



## THE EFFECTIVENESS OF NURSE-LED DEMENTIA CARE INTERVENTIONS

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### Abstract

Implementing evidence-based therapies for individuals with dementia is an intricate and demanding task. Nevertheless, achieving effective implementation is crucial in order to guarantee evidence-based practice and maintain a high standard of care. Enhancing the implementation procedures in dementia care requires a deeper comprehension of the emerging difficulties. The objective of this research was to uncover current information on the obstacles and factors that support the implementation of nurse-led interventions in dementia care. Only studies that specifically focused on the implementation process and the variables that influenced the adoption of a nurse-led intervention in dementia care across all settings were included. We used an inductive technique to construct domains and categories for the purpose of data analysis. In addition to the usual variables that influence the implementation of nursing treatments, we have uncovered special factors related to dementia that go beyond the obstacles and facilitators that are previously recognized. An established culture that prioritizes individual needs and consistent team cultures and attitudes greatly aid the implementation procedures. Additionally, there is a need for therapies that possess a high degree of adaptability and responsiveness to the condition, requirements, and behavior of patients.

**Keywords:** Dementia, nurse, nurse-led interventions, review, medical care.

### 1. Introduction

Dementia is a degenerative neurological condition that gradually impairs higher cognitive skills. It is often accompanied by alterations in emotional regulation, social behavior, and/or motivation [1]. The growing reliance of individuals with dementia necessitates the provision of either professional or informal care [2]. Over the last several decades, there has been a



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significant growth in the quantity of papers and the amount of evidence-based nursing treatments in the field of dementia care [3, 4]. Nevertheless, there exists a disparity between the information that is produced and its use in clinical settings. According to a cross-sectional assessment on the research practices of nurses who care for elderly individuals, just 20% of the nurses said that they had used particular research results. It is challenging to bridge the gap between existing knowledge and practical implementation. Translating dementia care research into reality poses several problems. Specifically, the abundance of newly published publications poses a challenge for doctors to get a comprehensive understanding. Another obstacle is the absence of clear delineation of duties regarding the conversion of research into practical application [4].

Recent research indicates that the failure to use evidence-based information or the application of such knowledge in an unsustainable manner leads to a deficiency in the quality of care provided to individuals with dementia [6, 7]. Moreover, the implementation of evidence-based therapies in dementia care seems intricate and lacking long-term viability. A comprehensive analysis of implementation methodologies in dementia care indicates that research focusing on psychosocial therapies for individuals with dementia seldom considered long-term sustainability [8]. Hence, it is vital to enhance the implementation procedures in dementia care by gaining a deeper comprehension of the emerging obstacles. An essential feature of understanding treatments is to thoroughly investigate and assess the process of their implementation. This allows for the identification and explanation of many variables that may impact the intervention, such as contextual or delivery-related elements [9].

Existing reviews primarily examine the difficulties and variables that impact the successful implementation of interventions in dementia care. These reviews specifically concentrate on psychosocial interventions in residential dementia care or personalized dementia care in community settings [8, 10]. The implementation process is influenced by intervention-related, personal, financial, and organizational features, as well as management support and the desire of residents and/or families to participate.

## **2. Implementation of nursing interventions in dementia care**

Lourida et al. [11] conducted a scoping analysis to examine the implementation methods, impediments, and facilitators in dementia care. They analyzed articles from 1998 to October 2015 to identify the elements that influence the implementation and distribution of activities in dementia care. The categories described include organisational factors such as time, workload, and leadership, as well as professional factors such as knowledge and training. Additionally, personality and staff characteristics such as engagement and resistance are considered. Financial factors, such as funding, environmental factors such as the physical structure, legal factors, resident-specific factors such as health status, and dementia-specific factors such as cognitive impairment and complications in the course of the disease are also taken into account. The authors demonstrated a significant and quick growth in research activity in this field throughout time. Approximately 33% of the research was published in the years 2014 and 2015 [11]. It is

crucial to examine the latest research on the elements that impede or support the implementation procedures in this subject.

Lourida et al. [11] identify time restrictions, increasing workload, leadership, and management support as influential variables. Moreover, our findings indicate that the presence of a strong organizational culture and a clear vision are crucial for effectively implementing procedures in dementia care. This is cited in more than 50% of the research. Barriers are identified as distinctive hierarchical structures, insufficient rules within the organization [12, 13], and a task-oriented, functional culture of care [14, 15, 16]. On the other hand, a culture of caring that focuses on the individual and promotes equality within the organization is seen as elements that facilitate positive outcomes.

The presence of an established culture of care that prioritizes individual needs inside the organization seems to be a particularly significant element. Therefore, the effective implementation of nursing interventions in dementia care is more likely in organizations that already have well-established person-centered care concepts as integral parts of their care philosophy and care organization. Geerligs et al. conducted a comprehensive analysis on the obstacles and aids to the overall implementation procedures in hospitals. They found that the system's culture, together with factors such as staff workload, time constraints, and high staff turnover, had a significant impact. The system's culture encompasses the workers' attitudes and the organization's preparedness for change [17]. This surpasses the concept of a culture of caring.

In contrast, Vlaeyen et al. [18] did not include culture as a component that helps in any way in their systematic review on the obstacles and aids to adopting fall prevention in residential care facilities. According to research, the significance of staffing, training, and the organization's interest was shown to be greater [18].

The treatments examined in this analysis provide more understanding as to why a person-centered culture of care is crucial for achieving success. The research included in the analysis focused on various therapies, such as communication-based and psychosocial interventions, as well as interventions targeting behavioral and psychological symptoms of dementia. The provided papers demonstrate that therapies for dementia are often intricate and include multicomponent approaches that prioritize the individual's needs.

Staff attitudes and credentials seem to be a significant determinant in establishing a person-centred culture of care. Lourida et al. [11] discuss professional issues such as knowledge of dementia, training using tools, staff experience, and personality traits. The level of dedication to change or opposition is also a determining element. This aligns with our research results on the staff domain, namely in relation to "staff knowledge, experience, and skills" as well as "staff motivation and openness". Additionally, we discovered that team cultures, attitudes towards the intervention, and familiarity with the intervention are characteristics that have an impact. Authors in 50% of the research primarily characterized team cultures as a facilitating feature. This was true whether team members saw cooperation and communication as stimulating and

encouraging. Within this particular context, the text highlights that the specific area of concern for each professional has an impact, for example, on whether they prioritize task-oriented or person-oriented care for individuals with dementia.

Other literature evaluations focused on other patient groups have corroborated that the implementation process is influenced by the knowledge, abilities, and attitudes of the personnel [17, 18]. The findings of our study reveal two additional characteristics that are particular to dementia: the individual emphasis of care by professionals and conflicts arising from diverse care cultures within the team. The presence of task-oriented or efficiency-oriented staff attitudes was identified as a hindrance. When it comes to other treatments, such as emergency interventions in fall prevention programs, a strategy focused on efficiency would not be as much of a hindrance and may potentially be helpful.

Furthermore, we have found obstacles and aids connected to individuals and families, which align with the findings of Lourida et al. [11]. Within the research examined, instances of both poor health condition and cognitive impairment were only documented once. Our study found that more than 25% of the included research [19, 20, 21] discussed elements that directly relate to the features of individuals with dementia. Publications involving different patient groups also documented influencing variables associated to patients or residents. The study discussed the participants' outlook on the intervention, as well as their physical and mental disabilities. It also addressed the motivational and compliance-related factors that were highlighted. The findings of our study emphasize the challenges associated with adopting pre-determined treatments in response to the changing needs and behaviors of individuals with dementia. This component is extremely unique to dementia and requires careful development of therapies.

When it comes to implementing the findings in reality, it is important to note that the obstacles and facilitators mentioned in the research are mostly presented from the viewpoint of healthcare professionals. Relatives were only included in four trials, while patients with dementia only participated in two investigations. Therefore, future process assessments in this domain should prioritize the inclusion of individuals with dementia and their families to a higher degree. The inclusion of individuals with dementia in research is deemed crucial to guarantee future patient benefits [22]. By omitting individuals with dementia and their families, there is a risk of overlooking extremely significant elements that specifically impact dementia. Furthermore, future research should prioritize a more comprehensive examination of the particular components related to dementia that were discussed in this study.

This analysis validates the observation made by Lourida et al. [11] that there has been a growing interest in studying the implementation procedures in dementia care. This trend is supported by the fact that 80% of the papers included in our review were published after 2017. Therefore, it is important to continuously review and analyze published publications in this particular sector.

### 3. Advantages and constraints

An advantage of our research is the thorough database search, as well as the methodical approach to selecting and analyzing data. We attempted to find all relevant research in this topic by doing an extra free online search and monitoring citations both backwards and forwards. However, it is likely that we have overlooked important research, especially when they have been published in a variety of different places. Having just one author do data extraction is a methodological restriction. Only 50% of the research were subjected to peer review. In addition, it was not able to make a more accurate distinction between some groups due to their reference to various domains. Staff attitudes and the emphasis of care are integral components of the organizational culture and values. However, they are also distinct elements. However, our findings provide a comprehensive understanding of the key elements that impact the execution of interventions in dementia care.

### 4. Conclusion

This scoping study enhances our understanding of the implementation procedures involved in dementia care. It may provide a foundation for informing future deployment of therapies specifically designed for dementia. Therefore, it may help to bridge the divide between the information gained on therapies and their use in clinical practice. In order to achieve effective treatments for individuals with dementia, it is essential to have mechanisms in place that promote a culture of care centered on the individual, such as adopting a person-centered approach to leadership. Moreover, a cohesive comprehension of dementia care across the team, together with effective communication and teamwork, are vital elements for implementing treatments in dementia care. Due to the intricate nature of the care scenario, effective treatments must be adaptable and responsive to the patients' present condition, requirements, and behaviors.

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