Title: Addressing the Frailty and Dementia Care Crisis in Romania: Challenges and Solutions

Introduction

Romania, similar to many other European countries, encounters significant obstacles in delivering specialized care for both frailty and dementia. Although dementia-specific services exist in certain regions, Romania's large geographical spread and socio-economic challenges make it especially hard for many individuals to access these services. This blog post delves into the current state of dementia and frailty care in Romania, with a particular focus on frailty, and highlights the COMFORTage project as a potential solution to address these challenges.

The Interconnection Between Frailty and Dementia in Romania

Frailty and dementia are two major health issues that disproportionately affect the aging population in Romania. Frailty, which refers to a decline in physical and cognitive function, often coexists with dementia, particularly Alzheimer's disease. The presence of frailty can accelerate the progression of dementia and vice versa, creating a more complex care scenario, though frailty can be reversed which opens new interventional strategies (Abizanda, 2023).

In Romania, the aging population is at an increasing risk of both frailty and dementia. *Studies suggest that one in four Romanians over the age of 65 is at risk of frailty, with higher prevalence among women and those living in rural areas. Frailty often precedes or coexists with dementia, making early intervention and comprehensive care essential.* The combination of these two conditions places an immense burden on both individuals and their caregivers (Popescu 2023), especially as Romania's healthcare system struggles to meet the needs of this growing demographic (Popescu, 2024 and 2025).

The State of Dementia and Frailty Care in Romania

In Romania, the incidence of frailty among individuals aged 65 and older is significant, with 14.7% of this population being classified as frail and, additionally, 44.9% are considered pre-frail (PubMed, 2023). In terms of dementia, the prevalence increases with age, with 3.7% of those aged 75–79 affected and approximately 7.5% of individuals aged 80 and older experiencing dementia (Knwoledge4Policy, 2020). Together, these statistics emphasize the considerable health challenges faced by the aging population in Romania, with a large portion of older adults either experiencing or at risk of frailty and dementia.

Although some public healthcare facilities exist, the majority of dementia and frailty care in Romania is provided by private organizations. These services, however, are often unaffordable for many, particularly those in rural areas, leaving a significant portion of the population without adequate care. Additionally, only a few care homes provide specific services for people with dementia, and these facilities often lack staff trained to provide specialized dementia care. People with dementia are frequently placed in general care facilities, where their specific needs are not met (Cucu, 2022).

Moreover, while information on dementia and frailty is available online, access to it is uneven. Many people, particularly in rural areas, lack the necessary internet skills, equipment, or financial resources to access these resources. As a result, they are often left uninformed and unprepared to care for themselves or their loved ones (Cucu, 2022).

In an interview conducted by Ana Aslan International Foundation in Romania with a neurologist (FAAI, 2024), the lack of education regarding frailty and dementia prevention and care management, accelerate medical complications.

Ongoing Political Efforts to Address the Crisis

Romania has made some efforts to address the frailty and dementia care crisis through various national and regional strategies, such as: a National Dementia Plan aligned with the World Health Organization's Global Action Plan on Dementia. More, the Romanian Ministry of Health has launched campaigns to raise awareness about early detection of dementia and frailty and training programs for specialists in geriatrics and neurology are being expanded, with the goal of improving the detection and care of individuals with frailty and dementia.

The Ana Aslan International Foundation is dedicated to advancing national strategies and supporting the Bucharest municipality by ensuring that seniors and their caregivers have equal access to vital information. Though various European Projects, like SHAFE and NET4Age, the foundation plays a crucial role in fostering dementia-friendly communities across Europe, while through testing and end-user active involvement, the Foundation is expanding its efforts to improve access to home care and telemedicine services.

The role of The ANA ASLAN International Foundation

The ANA ASLAN International Foundation (AAIF), based in Bucharest, Romania, is a non-profit organization with a mission to support healthy aging and improve the lives of older adults— especially those facing dementia and frailty.

Rooted in the legacy of Professor Ana Aslan, a pioneer in gerontology, the foundation combines direct community care, research, and policy advocacy to make a lasting impact. In Bucharest, AAIF provides services like cognitive screening, frailty assessments, and personalized care plans, supporting seniors to live more independently and with dignity.

Beyond its local work, AAIF is an active player in European research and innovation projects, having contributed to 15+ national and EU initiatives on aging, dementia, and integrated care. The foundation is also involved in shaping policy for more age-friendly communities and has been recognized as a reference site by the European Innovation Partnership on Active and Healthy Ageing.

Additionally, the foundation supports scientific progress in brain medicine and longevity through its Excellence Center for Memory Diseases and Longevity Medicine. It offers consultations in geriatrics, gerontology, geronto-psychiatry, and stress management, with services available through both private and public healthcare channels. The center is recognized for its research contributions to aging and cognitive health, as evidenced by its involvement in clinical studies published in medical journals These efforts reflect the foundation's commitment to enhancing the well-being of older adults living independently in the community. Prof. Dr. Luiza Spiru, a specialist in geriatrics, gerontology, geronto-psychiatry, and anti-aging medicine, serves as the president of the Ana Aslan International Foundation. She has been instrumental in advancing the foundation's mission to promote active aging and longevity. Her leadership includes overseeing the Excellence Center and contributing to national and international discussions on aging and dementia.

The Role of Technology in Managing Frailty and Dementia

When older adults experience frailty, they are more likely to experience cognitive decline, making early intervention and regular monitoring crucial. In Romania, an estimated 300,000 people are living with dementia, a number expected to double by 2050 due to the aging population. Unfortunately, underdiagnosis remains a significant issue, as many cases go undetected until advanced stages (Popescu, 2024).

The integration of technology into dementia and frailty care could provide a much-needed solution to these growing issues. A recent study suggests that a 12-month digital intervention program targeting frailty could be a cost-effective way to manage both frailty and dementia. The program would involve personalized physical exercises, nutritional advice, and chronic disease management. If successful, digital platforms could offer a practical solution for individuals in remote areas, improving access to essential care (Gheorghiu, 2023).

Ana Aslan International Foundation's Contribution to Open Data

The Ana Aslan International Foundation (FAAI) is committed to advancing the use of open data within the COMFORTage project and beyond. Data collection for the pilot study is set to begin in around July 2025, focusing on older adults (65+ years) in Bucharest who are at risk of or experiencing frailty, including both pre-frail and frail individuals. The data to be collected will encompass physical assessments (such as gait speed, grip strength, balance), cognitive function, mental well-being, and participation in a digital intervention program designed to address frailty.

Only retrospective data will be used, starting with data collection in July 2025. The study will follow cohorts of older adults from FAAI's volunteer pool, over a 12-month period, with assessments at baseline, 6 months, and 12 months. Participants will be randomly assigned to either a digital intervention group or a control group, ensuring scientific rigor and minimizing biases. This randomization process will help evaluate the true effectiveness of the digital intervention program in improving frailty and mobility.

The data collected will be anonymized and made available through open-access platforms, contributing to a larger open data repository that will enhance transparency and collaboration within the research community. Additionally, it will foster evidence-based solutions that can be leveraged to improve aging, frailty, and dementia care, both within Romania and globally.

FAAI's commitment to open data extends beyond the scope of the COMFORTage project, ensuring that valuable insights gathered throughout the pilot study will be accessible to researchers, policymakers, and the broader scientific community to enhance the care and quality of life for older adults.

The Way Forward

The pilot study number 9, conducted in Romania, aims to develop and test a digital intervention program for older adults (65+) with pre-frailty or frailty, delivered via a digital platform tailored to each participant's needs. The intervention will include physical exercises addressing the five components of frailty and nutritional recommendations. At baseline, a physiotherapist will assess participants' self-efficacy and readiness for physical activity, which will inform a personalized home-based exercise regimen. Chronic disease management will be integrated based on comprehensive geriatric assessments, and mobility aids will be recommended as needed. The program will last for 12 months, with a co-creation phase and pre-pilot study occurring beforehand.

The co-creation phase will involve 25 participants, while the pre-pilot study will include 50 participants to refine the app/platform prototype. The main pilot study, a 12-month randomized controlled trial, will assess the effectiveness of the digital intervention on frailty, mobility, and quality of life. Primary outcomes will focus on the physical aspects of frailty, measured by Fried's five components, and secondary outcomes include hospitalizations, falls, depression, and overall well-being. The study will provide valuable insights into the impact of digital, home-based interventions on frail older adults and their potential for cost savings in healthcare.

The pilot study in Romania could integrate the concept of a *digital twin* by creating a personalized, real-time virtual representation of each participant's health. As participants engage with the digital intervention, their data—such as physical function, frailty components, and chronic disease management—would be continuously updated in the digital twin, allowing for dynamic monitoring and tailored adjustments. This virtual model would enable healthcare providers to track progress, predict future health trajectories, and proactively adjust interventions as needed, potentially improving outcomes and reducing the risk of hospitalizations. Additionally, by integrating various health data, the digital twin would provide a comprehensive view of each participant's condition, optimizing both care delivery and cost-efficiency throughout the 12-month study.

In our pilot, a key focus is on addressing modifiable risks that contribute to frailty and loss of autonomy in older adults. Physical frailty, often exacerbated by inactivity, muscle weakness, and poor balance, can be mitigated through structured exercise programs aimed at improving strength, flexibility, and balance. Additionally, managing nutritional risks—such as insufficient intake or poor dietary choices—plays a vital role in maintaining overall health and preventing frailty. By incorporating personalized physical training programs and offering nutritional advice, the pilot supports older adults in improving their physical capacity and making healthier dietary choices, which in turn enhances their mobility, strength, and overall well-being, ultimately promoting greater independence and quality of life.

By targeting these modifiable risk factors, the pilot not only delivers clinical value but also lays the foundation for scalable educational resources. This is where the Training and Educational Toolkit (TET) plays a crucial role in reinforcing and expanding the impact of the intervention.

As a contributor to the COMFORTAGE Training and Educational Toolkit (TET), the Ana Aslan International Foundation will provide 30 tailored exercise videos designed for older adults with varying levels of frailty, covering flexibility, strength, and balance. These will be accompanied by accessible nutritional guides aimed at supporting healthy aging and enhancing the impact of physical activity. The content reflects the TET's emphasis on personalized, diverse, and empowering educational formats for older adults, caregivers, and healthcare professionals. These resources will first be tested during the co-creation phase with end users, and refined based on their feedback, before being integrated into the pilot phase. This process ensures the toolkit's content is both usercentered and grounded in real-life needs and preferences.

Conclusion

The pilot project in Romania focuses on using video game-based exercises to help slow down or even reverse pre-frailty and frailty conditions. Meanwhile, the FAAI is committed to a multi-sectoral approach, bringing together healthcare providers, policymakers, and communities. This collaborative effort is essential for building a more dementia-friendly and age-inclusive Romania.

While Romania has made progress in addressing dementia and frailty care, significant challenges remain. By developing national strategies, improving early diagnosis, and utilizing digital solutions, Romania can improve the quality of life for its aging population. A comprehensive approach to frailty is essential as the country prepares for the needs of its future senior citizens.

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