



Nursing Care Process to a patient with Alzheimer's Disease in Primary Health Care

Final Nursing Degree Project (2017-2018)

Author: Lara Medina García Tutoress: Daniela Celia Montesdeoca Ramírez

Universidad de Las Palmas de Gran Canaria June 2018

ABSTRACT

Alzheimer's disease is the most common form of dementia, being one of the main causes of disability and dependency among the elderly worldwide, so an adequate approach to it might mean an increase of the quality of life both the patient and their caregivers.

In this project, we present a Nursing Care Plan to a dependent patient with Alzheimer's disease in Primary Health Care ambit. In the follow-up of dementias, we must bear in mind the obstacles we can find are behavioral alterations, among others, that lead to greater fragility in these patients.

A comprehensive assessment has been carried out through the 11 functional patterns of Marjory Gordon, where the problems with the patient's health- patient's process, the antecedents in Dorothea Orem's theory of self-care, and the use of the three Languages recognized by the American Nurses Association (ANA): the American Association of Nursing Diagnosis (NANDA), the Classification of Nursing Outcomes (NOC) and the Classification of Nursing Interventions (NIC).

A comprehensive assessment has been carried out through the 11 functional patterns of Marjory Gordon, where the problems with the health process, the patient's illness, the antecedents in Dorothea Orem's theory of self-care and the use of the three languages, recognized by the American Nurses Association (ANA): the American Association of Nursing Diagnosis (NANDA), the Classification of Nursing Outcomes (NOC) and the Classification of Nursing Interventions (NIC).

The intervention focuses on the analysis of nursing diagnoses, nutritional imbalance, insomnia, memory impairment and anxiety.

After implementing the activities, we have assessed with the Likert scale certain characteristics and indicators of the patient to verify how the identified diagnoses have evolved.

Finally, it should be emphasised that the Care Plan has been carried out satisfactorily, prioritizing the patient's problems and acting on them with the collaboration of the main caregivers.

Key words: Alzheimer's Disease, dementia, aging, primary care, dependence, multidisciplinary work, care plan, intervention, caregiver, nursing.

1. INTRODUCTION

There is currently an unprecedented demographic change confirmed by the World Health Organization (WHO) in its latest "World Report on Aging and Health"¹, which provides data on this process called population aging, caused mainly by an increase in life expectancy and the reduction of the birth rate, accompanied by a great socioeconomic development. According to data from the National Institute of Statistics (INE) as of January 1, 2016, there are 8,657,705 elderly people in our country (65 and over), corresponding to 18.4% of the total population².

During aging, changes occur in this process that lead these people to suffer greater vulnerability when it comes to suffering from chronic diseases (CD), multiple pathologies and fragility³, as well as an increase in the incidence of the disease that we will deal with in this project, Alzheimer's disease (AD).

According to WHO, dementia is a syndrome, usually of a chronic or progressive nature, characterized by the deterioration of cognitive function (in other words, the ability to process thought) beyond what could be considered a consequence of aging normal. The deterioration of cognitive function is often accompanied, and sometimes is preceded by the deterioration of emotional control, social behavior or motivation. Dementia is one of the leading causes of disability and dependency among the elderly worldwide. The forms, or causes, of dementia are multiple and diverse. AD is the most common form of dementia: it is estimated that it represents between 60% and 70% of cases⁴⁻⁵, and the incidence of it increases exponentially with age (16-25% in the elderly 85 years old)⁶, so we can predict an epidemic worldwide in the coming decades⁷, observing a more aged population with worse health⁸.

Worldwide, the International Alzheimer's Association (ADI) has issued reports on the prevalence of this pathology, observing a total of approximately 46.8 million cases⁹⁻¹⁰. In Spain the approximate cases of dementia in 2015 were 150,000 new cases, adding to the end, together with the previous ones, a total of 600,000 cases. It should be emphasised that the trends predict that dementia in our country will increase in the coming years, observing forecasts for the year 2050 more than 1,500,000 cases of people with dementia, triple that currently⁹. Despite this, it

is probable that these figures underestimate the real value of the problem, since a nonquantifiable proportion of cases are undiagnosed or not found in the official registers⁵⁻⁷.

The INE has official mortality data of 2015, and we found that, when comparing diseases, "dementia" appears as the fourth disease with the most deaths in that year (20,442: 13,800 women and 6,642 men), while the "Alzheimer's disease" is the seventh cause of death, with 15,578 deaths (11,004 women and 4,574 men). If both were added, they would be the first cause of death, ahead of the "ischemic diseases of the heart" (33,769 deaths). Between 60-70% of deaths due to dementia occur in women⁷⁻⁸.

From a general perspective, 80% of Alzheimer's patients are cared by their family. Dementia is the CD that causes the greatest dependence, with 88.7% of all people in this situation, above cerebrovascular accidents or Parkinson's disease, among others. It is convenient to add that it is one of the main causes of institutionalization, finding in Spain, annual rates of 10.5% in this group⁷.

The WHO has already warned about the different consequences of this fact and encourages governments to take steps that reduce the social and health impact of this dire condition, carrying out projects at national level against Alzheimer's disease. It is estimated that the delay in the occurrence of AD in one year, through preventive interventions, would reduce about 12 million of cases the number of patients worldwide by 2050^{4,7}.

Being a neurodegenerative disease, progressive, irreversible and chronic, the care intended for people suffering from AD must be comprehensive and adapted to the variability during the morbid process, in a multidisciplinary way, taking into account the different dimensions of the affected person: the cognitive, emotional, social, functional and, therefore, in the quality of both the patient and the caregiver^{6,11}.

In the economic dimension, each patient with dementia generates three types of costs that are distributed as follows: health, including health care, hospital stays and medications (represents 20% of total costs); social services, which include formal caregivers, domiciliary services, day centers and residences (globally accounts for 40% of the total) and finally, the so-called next expenses, which include the services of the main caregiver and which sometimes require loss of income (these informal costs represent the other 40% of the total)¹⁰. The researches and

statistics presented during the year 2017 in the report of the Brain Foundation, carried out by the Spanish Society of Neurology (SEN), "Social impact of Alzheimer's disease and other dementias"⁷ calculates that the cost per Alzheimer patient amount is between 27,000 and 37,000 euros per year, and the family members assume an average of 87% of the total cost. But we must bear in mind that it has been calculated that the patient, with this condition, requires about 70 hours of weekly care, leading to an overload and great impact on the family members and caregivers (in which stress is present in more than 75%)⁷.

Regarding the role of the nursing professional in relation to AD, its labor is essential in the assessment of the patient's condition, in terms of the deterioration suffered by people affected by this pathology, in a comprehensive manner and adapted to the patient's own needs. Finding the guidance and health education that must be provided in order to improve quality care and reduce the risk factors in the social and economic situation, promoting family cohesion and the development of appropriate interpersonal relationships^{8,11}.

Therefore, the improvement of information and education about dementias to the population, and especially the AD, is transformed from a simple activity to a priority task, sensitizing the different health professionals of the improvements that lead the prevention of this disease and early diagnosis. Likewise, the provision of training to professionals to achieve advances in the screening of dementias and subsequent diagnoses, as well as the treatment of them that directly influences the increase in the quality of care^{6,12}. On the other hand, in the different nursing care plans to patients with AD, we can detect the multiple obstacles that can be found both patients and their caregivers and family members regarding the adherence of the prescribed treatment and the influence of the pathology on their well-being and quality of life, presenting behavior alterations, being able to express fear and anxiety, as well as sleep disorders¹³⁻¹⁵.

The general aim is to design an Individualized Nursing Care Plan for a patient with AD in the Primary Care (PC) field. The specific objectives are:

- To detect, through a complete and integral assessment, the dysfunctional patterns that appear during the realization of the care plan.
- To identify and formulate the existing nursing diagnoses and the specific care needs to the patient for each of the patterns altered according to the NANDA taxonomy.

- To prioritize and plan with the patient and her main caregiver, some objectives and a program of activities to get these altered patterns back to normal as soon as possible, by using the NOC and NIC taxonomies.
- To execute the planned activities and evaluate the result of the nursing interventions.
- To defend the importance of the nurse role in the prevention and approach of frailty in elderly people living in the community through home visits.

2. METHOD

Several methodological resources have been used for the elaboration of this project. On one hand, for the development of the theoretical framework, a bibliographic search has been carried out in the current databases such as Pubmed, Cochrane Plus, Cuiden, Dialnet and Scielo. The keywords which were used to build the search strategy according to the terminology of the Descriptors of Health Sciences (DeCS) and Medical Subjects Headings (MeSH) "Alzheimer disease", "dementia", "aging", "primary health care", "dependency", "multidisciplinary team", "care plan", "intervention", "caregivers" and "nursing".

In this project, it is schedule an assessment and follow-up of a patient with Alzheimer's disease. The procedure that has been used to carry out this project has been the Nursing Care Process (NCP)¹⁶, which is an organized and systematic method of administering individualized nursing care. It consists of five phases: assessment, diagnosis, planning, execution and evaluation. In the assessment stage the health status is determined, and the real and potential problems are identified. The functional patterns of Marjory Gordon¹⁶ have been used as an assessment tool by an interview or anamnesis, and thus, to be able to identify the altered patterns.

We have also based on the model of Dorothea Orem¹⁷, a nurse who motivated and promoted the Theory of Self-care. In this theory, Orem details that self-care is about "... a behavior of mature and maturing people who have learned and developed the skills to take care of themselves in their environmental situations". Nursing professionals in the practice of this model determine what requirements are demanded by the patient, distinguish appropriate ways to cover them and the proper course of action and determine the patient's abilities to satisfy their needs.

On the other hand, the North American Nursing Diagnosis Association (NANDA)¹⁸ taxonomy was applied to formulate the nursing diagnoses detected in the assessment and related to the patient's disease process, attending to their association and application in the home context. The problems formulated have been prioritized, having to state the expected objectives based on the Classification of Nursing Outcomes (NOC)¹⁹ and, starting from this, formulate the most relevant interventions using the Classification of Nursing Interventions (NIC)²⁰. Finally, both were used both for evaluation of results in the first assessment and to evaluate the progress of the patient.

Specific scales were used in certain patterns for an assessment and continuous evaluation of them. For the assessment of the number one pattern of perception and health control, the Fageström²¹ Test, the Richmond²¹ motivation questionnaire and the Morisky - Green – Leveen²¹ test were used. In the second nutritional-metabolic pattern, the adherence questionnaire to the Mediterranean²¹ diet and the mini nutritional assessment (NMA) were used. On the other hand, using the Katz²¹ index, the Barthel index²¹ and the Lawton and Brody²¹ scale to assess the forth pattern of activity and exercise. Finally, the Goldberg test of anxiety and depression²¹ for the seventh pattern of self-control and self-concept, and the Apgar Familiar²¹ test to assess the eight pattern of role and relationships.

In the evaluation phase, the Likert²² scale, a structured instrument for data collection, was used through a set of items that have a score between 1 (inadequate) and 5 (completely adequate). The scale shows the range in which the patient is at the time of assessment, the objective set and the result obtained after the nurses' activities.

In addition, the Code of Ethics of Spanish Nursing²³ current in our country, both in its prologue and in Article 17 specifies the ethical principles essential for an adequate development of the nursing professionals' research activity.

For this intervention, authorization was requested from the Directorate of the Care Unit with positive results on November 10, 2017; also having the corresponding informed consent of the patient, having guaranteed the fundamental principles and rights such as: confidentiality, anonymity and voluntary participation, respecting the principle of autonomy and justice.

For the development of this Care Plan, five visits were made to the patient at her home, during a period of 4 months, the period between November 2017 and February 2018.

3. RESULTS

3.1 Presentation of the case

A 65-year-old female patient from the ZBS of Arucas with a diagnosis of Alzheimer's disease since 2013. She lives with her husband.

Personal history: breast cancer, diabetes mellitus type II, atrial fibrillation, hypertension, hyperlipidemia, varicose veins.

3.2 Assesment phase

Using the 11 functional patterns of Marjory Gordon in the anamnesis, we were able to determine the altered patterns (Table 1).

Table 1. Valuation Stage applying the functional patterns of Marjory Gordon

PATTERN 1: PERCEPTION – HEALT CONTROL.

The patient describes her current health status as "good". It ensures and shows that it has prescribed more than 11 drugs (exposed in the presentation of the patient's clinical profile) as current treatment and ensures that it complies with the indicated dosage. Her children are the main caregivers, together with the patient's sister. She smokes daily about 8 cigarettes (which can increase the number depending on the degree of anxiety present), abstains and does not consume other types of drugs. She is correctly vaccinated according to the current schedule (tetanus and diphtheria, pneumo 23 and annual flu vaccine) and there are no known allergies. Followed by Primary Care Team (EAP) and specialized care. The CVR of the patient is high, having atrial fibrillation and taking antiplatelet treatment for it.

The medication currently scheduled is the following: Otilonium bromide 40mg VO 1-1-1 metformin 850mg VO 1-1-1, glimeprimde 4mg VO 0-1-0, acetylsalicylic acid 100mg VO 0-1-0, simvastatin 40mg VO 0-0-1, anastrozole 1mg VO 1-0-0, quetiapine 25mg VO 1-0-2, lorazepam 1mg VO 0-0-1, vortioxetine 10mg VO 1-0-0, trazodone 100mg, rivastigmine 13.3mg patch transdermal 1 patch / 24h, memantine 20mg VO 1-0-0.

Table 1. Valuation Stage applying the functional patterns of Marjory Gordon

In the last control analysis, the value of glycosylated haemoglobin (HbA1c) is 6.5%, being slightly out of range [4.0-6.0]. The lipid values are within range (cholesterol 166mg / dL, HDL 49mg / dL, LDL 94mg / dL and TG 116mg / dL). The estimated glomerular filtration rate (GFR) is at a slight decrease of 85.29mL / min [90-120mL / min], which may indicate possible kidney damage as a result of the patient's collaboration problems such as hypertension and DMII. The values of haemoglobin [12.00-17.00] and haematocrit [36.00-50.00] are slightly below the range: Hb 11.60g / dL and Hto 35.40%. Other results within the reference values.

For pattern 1 has been done the Morisky-Green-Leveen test (compliant), the Fageström test (with a total of 4 points: Moderate dependence), the Richmond motivation questionnaire (0 points: low motivation - no motivation).

Result of the pattern: ALTERED.

PATTERN 2: NUTRITIONAL – METABOLIC.

She does not follow any strict diet, she tries to eat everything, so her DMII does not influence it especially. She makes three to four meals per day and her fluid intake is adequate (1.5 - 21 / day) although her daughter reports that she sometimes drinks water excessively because she does not remember taking it. Her appetite is currently diminished. Carrier of partial prosthesis with regular state of care and has the skin adequately hydrated, without injuries or UPP. Her hygiene is appropriate. Currently, the patient weighs 54kg and measures 1.61 meters. BMI = 20.83 (norm weight).

In the nutritional-metabolic pattern 2 the questionnaire of adherence to the Mediterranean diet was made with a total of 10 points, good adherence to the diet and the MNA for the evaluation of nutritional status, with a total of 15 points (poor nutritional status).

Result of the pattern: ALTERED.

PATTERN 3: ELIMINATION.

The patient points out that she usually does not have problems of constipation that she previously had. She performs 7 weekly bowel movements and 6 daily voids. She manifests both urinary and faecal incontinence, for which she requires the use of absorbents, although she goes to the bathroom when she feels the urge to urinate or defecate.

Result of the pattern: ALTERED.

PATTERN 4: ACTIVITY – EXERCISE.

The patient refers to be very active. She has not had falls in the last year. She does not present problems of mobility or of ambulation. Good stability of the march. She leaves home to walk with her sister or his children daily. In the mornings she helps with simple domestic chores, although she does not prepare the food. She needs help with bathing and grooming, dressing / undressing, and cutting food, although the patient has the cover to her mouth by herself.

Table 1. Valuation Stage applying the functional patterns of Marjory Gordon

In pattern 4, the Katz index was made with a final score of 3 points (moderate disability), the Barthel index with a score of 75 points (moderate dependence) and the Lawton and Brody scale with the result of 2, being a serious dependent for instrumental activities of daily life because the patient is a woman.

Result of the pattern: ALTERED.

PATTERN 5: SLEEP – REST.

The patient reports having problems to reconcile and maintain sleep, ignoring the causes of it and mentioning fear. She sleeps during the night approximately 5 hours and does not nap. She takes treatment for insomnia, but it is not corrected. Non-restorative sleep, although the daytime energy level is optimal according says her daughter.

Result of the pattern: ALTERED.

PATTERN 6: COGNITIVE – PERCEPTUAL.

The patient did not reach the primary studies for economic and family reasons. She has no visual or auditory alterations. She is not space-time-oriented. The patient does not remember having Alzheimer's disease. She speaks generally clear and not coherent speech. It is usual that she has behaviour disorders, such as anxiety and nervousness. Daily performs activities for cognitive stimulation and draws.

Result of the pattern: ALTERED.

PATTERN 7: SELF-CONTROL – SELF-CONCEPT.

The patient reports feeling very overwhelmed and worried from one moment to another, identifying the cause of this alteration in the fear of losing her mother (since she is temporarily located at the time when she is newly married), to which she responds with nervousness. On the other hand, she is also concerned about the economic situation of her family at the time in which it is located.

For pattern 7, self-control self-concept has been used Goldberg's anxiety and depression test, obtaining 7 points for anxiety, which means, probable anxiety state and 4 points for depression, which is classified as probable depression.

Result of the pattern: ALTERED.

PATTERN 8: ROLE – RELATIONSHIPS.

She lives with her husband (who suffers from left hemiplegia derived from ACV) and with her sons who take turns taking care of the marriage in the afternoons and evenings. The patient has 8 brothers. The patient's relationship with her husband has been bad for several years. The relationship of the patient with her sons and with her sister, who takes care of her in the mornings, is good. The patient goes out with her sister to walk her pet and usually goes to breakfast in the mornings with her old workmates accompanied by her sister.

Table 1. Valuation Stage applying the functional patterns of Marjory Gordon

For this pattern, the Apgar family test has been used, obtaining a score of 8 points, a normal functional level, not a social risk. The Caregiver Overload Scale or Zarit test was performed on the daughter of the patient who is in charge of the main care, as well as the control of the revisions, obtaining a score of 50 points, slight overload, taking into account the change in role on the part of the caretaker, although she says that it does not interfere with her professional and social life and she tries to have freer and leisure time.

Result of the pattern: RISK OF ALTERATION OF THE PATTERN.

PATTERN 9: SEXUALITY – REPRODUCTION.

She has had four pregnancies of which she had an abortion and three children born alive today. She does not present vaginal bleeding. Performing mammograms annually in follow-up due to a history of breast cancer. She reported last cytology 4 years ago with normal result.

Result of the pattern: FUNCTIONAL.

PATTERN 10: ADAPTATION – STRESS TOLERANCE.

She does not make decisions by herself due to the cognitive alteration it presents, although the patient resolves aspects of daily life with help.

Result of the pattern: FUNCTIONAL.

PATTERN 11: VALUES – BELIEFS.

The patient refers to being catholic, but this does not significantly influence her life. Value health and your family.

Result of the pattern: FUNCTIONAL.

3.3 Diagnosis phase

After the interview and subsequent assessment of the patient, different nursing diagnoses have been determined, as well as current collaboration problems:

- [00078] Ineffective self-health management r/t insufficient knowledge of the therapeutic regimen m/b failure to take action to reduce the risk factors.
- [00002] Nutritional imbalance: less than body requirements r/t insufficient daily intake m/b insufficient interest for food.
- o [00048] Deterioration of teething r/t inadequate oral hygiene m/b absence of teeth.
- [00014] Faecal incontinence r/t impaired cognitive function m/b inability to delay defecation.
- [00016] Deterioration of urinary elimination r/t sensory-motor deterioration m/b urinary incontinence.

- [00102] Self-care deficit: feeding r/t impaired cognitive function m/b deterioration of the ability to take a complete meal on its own.
- [00108] Self-care deficit: bath r/t impaired cognitive function m/b deterioration of the ability to wash the body.
- [00109] Self-care deficit: dress r/t impaired cognitive function m/b deterioration of the ability to put on different pieces of clothing.
- o [00095] Insomnia r/t fear m/b difficulty in reconciling and maintaining sleep.
- [00131] Impairment of memory r/t neurological deterioration m/b inability to remember events.
- o [00146] Anxiety r/t stressors m/b nervousness.
- o [00229] Ineffective relationship risk r/t ineffective communication skills.
- o [00062] Risk of fatigue of the role of caregiver r/t insufficient carer's leisure time.

3.4 Planning and execution phase

As multiple diagnoses have been detected and not all have been addressed, we have reached a consensus with the caregivers of the patient to prioritize the resolution of the problems detected. In the following table are exposed the prioritized diagnoses, objectives and activities proposed (Table 2).

Table 2. Priority nursing diagnoses, objectives and corresponding activities

PROBLEM 1: 00002 – Nutritional imbalance: less than body requirements r/t insufficient daily intake m/b insufficient interest for food.

Objectives:

- > To achieve an adequate intake of nutrients.
- To increase appetite.

NOC: [1014] Appetite.

NIC: [1120] Nutrition therapy.

Activities:

- \circ To determine the patient's food preferences.
- \circ To provide the patient soft and non-acidic food.
- To present the food in an attractive, pleasant way, taking into consideration the colour, texture and variety.

Table 2. Priority nursing diagnoses, objectives and corresponding activities

PROBLEM 2: 00095 – Insomnia r/t fear m/b difficulty in reconciling and maintaining sleep.

Objectives:

> To achieve a stable sleep pattern in the patient.

NOC: [0004] Sleep.

NIC: [2300] Administration of medication.

Activities:

- To help the patient to take the medication.
- To control the therapeutic effects of the medication on the patient.
- To monitor if adverse effects and interactions occur in the patient.

PROBLEM 3: 00131 – Impairment of memory r/t neurological deterioration m/b inability to remember events.

Objectives:

> To promote personal and spatiotemporal orientation.

NOC: [0901] Cognitive orientation.

NIC: [4720] Cognitive stimulation.

Activities:

- o To consult with caregivers to establish the baseline cognitive level of the patient.
- o To inform the patient about news of recent events that do not involve threats.
- To orient with respect to time, place and person

PROBLEM 4: 00146 - Anxiety r/t stressors m/b nervousness.

Objectives:

- ➢ To decrease anxiety.
- > To help in the control of stressors.

NOC: [1211] Level of anxiety.

NIC: [5820] Decreased anxiety.

Activities:

- To try to assess the patient's perspective on a stressful situation.
- To stay with the patient to promote safety and reduce fear.
- o To listen carefully and encourage the manifestation of feelings, perceptions and fears.
- To establish recreation activities aimed at reducing tensions.
- To administer medications that reduce anxiety, as appropriate.

In the following appointments, an assessment of the evolution and progress in the various activities proposed is made, in order to achieve the objectives formulated.

3.4 Evaluation phase

The achievement of the established objectives (NOC) has been assessed through Likert scales. Obtaining the following results after carrying out the activities proposed (Table 3).

INDICATORS	BEGGINING	HALF	ENDING
[101401] Desire to eat.	2	4	4
[101406] Food intake.	1	5	5
[401] Hours of sleep.	1	2	4
[404] Sleep quality.	1	2	4
[421] Difficulty of getting sleep.	1	2	3
[90101] She identifies herself.	2	3	4
[90102] Identify her relatives.	2	3	3
[90103] Identify where she is	2	2	3
[90106] Identify the current year.	1	1	1
[121102] Impatience.	2	3	3
[121117] Verbalized anxiety.	2	3	4
[121118] Concern about recent events.	2	3	3

Table 3. Indicators of results of the activities proposed

Likert scale: 1 (inadequate); 2 (slightly adequate); 3 (moderately adequate); 4 (substantially adequate); 5 (completely adequate).

4. DISCUSSION

In the realization of this final degree project in which a patient with Alzheimer's disease (AD) has been carried out in a Nursing Plan, it is convenient that after the diagnosis of a pathology of this nature, a nursing care process is initiated, which must be adequately programmed and structured with it is subsequent execution taking into consideration the needs of both the patient and their primary caregiver.

It is estimated that the number of people with dementia worldwide would be 35 million and increasing, recognizing this disease as a major public health problem²⁴. Considering also that it seems unquestionable that both economic and social costs increase year by year, where the main costs derived from dementia are informal, in other terms, those derived from long-term home care instead of direct medical costs, such as ambulatory services or medications²⁵.

In addition, the Primary Care (PHC) it is the first access point of access to medical care and qualified for people with dementia, thus ensuring an early reference for specialized care (EC). Determining that the PHC needs to progress need to progress and possess a greater capacity to manage the complexity of the care of this pathology within this area with the aim of providing better care to people with complex chronic situations as dementia, taking advantage of the potential value that has de PHC in addressing the needs of these complex and many future patients. In relation to our care plan, the PHC plays a fundamental role not only in the provision of care and availability of material and human resources, but also in the information and training of the caregivers of the patient, in the establishment of a care plan in the short and mediumterm planning in advance the decisions and assessing the cognitive evolution or other fundamental aspects such as for example the control of the symptomatology or the behavioural alterations²⁶.

The AD, being a degenerative pathology and that progressively affects the functionality of the individual, from the perspective of the nursing professional, it supposes that an exquisite evaluation will be carried out with the critical and integral analysis, taking into consideration the characteristics of each patient and the evolution of its health-disease process, the existence of economic and social resources, etc. Likewise, the use of standardized instruments generally used in the development of professional practice is essential, encouraging the use of them with the main objective of providing quality and individualized nursing care¹⁵.

It is also indispensable those interventions that suppose an improvement in the quality of care of patients with dementia living in their home, noting that due to the variety of interventions that describe samples and specific contexts, the comparison of such effectiveness in the practice is complex. Also taking into account that, in order to increase this quality in the come of people with dementia, health professionals should support and educate caregivers²⁷.

In the Nursing Care Plan presented, it is important to highlight the importance of the role played by the informal caregivers of the patient who, being their own family, at all times engaged in the development of the different activities and in the achievement of the objectives, understanding the process and being fully involved in it and consequently, assessing the evolution of all this. All this process has been contrasted with other plans of nursing care in AD, which highlights the importance of improving care for people with dementia, as this significantly reduces the burden on the caregivers¹³⁻¹⁵.

Regarding the diagnoses initially proposed in terms of nutritional imbalance and insomnia that were present at the time of the assessment of the patient, we can verify through the evaluation indicators that these problems have been largely resolved over the development of the activities, the caregivers expressing the importance of maintaining the activities developed over time, in order to contribute to the improvement of the quality of life of the patient and promoting self-care as far as possible.

In relation to the initial anxiety that caused the patient alterations in behaviour, we confirmed that after assessing stressors and promoting mechanisms that increase safety, such as the manifestation of feelings and fears or active listening among others, as well as the appropriate administration of the prescribed medication for the reduction of it, they are essential in the integral attention.

Finally, we consider that the diagnosis of memory deterioration has not evolved substantially, since cognitive stimulation has not been carried out with a rehabilitation purpose, but rather a slowing down of the morbid process and facilitating its orientation in space, time and person mainly.

The nursing professional plays a fundamental role in the patient's care, being the person in charge of the basic care and control, being a reference professional since it carries out a regular follow-up, leading to an improvement of the appropriate circumstances so that the NCP, becoming an ideal tool to ensure such care.

The realization of this Care Plan has given me the opportunity to put into practice the theoretical knowledge that I have acquired throughout my academic training, being able to distinguish both the facilities and the obstacles that we can find as professionals throughout the realization of a process like this. Mainly the difficulties with which I have found in the development of the NCP have been the own ones of the pathology of the patient, as they are the alterations of the behaviour and the deterioration of the memory, among other problems derived the same, due to the scarce experience that I have in terms of communication and care in patients with dementia. In spite of this, I would like to point out that at the beginning of the work I set out my own objectives that I have also been able to achieve and value, both at an academic and professional level as well as at a personal level, which has enriched me and contributed values,

knowledge and deep satisfaction with the path that has led to the development of this work, also knowing my own limitations on the other hand.

The development of this work, where I have been able to assess holistically a patient, understanding the individual with their physical, social and especially emotional facet, knowing their reality, working together with their caregivers and knowing the day to day life of they have provided my learning with the ability to not only provide quality care, but also to consider the meaning of "caring" in the performance of nursing practice, going beyond the merely technical and the disease.

At the professional level, I have been able to delve into the use of the tools we have at our disposal, and which in many cases are underutilized or used inappropriately in the development of the nursing activity. These tools used are the functional patterns of Marjory Gordon that allow a structuring of the assessment, going through the understanding of the theory of self-care of Orem and applying the taxonomies that combine the knowledge of the discipline: NANDA, NIC and NOC, finding a utility practice for all that drives to improve the quality of care and influencing the autonomy and critical reflection of the profession that I will develop in the future.

5. CONCLUSIONS

Regarding the general objective formulated, the nursing care plan for the selected patient has been satisfactorily developed, carrying out all the phases of this. With regard to the specific objectives, it can be concluded that:

- An integral assessment was carried out in which the altered patterns that the patient presented were identified, as well as the nursing diagnoses analysed, where we found the most important ones: nutritional imbalance, insomnia, memory deterioration and anxiety.
- Real objectives and activities were formulated, making it possible to monitor the evolution of the patient and adapting these activities to the new needs that may appear.
- A great part of the objectives established in the care plan have been achieved, highlighting among them the increase of appetite and the improvement of night rest.
- The realization of cognitive stimulation has had a favourable impact on the patient at the level of spatial orientation and person.

- The NCP is a very important nursing instrument with which stability or improvement has been achieved in the established diagnoses, through the proposed activities, influencing the improvement of the quality of life of the patient and her caregivers.
- Finally, highlight the role of caregivers and the family as an essential part in the care and evolution of the patient's disease process.

BIBLIOGRAPHY

1. World Health Organization (WHO). "Informe Mundial sobre el envejecimiento y la salud" [Internet]. España. WHO; [publication date: 2015; date of last consultation: December 5, 2017]. Avaliable in: URL: http://apps.who.int/iris/bitstream/10665/186466/1/9789240694873_spa.pdf?ua=1

2. Instituto Nacional de Estadística (INE) [Internet]. España, INE; [date for last update: 2017; date of last consultation: December 5, 2017]. Avaliable in: URL: <u>http://www.ine.es/</u>

3. Ferrer C, Orozco D, Román P, Fernández A, Rodríguez R, Cortés O et al. " "Estrategia para el abordaje de la cronicidad en el Sistema Nacional de Salud" [Internet]. Ministerio de Sanidad, Servicios Sociales e Igualdad. España. 2012; [date for last update: 2016; date of last consultation: October 2, 2017]. Avaliable in: URL: http://www.msssi.gob.es/organizacion/sns/planCalidadSNS/pdf/ESTRATEGIA_ABORDAJE_CRONICIDAD.p df

4. WHO. "Demencia: una prioridad de salud pública" [Internet]. España. WHO; [date for last update: December 4, 2017; date of last consultation: December 6, 2017]. Avaliable in: URL: http://apps.who.int/iris/bitstream/handle/10665/98377/9789275318256_spa.pdf?sequence=1

5. Gallego C, Guerrero N. Sociedad Española de Enfermería Neurológica (SEDENE). "Manejo de pacientes con enfermedad de Alzheimer: ¿cambio en el paradigma actual?" [Internet]. Rev Cient Soc Esp Enferm Neurol. España, 2017; [publication date: 2017; date of last consultation: October 2, 2017]. Vol. 45 January – June 2017; 45(C): 30-31. Avaliable in: URL: <u>https://ac.els-cdn.com/S2013524616300204/1-s2.0-S2013524616300204/-main.pdf?_tid=58ef1ffc-b75f-11e7-9aad-00000aab0f6c&acdnat=1508700760_038ab56cfbf4f0f43aef76381df1c99a</u>

6. Gobierno de Canarias, Consejería de Sanidad, Servicio Canario de Salud (SCS), Dirección General de Programas Asistenciales | "Manual de Actuación en la enfermedad de Alzheimer y otras Demencias" [Internet]. España; 2011; [date for last update: 2011; date of last consultation: October 2, 2017]. Avaliable in: URL: http://www3.gobiernodecanarias.org/sanidad/scs/content/7730420f-4820-11e1-92c3-9195656fdecf/26797_ag ALZHEIMER_baja.pdf

7. Prieto C, Eimil M, López C, Llanero M, Villarejo A. Informe de la Fundación del Cerebro, Sociedad Española de Neurología (SEN). "Impacto social de la Enfermedad de Alzheimer y otras Demencias". España; [publication date: 2017; date of last consultation: October 4, 2017]. Avaliable in: URL: http://www.fundaciondelcerebro.es/docs/IS_EA_y_otras_demencias.pdf

8. Cruz E. "Algunos aspectos actuales sobre el manejo de la Enfermedad de Alzheimer por el profesional de Enfermería" [Internet]. Facultad de Tecnología de la Salud. Revista Cubana de Tecnología de la Salud; [publication date: 2016; date of last consultation: October 2, 2017]; 7(1). Avaliable in: URL: http://www.revtecnologia.sld.cu/index.php/tec/article/view/651

9. Alzheimer's Disease International (ADI). "About Dementia" [Internet]. [Date of last consultation: January 26m 2018]. Avaliable in: URL: <u>https://www.alz.co.uk/about-dementia</u>

10. Hernández-Lahoz C, López-Pousa S. "Alzheimer: Guía Práctica para conocer, comprender y convivir con la enfermedad". 1ª ed. España: Ediciones Nobel; 2016.

11. Martínez J, Del Pino R. "Manual Práctico de Enfermería Comunitaria". 1ª ed. Vol. I. España: Elsevier España; 2014.

12. Campo Darias S, Campo M. "Enfermería Comunitaria". 3ª ed. Vol. II. España: DAE; 2016.

13. Blanco S. "Cuidados de Enfermería en el Alzheimer: Revisión Sistemática". [Internet]. Escola Universitaria de Enfermería A Coruña, Universidad Da Coruña, España; [publication date: 2014-2015; date of last consultation: January 29, 2018]. Avaliable in: URL: http://ruc.udc.es/dspace/bitstream/handle/2183/15333/BlancoRodriguez_Sandra_TFG_2015.pdf?sequence=2

14. Fernández R. "Abordaje de los cuidados enfermeros en Alzheimer" [Internet]. Universidad de Murcia, España; [publication date: September 2014; date of last consultation: January 29, 2018]. Avalaible in: URL: <u>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</u>

15. Gallego LA. "Demencia en fase avanzada: plan de cuidados a propósito de un caso" [Internet]. Escola Universitaria de Enfermería A Coruña, Universidad Da Coruña, España. [publication date: May-June 2015; date of last consultation: January 29, 2018]. Avaliable in: URL: http://ruc.udc.es/dspace/bitstream/handle/2183/15334/GallegoJuan_LadislaoAlejandro_TFG_2015.pdf?sequence=2

16. Alligood M, Tomey A. "Modelos y Teorías en Enfermería". 8ª ed. España: Elsevier Mosby; 2014.

17. Prado L, González M, Paz N, Romero K. "La teoría Déficit de autocuidado: Dorothea Orem punto de partida para calidad en la atención" [Internet]. Rev. Med. Electron. 36(6) 835–845; [publication date: November-December 2014; date of last consultation: December 5, 2017]. Available in: URL: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1684-18242014000600004

18. Heather Herdman T. "Diagnósticos Enfermeros: Definiciones y clasificación 2015-2017". 11^a ed. España: Elsevier; 2015.

19. Moorhead S, Johnson M, Maas M, Swanson E. "Clasificación de Resultados de Enfermería (NOC)". 5ª ed. España: Elsevier; 2014.

20. Bulechek GM, Butcher HK, Dochterman JM, Wagner CM. "Clasificación de Intervenciones de Enfermería (NIC)". 6ª ed. España: Elsevier; 2014.

21. Servicio Andaluz de Salud. "Cuestionarios, test e índices de valoración enfermera en formato para uso clínico" [Internet]. Estrategia de Cuidados de Andalucía. España; Junta de Andalucía; [date for last update: November 18, 2016; date of last consultation: December 7, 2017]. Avaliable in: URL: http://www.juntadeandalucia.es/servicioandaluzdesalud/principal/documentosAcc.asp?pagina=pr_desa_innovaci on5

22. Ospina BE, Sandoval J, Aristizábal CA. "La escala de Likert en la valoración de los conocimientos y las actitudes de los profesionales de enfermería en el cuidado de la salud". Investigación Educación Enfermería, (1)2005, pp. 14-29.

23. Organización Colegial de Enfermería. "Código Deontológico de la Enfermería Española" [Internet]. Consejo General de Colegios Oficiales de Enfermería de España; [publication date: July 14, 1989; date of last consultation January 30, 2018]. Avaliable in: URL:

http://www.consejogeneralenfermeria.org/index.php/component/jdownloads/send/8-normativa-colegial/86-codigocge

24. Jackson M, Pelone F, Reeves S, Anne Marie Hassenkamp, Emery C, Titmarsh K et al. "Interprofessional education in the care of people diagnosed with dementia and their carers: a systematic review" [Internet]. BMJ Open; [publication date: July 2016; date of last consultation: February 15, 2018]; 6 (8): e010948. doi: 10.1136. Avaliable in: URL: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5013417/</u>

25. Schaller S, Mauskopf J, Kriza C, Wahlesr P, Kolominsky-Rabas PL. "The main cost drivers in dementia: a systematic review" [Internet]. Int J Geriatr Psychiatry; [publication date: February 2015; date of last consultation: February 15, 2018]; 30 (2): 111-29. doi: 10.1002. Available in: URL:https://www.ncbi.nlm.nih.gov/pubmed/25320002

26. Spenceley SM, Sedgwick N, Keenan J. "Dementia care in the context of primary care reform: an integrative review" [Internet]. Aging & Mental Health, Routlegde; [publication date: June 5, 2014; date of last consultation February 16, 2018]; 19(2):107-20. doi: 10.1080. Available in: URL: https://www.ncbi.nlm.nih.gov/pubmed/24901364

27. Zabalegui A, Hamers JP, Karlsson S, Leino-Kilpi H, Renom-Guiteras A, Saks K et al. "Best practices interventions to improve quality of care of people with dementia living at home" [Internet]. Patient Educ Couns; [publication date: May 2014: date of last consultation: February 16, 2018]; 95(2):175-84. doi: 10.1016. Avaliable in: URL: https://www.ncbi.nlm.nih.gov/pubmed/24525223