Care Network for the Elderly with Alzheimer’s Disease in the View of Primary Care Nurses

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Abstract

Objective: To build a care network for the elderly with Alzheimer’s disease from the view of nurses of the Family Health Strategy (FHS).

Method: Exploratory qualitative study, developed with seven nurses from the FHS in the city of Santa Cruz, state of Rio Grande do Norte, Brazil. After obtaining a favorable opinion of the Ethics Committee of the Alcides Carneiro University Hospital (CAAE nº 31307314.9.0000.5182), data were collected through semi-structured interviews and analyzed according to the Collective Subject Discourse.

Results: For an effective care network to the elderly with Alzheimer, some elements are necessary, such as: care in the three levels of complexity, family support, complementary diagnostic center, pharmaceutical services, continuing education, intersectionality and group of caregivers.

Conclusions: When the care to the elderly with Alzheimer’s disease is performed in an articulated manner between the multiples axes that compose the network, it clarifies the caring process, facilitates the decision making, directs care, guarantee a comprehensive care and greatly reduce the deficits associated with this disease.

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Keywords
Alzheimer’s Disease; Family Health Strategy; Health Care Network.
Introduction

Alzheimer’s Disease (AD) is a dementia disease marked by progressive chronic-degenerative decline that affects cognitive, functional and behavioral areas, and compromises the daily activities of the individual [1]. The disease progresses slowly and several deficits are observed of which the most common has willy onset, with early defects in recent memory, which can lead to the development of aphasia, apraxia and agnosia after a few years [2]. Although the average duration of illness is estimated between 7 and 10 years from the initial phase of symptoms to death, survival has proven to be significantly higher [3].

Considering the epidemiological panorama of AD in the world scenario, another phenomenon to be highlighted is population aging, once the intrinsic relationship between both. According to the Brazilian Institute of Geography and Statistics, [4] the world population, especially in Brazil, has shown a significant increase in life expectancy as opposed to declining mortality and birth rates, which leads to changes in the structure of the population pyramid. Thus, along with population aging, the number of aging-related diseases, such as coronary, neoplastic, osteoporosis and neurodegenerative diseases, such as dementias, increases [5].

AD has multiple and usually undefined etiologies, but there are four potential risk factors, namely age, heredity, Down’s Syndrome and the presence of Apolipoprotein E-4 [6]. Early diagnosis is crucial to delay the progression of the disease and its clinical manifestations, and thus guarantee better levels of quality of life to the patient, as well as to caregivers and relatives [3]. Recognizing the complexity of the diagnosis, as well as the increase in life expectancy, the need to promote comprehensive and quality care for the elderly with AD arises, mediated by an individualized health care in accordance with the public policies that ensure rights to health, social security and social assistance.

In order to meet this demand, important legal devices were developed in the field of protection for the elderly in the world scenario. In Brazil, mainly based on the guarantees obtained in the Federal Constitution of 1988, a process began to review the legal basis of health care, which culminated in the publication of Administrative Rule GM/MS No. 399 of February 22, 2006, which announced the Pact for Health, consolidating the operational guidelines of the Brazilian Health System (SUS) and affirming that the health of the elderly is one of its priorities [7].

Based on this publication, and considering the need for the health sector to have an updated policy on the health of the elderly, Ordinance No. 2,528 of October 19, 2006 was launched, approving the National Policy on the Health of the Elderly Person (PNSPI in Portuguese), which proposes the recovery, maintenance and promotion of autonomy and independence of the elderly. This policy states the need to develop a care structure with qualified support for the elderly and their families, multidisciplinary and interdisciplinary teams with knowledge about aging and the implementation of health care networks targeted at the elderly [8].

In this context, Primary Care (PC) is the gateway for the user to enter the health services network of the SUS, and the Family Health team (FHT) must act in the comprehensive care of the needs of the elderly, implementing actions of individualized care, health education, home visits, offering appointments and treatments, among others, as recommended by Ordinance No. 703 of April 12, 2002 that establishes the program of care for patients with AD [9].

Based on the foregoing, and in view of the difficulties experienced by elderly people with Alzheimer’s disease, family members and caregivers in therapeutic management and social life, this study aims to build a network of care for the elderly with Alzheimer’s disease from the perspective of nurses of the Family Health Strategy (FHS).
Material and Methods
This is an exploratory and descriptive study, with a qualitative approach, developed in the municipality of Santa Cruz, state of Rio Grande do Norte, specifically in the Family Health Units (FHUs) linked to the Municipal Health Department and located geographically in the urban area. The sample was composed of seven nurses.

The data were collected in August 2014, after a favorable opinion no. 807,123 of July 30, 2014 of the Research Ethics Committee of the Alcides Carneiro University Hospital (CAAE No. 31307314.9.0000.5182), by using a semi-structured interview and analyzed according to the Discourse of the Collective Subject (DCS) [10] technique, which consists of a synthesis discourse elaborated with excerpts from discourses of similar meanings.

In order to make the analysis feasible, the following operational steps were followed: a) selection of the key expressions of each particular discourse obtained for each of the study’s guiding questions. The key expressions denote the discourse-empirical proof of the truth of the central ideas; b) identification of the central idea of each of the key expressions, constituting the synthesis of the contents of these expressions; c) identification of similar or complementary ideas considering the same answers of a questioning proposed for the research, literally transcribing the terms used by the study participants; d) gathering key expressions in relation to the central ideas, similar or complementary in a discourse-synthesis, as if they had all been uttered by the same individual, constructing the DCS [10].

After the interviews with all the participants of the study, the testimonies were carefully transcribed in full and all the steps for the operationalization of the analysis through the proposed technique were followed. Based on the general representation of the DCS, a diagram was built presenting the care network to the elderly with AD.

The ethics of the study was based on the considerations of Resolution No. 466/2012 of the National Health Council/Ministry of Health that regulates the ethical principles of scientific research involving human beings, as well as Resolution No. 311/2007 of the Federal Nursing Council (COFEN), which is based on the code of ethics of nursing professionals [11, 12]. All study participants were advised of its objectives, risks and benefits by signing a term in which they freely agreed to participate.

Results
The social and professional profile of the interviewees is presented in Table 1, covering six variables: sex, age, training time, working time in primary care, titration and qualification for the elderly health.

Table 1. Social and professional characterization of the participants (n = 7). Santa Cruz, RN, 2014.

<table>
<thead>
<tr>
<th>Variables</th>
<th>f</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>85.7</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 to 29 years old</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>30 to 39 years old</td>
<td>5</td>
<td>71.4</td>
</tr>
<tr>
<td>40 to 49 years old</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>Training time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 to 05 years</td>
<td>5</td>
<td>71.4</td>
</tr>
<tr>
<td>06 to 10 years</td>
<td>2</td>
<td>28.6</td>
</tr>
<tr>
<td>Time of work in primary care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 months</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>4 years</td>
<td>4</td>
<td>57.1</td>
</tr>
<tr>
<td>7 years</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>10 years</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate level</td>
<td>4</td>
<td>57.1</td>
</tr>
<tr>
<td>Specialization</td>
<td>3</td>
<td>42.9</td>
</tr>
<tr>
<td>Qualification in health of the elderly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>42.9</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>57.1</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>100</td>
</tr>
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Source: Research Data, 2014.
In light of the results of social and professional profile of nurses as presented in Table 01, we can identify that the majority of respondents are female, constituting 85.7% of the sample. As for the variable age group, 71.4% of respondents present age between 30 and 39 years, which represents an age group characteristic of full productive activity and, therefore, endowed with more knowledge accumulated from the experiences lived over the years.

The professional training time of the nurses working in the FHS't's is an interesting category for analysis. The data show that the majority (n = 5) has between one and five years of training, which corresponds to 71.4% of the sample. In relation to the time working in primary care, 57.1% have been working for 4 years, a period that is satisfactorily adequate for establishing bond with the assisted community, given the contact and responsibility with users, becoming great facilitators in the accomplishment of health education and promotion practices, especially by maintaining a closer contact with the context in which these elderly people live.

Regarding the variable titration, 57.1% only have undergraduate course and 42.9% have some type of specialization, and no other higher qualifications have been identified. The FHS nurses must always be attentive to the permanent need for training, which enables them to carry out activities aimed at the elderly in a competent, humanized and absolute manner, and making this assistance possible of being performed and desired by all, including by managers, teachers, practitioners and above all by the population itself [13]. The training of professionals to work in the area of aging and health of the elderly is one of the priority actions of the National Policy for the Elderly [14].

A worrying result is that 57.1% of the professionals did not report any participation in any training aimed at the health of the elderly. The training of nurses cannot simply be limited to the knowledge obtained at the undergraduate level. The evolution of the science and practices of health care is dynamic and the professional must follow it. In this sense, the professional must demonstrate competence in meeting the needs of the users, and through qualification, the professional has the opportunity to acquire new knowledge and expand the capacity to work in their sector of work in order to contribute to the well-being of the patient and his/her family [15].

During the interviews, the participants were approached with the following question: what elements/equipment/type of care do you consider necessary for the creation of a care network for the elderly with Alzheimer’s disease? Based on this question, similar discourses were identified, composing the central idea “Different levels of health care, interdisciplinarity, family participation and pro-

### Table 2. Central Idea and Discourse of the Collective Subject regarding the questioning: what elements/equipment/type of care do you consider necessary for the creation of a care network for the elderly with AD?

<table>
<thead>
<tr>
<th>Central Idea</th>
<th>Discourse of the Collective Subject</th>
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<tr>
<td>Different levels of health care, interdisciplinarity, family participation and professional training as necessary elements for the construction of the care network for the elderly with AD</td>
<td>[...] guiding the caregivers [...] we refer to CRAS, to FACISA, which is also a great partnership we have [...] continuous assistance, month by month (N1). First, qualification for the staff, as we only see content about the elderly during the undergraduate course [...] the issue of multidisciplinarity, the psychologist, the social worker, the physiotherapist, right? (N3). I think in the first place we have to guide the caregiver [...] to guide the family and the caregiver (N4). [...] medical follow-up, examinations, referral to appropriate centers (N5). First, a reference center, right? A group of elderly people’s caregivers could also be set up (N6). Implantation of multidisciplinarity teams to accompany the elderly with Alzheimer’s disease (N7).</td>
</tr>
</tbody>
</table>

fessional qualification as necessary elements for the construction of care network for the elderly with Alzheimer's disease”. The DCS of this central idea can be seen in Table 2.

Taking care of for an elderly person with Alzheimer’s disease requires potentially complex care. In addition to having follow-up in the FHSs, these elderly people often require referrals to other levels of care, depending on the stage of the illness in which they are. It should be noted that chapter IV of the Statute of the Elderly specifically addresses the role of SUS in guaranteeing the health care of the elderly in a comprehensive way and at all levels of care [16].

According to the analysis of the DCS, as presented in Table 1, interdisciplinary actions have been identified between primary care, the services of the Social Assistance Reference Center (CRAS) and the group of academics of the Physical Therapy Course of the Faculty of Health Sciences of Trairi of the Federal University Of Rio Grande do Norte (FACISA-UFRN), in which partnerships were established for the effective follow-up of the elderly living in the community, including those affected with AD.

Interdisciplinary actions are of great importance for the consolidation of a care network for the elderly with Alzheimer's disease, since the elderly will receive specialized care and with the involvement of different social segments. Interdisciplinary actions are recommended in the FHS and this operational arrangement is reaffirmed in the National Policy for Primary Care of 2012, which guides the development of interdisciplinary actions, integrating social support projects and networks aimed at the development of comprehensive care [17].

Another important element verified in the testimonies concerns the participation of the family in the care of the elderly with AD. Nursing guidelines are indispensable to the family - the main responsible for the daily care and for the monitoring of the elderly -, especially regarding the characteristics of the disease and its evolution, in order to carry out adequate and effective behaviors. In practice, family members often exercise the role of caregiver without support and necessary guidance, generating a risk to the health of the elderly [18]. The family needs to be prepared to consider itself a point of reference in all situations and it is pointed out by scholars of aging as the key point to address issues such as well-being and safety [19].

Regarding the professional qualification to assist the elderly with Alzheimer’s disease, the nurses working at the FHS reported the need for qualifications in the area that support the improvement of care. Therefore, continuing education projects that address the multidimensional evaluation of the aging process and its pathophysiological nuances may, certainly, optimize nurses' performance in the care of the elderly with Alzheimer's disease, favoring the patients and their family's well-being.

Considering the results shown in Table 1, a care network for the elderly with Alzheimer’s disease was built in the view of primary care nurses (Figure 1), adding indispensable elements for multiprofessional and interdisciplinary assistance in order to ensure better levels of quality of life to this population.

Figure 1: Comprehensive care network for the elderly with Alzheimer’s disease.

Source: Research Data, 2014.
Comprehensive health care for the elderly should be built on the basis of a user-centered care network based on their rights, needs, preferences and abilities; establishment of functioning bi-directional flows, expanding and facilitating access to all levels of care; and provided with essential conditions such as adequate physical infrastructure, inputs and qualified personnel for a good technical quality [8]. It is essential that each organized care network has a manager to think and operationalize its flows, thus ensuring that the access routes to services remain unobstructed and monitoring the non-bureaucratization of these flows [20].

**Discussion**

The care network for the elderly with AD was formulated to meet their needs in a holistic, qualified and humanized way, in which the scientific and technological knowledge is provided to them based on a continuous and structure, articulated between the different health care networks and services networks and their respective levels of care.

Primary care has an important role in the composition of the care network for the elderly with AD, since it is the preferential gateway of health services, thus effecting assistance in the contribution of the expanded clinic and conducting home visits and health education actions. The extended clinic proposal allows a comprehensive understanding of the health-disease process and focuses on the subject, the disease, the family and the social context, with the purpose of producing health and increasing the autonomy of those involved in the care and resolution of their problems [21].

The partnership with university extension reveals its importance in the relationship established between institution and society, bringing benefits to both academics and the community. The actions promote knowledge exchange, and students can put into practice what they have learned in theory and the elderly and their families are benefited with the care provided. This scenario becomes a differentiated space for new experiences aimed at humanization, care and qualification of health care for the elderly.

According to the National Plan for University Extension, the activities carried out in the community by university students aim to produce knowledge, both scientific and technological, making them accessible to the population. The university has been focused on bringing knowledge and benefits to the population, so that it benefits from the results obtained by academic activity [22].

Specialized care is a very important factor, since elderly people with AD require constant care. Follow-up with a geriatrician and neurologist should be constant in the care of the elderly with Alzheimer's disease, which, although it is still an incurable disease, requires medications that delay the process of neuronal destruction and improve the survival of these patients. Therefore, in the context of the care network, flows to specialized care should be ensured whenever there is referral by the primary care team.

Accompanying the elderly with AD is a difficult task for the family and/or caregiver, and requires patience and determination. Thus, the psychologist is indispensable in these situations, since often family members need this type of follow-up to relieve stress, overload and mental health care, which may affect the coexistence with the elderly and thus interfere in therapeutic management.

With the evolution of the disease, the elderly starts to have cognitive deficits that prevent them from performing the activities of daily living (ADLs), so physiotherapy is also important in the treatment of the elderly with AD, especially when it is diagnosed early, and contributes to preserving motor functions and to promoting a better quality of life. In this way, a specialized treatment allows the elderly to reach a higher cognitive and functional level [23].

It is extremely important that the speech therapist participate in specialized care, since as AD progresses, the elderly tends to present problems in oral
communication and also in swallowing. This is due to the deterioration in the "semantic stock", or it can be interpreted as access failures to this stock, related to attentional and executive processes. Added to these investigations, there has been, gradually, studies describing semantic, syntactic and discursive changes, both in oral communication and in graphic communication [24].

The caregivers groups and the families that make up the care network are closely related, since the caregiver of the elderly is often someone in the family. When the diagnosis of AD is confirmed, the family suffers a shock that often disrupts the whole family routine. It is necessary to intervene with these relatives, since the quality of life of patients with dementia depends primarily on those who are responsible for their care. Thus, the great majority of therapeutic approaches include work with groups of family members and caregivers.

The groups have two main objectives: to help the family to better withstand the emotional and occupational overload caused by intensive care and to provide information that favors the care of the family with the patient [25]. In this group, caregivers will be able to exchange experiences and grow mutually, acquiring better understanding of the aging process and its possible implications in their lives and in the elderly's lives through the testimonies of people who are experiencing the same problems, instigating them to create coping strategies to make changes in their way of life, which will make taking care for the elderly with Alzheimer's an easier task [26].

The early diagnosis of AD allows the physician to have better conditions to intervene to benefit the health of the elderly, a fact that will only be possible through articulation with a Complementary Diagnostic Center. The elderly, when presenting the first symptoms of the disease, should be taken to the FHS so that the nurse and physician can evaluate them in a comprehensive manner, obtaining their medical history and sending it to the said Center in order to carry out specific tests for the diagnostic conclusion. Due to the progressive and degenerative nature of AD, the longer it takes to diagnose the disease, the more the neuronal tissue will be compromised and the cognitive changes will be more evident.

Older people with AD need comprehensive care provided by trained professionals, who seek to become professionals to provide a quality care. In this logic, continuing education becomes indispensable. The Statute of the Elderly in Article 18, Chapter IV of the right to health, says that health institutions must meet the minimum criteria for meeting the needs of the elderly, promoting training and qualification of professionals [16]. These qualifications awaken in the health professional the recognition of the elderly as a citizen, knowing their social and health reality, the existing healthcare technologies, the available resources and the legal devices as indispensable tools for the development of health actions [27].

Another axis presented in the care network is the pharmaceutical care. The elderly diagnosed with AD should receive information necessary for the correct use of medicines, as well as receive from the State the medicines necessary for the treatment of the disease, which will delay the destruction of neurons and minimize the cognitive changes triggered as the disease progresses.

Pharmaceutical care is a set of actions aimed at the promotion, protection and recovery of health, both individual and collective, having the drug as an essential input and aiming at ensuring the accessibility of the population to quality pharmacotherapy and contributing to the rational use of medicines [28]. According to the Statute of the Elderly, Chapter IV, subsection 2, it is the responsibility of the Government to provide the elderly, free of charge, with medicines, especially those of continuous use [16].

The proposal of interdisciplinarity is present in the articulation of the FHS with the CRAS, which besides offering services and actions of basic protection,
has the function of territorial management of the social assistance network, promoting organization and articulation of the units referenced to it and the management of processes involved in it. Caregivers and the elderly with AD are referred to CRAS for follow-up aimed at strengthening the family's protective function and the ties, once the caregiver may be overloaded and need to be monitored.

Management’s participation has been included in the care network since all other axes that comprise it will be practically inoperative if there is no support from the federal, state and municipal management that guarantee the feasibility of the same. For the network to be fully operational, a shared commitment among managers is required in line with the principles of regionalization. The effective agreement made by the coordinators and managers in relation to care flows allows the execution of actions and services in a harmonious, tranquil, efficient manner, guaranteeing access to users [20].

Regarding the application of the nursing process (NP), this is also considered an essential methodological tool in the care of the elderly with AD, since it enables the organization and direction of care, besides helping nurses to make decisions and to predict and evaluate consequences. The purpose of the NP is to systematize care and qualify it through individualized care, supported by the method that guarantees the collection of specific data to the subject for the development of behaviors that provide health promotion, prevention of complication and treatment in an efficient and effective manner [29].

In this sense, the functioning of the care network should follow the following logic: in view of the initial presentation of signs of AD, such as impairment of the recent memory, the nurse should refer the elderly to specialized care services. Geriatricians, psychologists and neurologists will evaluate the elderly person and request tests that will be performed at the Complementary Diagnostic Center. Once the AD is confirmed, the elderly will be accompanied by a trained team, in which the nurse of the unit will use the nursing process to systematize the care of this elderly person, setting nursing diagnoses and interventions based on the investigation of the data about the health and disease of the elderly in an individualized way and with a view to promoting, protecting, recovering and rehabilitating health.

In addition to the proposal and execution of the care plan, it is up to the primary care nurse to adopt measures such as the qualification of the caregivers, raising the family’s awareness for greater involvement and the formation of social groups; [30] to refer caregivers/family members to the CRAS, where they will have necessary family assistance; to require collaboration of specialized care, such as the psychologist and speech therapist; to share experiences with a group of caregivers and thereby assist in providing more efficient care; to guide the use of medicines and favor the dispensing of these through the basic pharmacy of the municipality, according to the medical prescription; and to make room for establishing a partnership with university extension, allowing other academic-professional categories to share care for the elderly with AD, such as physiotherapists, nutritionists, occupational therapists, pharmacists, dentists, among others.

Conclusion

The care network for the elderly with AD was conceived through the view of nurses working at the FHS and built with the purpose of providing a comprehensive and humanized care in the various levels of health care, clarifying the process of care for the elderly with AD, directing assistance within this network of care and significantly reducing the factors associated with the morbidities that affect this population.

Developing a care network for the elderly with AD is an innovative act. Little is known about the subject and the benefits that it can provide to the population, especially for the complexity of the assistance demanded. The number of elderly people...
with the disease has grown a lot in recent times due to the increase in life expectancy, and it is common to find elderly people and families experiencing the evolution of the picture without any monitoring by the primary care.

The practical operation of this network will revolutionize primary care and will include not only elderly people affected by AD, but also their families, who will have all the necessary support and guidance, as well as the routine monitoring of the health team. The public health system will be more efficient and will have fewer expenses with repeated hospitalizations and high cost. The FHS itself, will know how to direct care to this elderly, thus providing a better quality of life.

Therefore, the effectiveness of care for the elderly with AD based on this care network, associated with the participation of the management and the implementation of the nursing process, ensures them a comprehensive and humanized care, directs the decision-making process and reduces considerably the deficits associated with the disease.

References


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