



Proceeding Paper Nursing Intervention in Mental Health: A Case Study in a Home Setting [†]

Palmira Oliveira ^{1,*}, Sofia Figueiredo ², Júlia Martinho ¹, Regina Pires ¹ and Cristina Barroso Pinto ¹

- ¹ CINTESIS—Center for Health Technology and Services Research, Oporto Nursing School, 4200-072 Porto, Portugal
- ² Unidade de Cuidados na Comunidade de S. Mamede Infesta, 4465-156 S. Mamede Infesta, Portugal
- * Correspondence: palmiraoliveira@esenf.pt
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Abstract: This case study aims to describe the implementation of the decision-making process in mental health nursing given the care needs identified in a person with Alzheimer's disease at home. The cognitive assessment, supported by the cognitive decision algorithm, revealed that the patient presented moderate dementia, with visuospatial disorganization, memory changes, orientation, evocation, and constructive abilities. Five sessions of cognitive stimulation were performed to enhance cognitive functions and their maintenance. We concluded that the personalized nursing intervention allowed for stabilizing mental health conditions.

Keywords: case study; dementia; house calls; mental health nursing

1. Introduction

The Organization for Economic Cooperation and Development places Portugal as the fourth country with the most cases per thousand inhabitants, and Alzheimer's disease (AD) is the most frequent type of dementia [1]. AD is a degenerative, progressive disease caused by an accelerated loss of neurons. It mainly affects memory, reasoning, orientation, language, behaviour, and affections [2].

The early intervention of the mental health nurse (MHN) is essential, who is recognised as having the scientific, technical, and human competence to provide specialised nursing care in this area, as well as to delay the progression of dementia. Their practice translates into a deeper knowledge of the issue, which allows them to identify nursing diagnoses, as well as to prescribe and implement interventions that lead to health gains in people with AD and their families [3].

The home visit (HV) is a form of potential early access that requires continuity of care, often provided by the carer. In mental health, the HV facilitates the approach to the patient and his or her family, since the MHN can understand the family dynamics to assess the family involvement in the treatment and follow-up of the ill person [4].

On the other hand, the approach to the person with dementia should not be limited to pharmacological treatment, as it is also necessary to include non-pharmacological approaches to enhance the existing cognitive abilities and delay cognitive and motor losses so as to promote quality of life [5]. Therefore, the non-pharmacological approach, in which cognitive stimulation is included, requires a previous neuropsychological assessment to identify the deficits and functions that can be stimulated, as well as the type and stage of dementia [6].

Thus, in the case of mental health nursing, cognitive stimulation aims to enhance the capabilities that the person with AD still maintains, delaying their decline, and different specific activities can be used to train memory and thinking, among other cognitive areas [1] depending on the particularities of each patient, so, we intend to describe the



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Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). implementation of the nursing decision-making process in view of the care needs identified in a person with AD at home.

2. Material and Methods

This is an exploratory–descriptive case study, based on the nursing process methodology, using the nursing ontology approved in 2021 by the Portuguese Nursing Council. Thus, the study of clinical cases allows a deeper analysis of the problems and needs of the individual, family, and/or community, with the purpose of collecting relevant information for the decision-making process [7].

This case study was carried out in an academic context during the specialization course in mental health nursing, and informed consent was obtained from the caregiver. Home visits were carried out between 19 April and 31 May 2022.

The nursing decision-making process began with data collection, followed by the identification of nursing diagnoses, the definition of objectives, the prescription of interventions with referential integrity, and the assessment of results. For the functional and cognitive assessment, nurses used the decision algorithm in cognition [6], applying some psychometric tools to support decision-making, such as the Subjective Memory Complaints Scale, Mini Mental State Examination, the clock test, NOC Cognition (Nursing Outcomes Classification), validated for the Portuguese population [8], and NOC Cognitive Orientation [9], this being an instrument widely used internationally.

Different techniques were used: reminiscence therapy; cognitive training (memory stimulation such as the name/face association technique); compensation with external supports (notebook and calendar); and internal supports (organizing information: mnemonics and repetition of word and number lists). The selection of some of the CS exercises was made using the available bibliography, and others were constructed in a personalized way. They had different levels of difficulty [2] to avoid the user's frustration, maintaining the regular practice of certain cognitive functions to improve or maintain them [6]. The performance of the exercises was monitored by the caregiver, who performed CS exercises with the patient between sessions.

3. Results

This case study concerns a 69-year-old man, independent in instrumental activities of daily living, diagnosed in 2020 with moderate AD. He presents with visuospatial disorganization, memory changes, orientation, recall, and constructive skills.

The diagnoses of impaired cognition and orientation were identified, and nursing interventions were prioritized. Five sessions of cognitive stimulation (CS) were prescribed, with an average productive work time of 40 min per session.

A positive evolution was observed in all items of the NOC Orientation. Regarding the NOC Cognition, the patient preserved all the items where he was slightly impaired compared to the first assessment (clear and age-appropriate communication, understanding of the meaning of situations, immediate memory, remote memory, and processing of information). In the 'ability to pay attention', 'recent memory', and 'ability of complex calculations', he changed from moderately compromised to slightly compromised, and in the 'weight of alternatives' and 'making decisions', he changed from very compromised to moderately compromised. On 'concentration', he remained moderately impaired, and in 'adequate decision-making', he persisted as very impaired.

4. Discussion

Cognitive decline, especially in memory, was the main defining characteristic of AD in the patient of this study, corroborating what is supported in the literature [6]. Thus, for each person with AD, a specific nursing care plan should be elaborated, regularly reformulated according to the evolution of the situation, where the family/caregiver should be included as an element of the therapeutic process. Empowering the caregiver implies providing him/her with knowledge and skills, and, in fact, the 'lack of training of caregivers is a predictive factor of cognitive and functional deterioration of the dependent elderly' [6] (p. 205). In this clinical case, the caregiver was fundamental in performing the proposed exercises daily, between home visits, making it possible to achieve the success of the MHN intervention and the achievement of health gains in some of the items of the NOC Cognition. Therefore, for nurses, 'the home space emerges as a centrality of the person receiving care, with their consequent active participation in decisions and care interventions' [6] (p. 27).

The construction of personalized CS exercises for the patient, based on personal preferences, deteriorating cognitive areas, and potentials, revealed that the MHN was able to privilege the establishment of an effective therapeutic relationship supported by conceptual references of their person-centred care and transition processes [3,10], putting into practice their specific competences that aim to contribute to adequate responses of the patient and family to the specific issues related to the mental illness in order to avoid the worsening of the clinical circumstances and the social isolation of the patient [11].

Although the results obtained cannot be generalized, as it is a clinical case study, they corroborate the literature that shows that cognitive stimulation has positive effects in people with moderate dementia [6].

5. Conclusions

The professional practice of nursing was built on the interaction established between the nurse and the patient requiring care; by establishing a relationship of individualized and personalized assistance; and, by using a rigorous scientific methodology and a way of acting appropriately to the patient's mental health conditions, contributing to their stabilization.

The description of the case study corroborates the importance of the role of the MHN in providing care to the person with AD, namely, in the intervention at home. It also allowed a critical reflection on the decision-making process in nursing through an articulation of theoretical knowledge with clinical practice.

Given that the results cannot be generalized, we suggest investigation studies with representative samples of the Portuguese population on the contribution of CS in people with AD.

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