifested by [m/p] inability to move, mobilize. NOC [Nursing Outcomes Classification] 1308 Adaptation to (progressive) physical disability. NIC [Nursing -6480 Environmental management; manipulation of the patient's Interventions environment to achieve therapeutic benefits. Classification] -6490 Fall prevention. -0840 Repositioning. -7140 Family support and reference. Stimulation of family values, interests and objectives.
Autonomy
DX: Deficit in self-care in eating (00102) - Deficit in self-care in bathing (00108) - Deficit in self-care in using the toilet (00110) - Deficit in self-care in dressing (00109) - Readiness to improve self-care (00182) - Personal neglect (00193) - Deterioration in home maintenance (00098) - Risk of ineffective planning of activities (0226) - Ineffective planning of activities (0199) - Risk of ineffective planning of activities (0226) - Ineffective planning of activities (0199) - Risk of ineffective planning of activities (0226) - Ineffective planning of activities (0199) - Risk of ineffective planning of activities (0226) - Ineffective planning of activities (0199) - Risk of ineffective planning of deterioration of home maintenance (00098) - Risk of ineffective planning of activities (0226) - Ineffective planning of activities (0199) - Risk of deterioration of independent decision-making (00244) - Deterioration of independent decision-making (00242) - Readiness to improve independent decision-making (00243). r/c neurological disorder (EA) m/p inability to carry out self-care and household maintenance activities. NOC 0300 Self-care: activities of daily living (ADL). 0306 Self-care: instrumental activities of daily living (IADL). 0301 Self-care: bathing. 0303 Self-care: eating. 0305 Self-care: hygiene. 0308 Self-care: oral hygiene. 0307 Self-care: non-parenteral medication. 0309 Self-care: parenteral medication.
0310 Self-care: using the toilet. 0302 Self-care: dressing. 1639 Self-management of activities of daily living (ADL). 1613 Self-management of care. 1614 Personal autonomy. **NIC** -6480 Environmental management; manipulation of the patient's environment to achieve therapeutic benefits and sensory interest. -5230 Increase coping. Help the patient adapt to stressors, changes or perceived threats that interfere with fulfilling the demands and roles of everyday life. -5400 Enhancement of self-esteem; helping a patient to increase their personal judgment of their own worth. -4420 Agreement with the patient. -5250 Decision-making support. Providing information, advice and support to the patient who must make a healthcare decision. -7140 Family support and referral. Stimulation of family values, interests and objectives..

Source: Author's own creation. NIC and NOC by Fernández Rodríguez (2014). Approach to nursing care in Alzheimer's disease.

2.- Health-related quality of life (HRQoL). Higher cognitive functions.

Table 6

Report

DX: Memory impairment (00131).

r/c neurological disorder (EA) m/p due to inability to remember recent or past events, inability to learn or retain new skills or information.

NOC 0908.01; 02; 03 Remembers immediate, recent or remote information.

NIC -4760 Memory training. Ability to retrieve and communicate previously stored information.

-4860 Reminiscence therapy; the recall of past events, feelings and thoughts to facilitate quality of life or adaptation to current circumstances.

-7140 Family support and reference. Stimulation of family values, interests and objectives.

Temporal and spatial orientation

DX: Risk of acute confusion (00173) - Acute confusion (00128) - Chronic confusion (00129)
r/c neurological disorder (EA) m/p inability to orientate.
NOC 0900 Cognition. Ability to perform complex mental processes.

099.05 Is oriented. 0901.01 Self-identifies. 0901.02 Identifies loved ones. 0901.03 Identifies location. 0901.04; 05; 06 Identifies current day, month and year. 0901.07 Identifies current season. 0901.09 Identifies significant current events. 0905.03; 05; 06; 07. Responds adequately to visual, auditory, tactile, olfactory or language signals.

NIC -4820 Orientation to reality. Ability to identify people, places and time accurately. Promoting patient awareness of personal identity, time and environment.

-6460 Management of dementia; providing a modified environment for the patient who experiences a state of chronic confusion.

-6480 Environmental management; manipulation of the patient's environment to achieve therapeutic benefits, sensory interest and psychological well-being.

-7140 Family support and reference. Stimulation of family values, interests and objectives.

Superior cognitive activity and capacity for abstraction.

DX: Impaired verbal communication (00051) - Impaired cognition (00052).

r/c neurological disorder (EA) m/p due to inability to perform complex mental processes

NOC 0900 Cognition. Ability to carry out complex mental processes. 0900.03 Pays attention. 0900.04 Concentrates. 0900.09 Processes information. 0905. 07. Responds appropriately to language signals.

NIC -4720 Cognitive stimulation. Ability to focus on a specific stimulus. Encourage awareness and understanding of the environment through the use of planned stimuli.

-5520 Facilitate learning. Promote the ability to process and understand information.

-6460 Management of dementia; provide a modified environment for the patient experiencing a state of chronic confusion.

-7140 Family support and reference. Stimulation of family values, interests and objectives..

Source: Author's own creation. NIC and NOC by Fernández Rodríguez (2014). Approach to nursing care in Alzheimer's disease.

3.- Health-related quality of life- HRQOL-. Psychological functions and behavior.

Table 7

Psychological functions and behavior.

DX: Willingness to improve self-concept (00167) - Risk of compromising human dignity (00174) - Hopelessness (00124) - Willingness to improve hope (00185) - Risk of personal identity disorder (00225) - Personal identity disorder (00121) - Impaired regulation of mood (00241) - Unstable emotional control (00251).
r/c progressive irreversible deterioration m/p behavioral disturbance.

NOC	1300 Acceptance of health status; reconciliation with significant changes in health circumstances. 1401 Self-control of aggression. 1404 Self-control of fear. 2002 Personal well-being.
NIC	-6460 Dementia management; providing a modified environment for the patient experiencing a state of chronic confusion). -6480 Environmental management; manipulation of the patient's environment to achieve therapeutic benefits and psychological well-being. -4390 Environmental therapy; utilization of people, resources and events in the patient's immediate environment to promote optimal psychosocial functioning. -5230 Increase coping. Help the patient adapt to stressors, changes or perceived threats that interfere with the fulfillment of the demands and roles of everyday life. -1300 Acceptance of health status, Reconciliation with significant changes in health circumstances. -4370 Impulse control training. Helping the patient to control impulsive behavior by applying problem-solving strategies to social and interpersonal situations. -5230 Mood control. Providing security, stability, recovery and maintenance to a patient experiencing dysfunctionally depressed or euphoric moods. -7140 Family support and reference. Stimulation of family values, interests and objectives.

Source: Author's own creation. NIC and NOC by Fernández Rodríguez (2014). Approach to nursing care in Alzheimer's disease.

4.- Health-related quality of life (HRQoL). Social functions and interaction.

Table 8

Social functions and interaction
DX: Risk of caregiver role fatigue (00062) - Caregiver role fatigue (00061) - Disruption of family processes (00060) - Dysfunctional family processes (00063) - Willingness to improve family processes (00159) - Risk of deterioration of bonding (00058) - Ineffective role performance (00055) role performance (00055) - Impaired social interaction (00052) - Risk of ineffective relationship (00229) - Ineffective relationship (00223) - Willingness to improve relationship (00207) - Compromised family coping (00074) - Willingness to improve family coping (00075) - Unstable emotional control (00251) - Ineffective impulse control (00222).

	r/c progressive irreversible deterioration m/p alteration of social life.
	NOC 1300 Acceptance of health status. Reconciliation with significant changes in health circumstances. 1302 Problem coping. Personal actions to control the stressors that test the individual's resources. 1305 Psychosocial modification: Change of life, psychosocial response of adaptation of an individual to a major change of life. 2600 Coping with family problems. 1204 Emotional balance. 2013 Balance in lifestyle.
NIC	-4390 Environmental therapy; using people, resources and events in the patient's immediate environment to promote optimal psychosocial functioning. -1300 Acceptance of health status, reconciliation with significant changes in health circumstances. -5230 Increase coping. Helping the patient to adapt to stressors, changes or perceived threats that interfere with fulfilling the demands and roles of everyday life. -5290 -Facilitating grief -4370 Impulse control training. Helping the patient to control impulsive behavior by applying problem-solving strategies to social and interpersonal situations. -5230 Mood control. Provide security, stability, recovery and maintenance to a patient experiencing dysfunctionally depressed or euphoric moods. -2300 Medication administration. -7140 Family support and reference. Stimulation of family values, interests and objectives.

CONCLUSIONS

Alzheimer's disease (AD) represents a growing challenge for healthcare systems due to the aging of the population and its multidimensional impact on patients and caregivers. This neurodegenerative, incurable, and progressive disorder affects cognitive, emotional, and social functions, leading to total dependence in its advanced stages. Despite advances in research, a definitive cure has not been found, highlighting the importance of interventions focused on quality of life.

A comprehensive approach to the patient with AD must consider not only their physical and cognitive needs but also their psychological and social well-being. Health-related quality of life (HRQoL) is positioned as an essential indicator for measuring the impact of care strategies. Factors such as nutritional status, mobility, family support, and adequate environmental management directly influence patient outcomes. Care models must be dynamic and adaptive, responding to changing needs throughout the different stages of the disease.

The role of the caregiver, especially in home settings, is fundamental but also challenging. Studies indicate that caregivers experience high levels of stress and emotional overload, affecting their quality of life. This underscores the need to implement support programs that include education, counseling, and specific resources to mitigate the adverse effects associated with long-term care.

On the other hand, multidisciplinary teams, including professionals specialized in geriatrics and gerontology, are crucial to providing quality care. Nursing, as the central axis of care, must be trained to implement evidence-based interventions adapted to the phases of the disease and aimed at maintaining the highest possible level of autonomy. This includes the management of behavioral symptoms, the prevention of physical complications such as pressure ulcers and infections, and promoting a safe and stimulating environment.

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Research into AD continues to be a priority. It is necessary to deepen the understanding of the disease's biological mechanisms, develop tools for early diagnosis, and design innovative interventions that improve the quality of life of both patients and their caregivers. Likewise, public policies must focus on providing specialized and accessible services, recognizing the growing prevalence of this disease.

Tackling AD requires a comprehensive, humanized, and evidence-based approach encompassing the patient's complex needs and their environment. Only in this way will it be possible to mitigate the impact of this disease on individuals and society in general.

REFERENCES

1. Alvarado García, A., Alvarado Hueso, P., Rojas Méndez, T. y Oviedo Tao, P. (2019). Necesidades de cuidado en los pacientes con demencia y/o alzheimer: una revisión integrativa. Revista Cuidarte Print version ISSN 2216-0973. Rev Cuid vol.10 no.3 Bucaramanga Sep./Dec. 2019 Epub Dec 20, 2019. On- line version ISSN 2346-3414.https://doi.org/10.15649/cuidarte.v10i3.813. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S2216- 09732019000300302.
2. Balbas Liaño, V. (2005). El profesional de Enfermería y el Alzheimer. Revista Nure de Investigación 13, 1-6.
    a. https://www.nureinvestigacion.es/OJS/index.php/nure/article/view/223.
3. Chávez, V. (2019) Alzheimer: síntomas para reconocer una enfermedad que padece 1 de cada 8 adultos mayores en la Argentina.
    a. https://www.infobae.com/salud/2019/09/21/alzheimer-sintomas-para-reconocer-una-enfermedad-que-padece-1-de-cada-8-adultos-mayores-en-la-argentina/
4. Darpon, J. (2013). Resumen de la comparecencia del consejero de la salud en el Parlamento vasco el 18-02. Eusko Jaurlaritza - Gobierno Vasco, Departamento de salud. Pp. 79-89.
    a. https://www.euskadi.eus/contenidos/nota_prensa/prensa_salud_275/es_salud/adjuntos/s alud.pdf
5. Elers Mastrapa, Y. & Gibert Lamadrid, M.P. (2016). Relación enfermera-paciente: una perspectiva desde las teorías de las relaciones interpersonales. Revista cubana de Enfermería, Vol. 32, No. 4 (2016). http://www.revenfermeria.sld.cu/index.php/enf/article/view/976/215.
6. Fernández Rodríguez, R. (2014). Abordaje de los cuidados enfermeros en Alzheimer. Tesis Maestría en Envejecimiento. IUIE, Instituto Universitario Investigación Envejecimiento, Universidad de Murcia. http://www.cuidarypaliar.es/wp-content/uploads/2016/12/TFM-FINAL.-Abordaje-de-cuidados-enfermeros-en- Alzh%C3%A9imer.-Rub%C3%A9n-Fern%C3%A1ndez- Rodr%C3%ADguez..pdf.
7. Fundación Alzheimer España (14 de julio de 2022). Fases del Alzheimer. http://www.alzfae.org/fundacion/146/fases-alzheimer.
8. Goodman, C., Morales Asencio, J.M. y de la Torre-Aboki, J. (2013). La contribución de la enfermera de Práctica Avanzada como respuesta a las necesidades cambiantes de salud de la población. Metas Enferm 2013; 16(9):20-25. https://www.enfermeria21.com/revistas/metas/articulo/80515/la-contribucion-de-la-enfermera-de-practica-avanzada-como-respuesta-a-las-necesidades- cambiantes-de-salud-de-la-poblacion/.
9. Lluesma Vidal, M. (2017). Calidad de vida en pacientes con demencia no institucionalizados. Una perspectiva enfermera. Tesis doctoral. Universidad CEUCardenal Herrera (España). http://hdl.handle.net/10637/8536.

10. León Román, C. (2017). Nuevas teorías en enfermería y las precedentes de importancia histórica. Revista cubana de Enfermería, Vol. 33, No. 4 (2017). http://www.revenfermeria.sld.cu/index.php/enf/article/view/1587/301.
11. López Perales, B., Martínez Melero, M. y Oliver Bretón, P. (2020). Instrumentos de calidad de vida en la enfermedad de Alzheimer. Revista Electrónica de PortalesMedicos.com – ISSN1886-8924. Vol. XV; nº 12; 558. https://www.revista-portalesmedicos.com/revista-medica/instrumentos-de- calidad-de-vida-en-la-enfermedad-de-alzheimer/.
12. Martínez Lage, J.M. (2004). Rudimentos Sobre la Enfermedad de Alzheimer. Repositorio Universidad Maimónides. http://weblog.maimonides.edu/gerontologia/archives/001518.html
13. Mejía Díaz, C. (2018). El cuidado y la comunicación con el paciente de Alzheimer. Universidad Pontificia Comillas, Madrid. Repositorio institucional. https://repositorio.comillas.edu/jspui/bitstream/11531/31130/1/TFM000947.pdf
14. Miguel González, S. (2017). Calidad de vida y calidad de los cuidados de las personas con demencia y sus cuidadores informales. Tesis doctoral. Universidad Jaume I de Castellón, España.
    a. https://www.tesisenred.net/bitstream/handle/10803/406122/2017_Tesis_Miguel%20
    b. Gonzalez_Susana.pdf?sequence=1&isAllowed=y
15. Organización Mundial de la Salud [OMS] (2020). Demencia.
    a. https://www.who.int/es/newsroom/fact-sheets/detail/dementia
16. Organización Panamericana de la Salud [OPS] (2012). Enseñanza de la Enfermería en Salud del Adulto Mayor. Serie recursos humanos para la salud n 59, p. 4. Oficina Regional de la Organización Mundial de la Salud
    a. https://www.paho.org/hq/dmdocuments/2012/nursing-salud-adulto-mayor-2012-spa.pdf (p.4)
17. Reina, N.C. (2010). El proceso de enfermería: instrumento para el cuidado. Umbral Científico, núm. 17, diciembre, 2010, pp. 18-23 Universidad Manuela Beltrán Bogotá, Colombia. https://www.redalyc.org/pdf/304/30421294003.pdf
18. Sánchez I (2014). Cronicidad y complejidad: Nuevos roles de enfermería de Practica avanzada. Revista Enfermería clínica 24, 1, 1-9. https://www.elsevier.es/es-revista-enfermeria-clinica-35-articulo-cronicidad- complejidad nuevos-roles-enfermeria--S1130862113001964.

FINANCING

None.

CONFLICT OF INTEREST

None.

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