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# SIMPLE KEYS TO LIVING WELL

More than 55 million people worldwide suffer from cognitive decline. Teams of researchers from various countries are exploring how music and literature can enhance the daily lives of people with dementia and their caregivers.

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ounds reach our ears even before we are born - spoken words, as well as the ubiquitous music surrounding us. These two often blend together, forming the lyrics and melodies of songs. Throughout our lives, music becomes a constant companion. We embrace it, hear it on the radio, and encounter it at family celebrations. It provides the backdrop to countless moments, from the ordinary to the significant, illustrating our everyday experiences. A specific melody can transport us back to memories, places, and the people we shared those moments with. Music helps us recall the lyrics of songs from years past. It also inspires movement - how much easier it is to walk to a rhythm, whether humming under our breath or listening through headphones. Dance steps learned long ago seem to flow naturally when familiar tunes activate specific parts of our brains.

The same is true for words, texts, and literature. They are an integral part of our daily lives: we hear them, read them, write them, and use them to communicate. Words are with us at work, school, in shops, while traveling – literally everywhere. They allow us to express our needs, emotions, and feelings. These familiar, accessible, and affordable cultural products – music and literature – can serve another vital purpose in certain contexts. They can help older adults, especially those experiencing cognitive decline. They can also assist caregivers by providing tools that make daily care easier.

Thanks to advances in medicine and improved living conditions, modern societies are living longer. However, with age comes an increased risk of cognitive decline, such as problems with memory, communication, planning, and decision-making. This can lead to more severe conditions collectively known as dementia. Dementia refers to a range of symptoms associated with the progressive decline of cognitive abilities, significantly affecting the daily life of the individual and, in turn, often impacting their family.

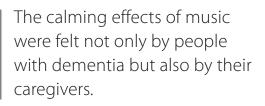
Symptoms of dementia include short-term memory loss, difficulties with planning and problem-solving, challenges in performing everyday tasks, and disorientation in time and space. Over time, issues with speech and communication, impaired judgment, personality changes, and behavioral shifts such as apathy or anxiety may arise. According to the World Health Organization, the most common forms of dementia are Alzheimer's disease and vascular dementia.

Alzheimer Disease International estimates that over 55 million people globally are affected by dementia, including around 600,000 individuals in Poland as of 2019.

Dementia-related diseases are among the most expensive to manage in contemporary Europe. In Poland, nearly 92% of dementia patients remain at home from diagnosis until the end of their lives. The burden of care falls almost entirely on families and caregivers (according to a 2017 report from Poland's Supreme Chamber of Audit – NIK). For this reason, it is essential to support home caregivers by offering affordable and accessible tools to help them manage the daily care of their loved ones.

### The Homeside Project

While developing the methodological framework for the international research project HOMESIDE – A home-based family caregiver-delivered music and reading intervention for people living with dementia: Randomised Controlled Trial (Horizon 2020 program, National Centre for Research and Development) – our team of researchers from the Institute of Applied Sciences, Faculty of Physical Rehabilitation at the University of Physical Education in Krakow, alongside colleagues from Australia, the United Kingdom, Germany, and Norway, aimed to assess the effectiveness of music and reading activities in daily home care for individuals with dementia.



Although dementia remains incurable, research does suggest that interventions such as these can modify the effects of the disease, slow its progression, facilitate communication with patients, and positively influence their behavior and well-being. Caregivers, in turn, gain a greater sense of control over their loved ones' behavior, learn to redirect attention, engage them in daily tasks, and foster relaxation and better sleep. These tools enhance caregivers' skills, reducing the burden of providing care for a loved one with dementia.

A total of 432 families – comprising individuals with dementia and their home caregivers (spouses,



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anna.bukowska @awf.krakow.pl children, or grandchildren) – participated in the Homeside project, conducted between 2019 and 2023. Participants attended personalized training sessions led by therapists, designed to help families independently implement music or reading activities into their daily routines. These tools were intended to support the functioning of individuals with dementia while easing the caregiving responsibilities of their loved ones.

## The Melody

The music activities were designed to promote intentional use of music and foster meaningful shared experiences and memories through familiar melodies from the past. Music therapists demonstrated how caregivers could engage individuals with dementia in

The therapeutic use of literature and music can become an essential part of the care process for individuals with dementia and their home caregivers.

musical activities, creating opportunities for non-verbal dialogue through music. Participants were trained to select appropriate music and participate in various musical activities.

One such activity was singing together, which helped regulate breathing and, through the release of endorphins, fostered a sense of well-being for both people with dementia and their caregivers. Listening to and singing familiar songs stimulated important memories, supported cognitive functions, and facilitated meaningful connections with the person suffering from dementia. Songs were also used in specific situations to aid with daily tasks such as dressing, eating, or driving, helping to diffuse tension and redirect attention.

Another activity involved movement to music. Moving to the rhythm of music provided a simple way to engage in physical exercise, facilitate movement within the home, or channel excess energy. Dancing together, holding hands, or swaying to music created opportunities to build and maintain emotional connections. Music relaxation activities, such as listening to carefully selected music, were particularly effective in reducing anxiety, regulating breathing, promoting

rest, and facilitating peaceful sleep. Caregivers often embraced these relaxation practices for their own benefit as well. It is worth noting that the soothing effects of music were experienced by both the individuals with dementia and their caregivers.

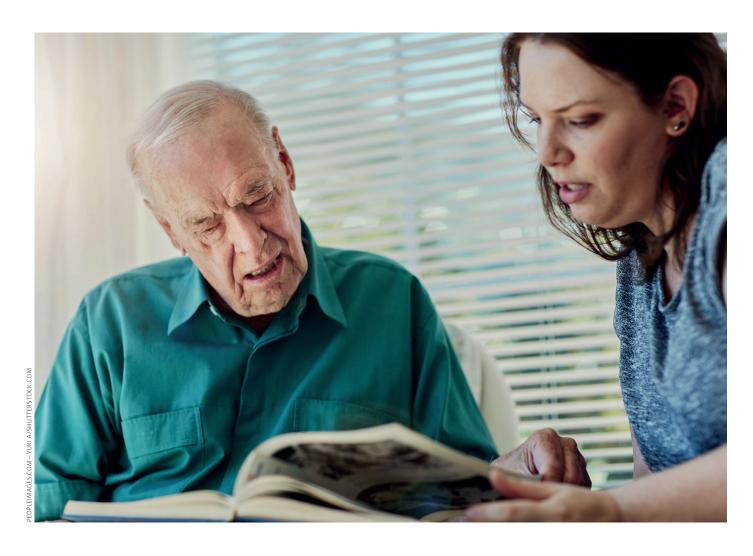
The final proposed musical activity involved playing simple percussion instruments. This activity provided a distraction during challenging moments, offering a focus for individuals with dementia, particularly during repetitive or restless hand movements. Playing and singing together also allowed families to share meaningful time in a collaborative and enjoyable way. Because music is a multifaceted form of communication and a means of expression, it facilitates non-verbal interaction with individuals in even the advanced stages of dementia.

#### The Word

Another form of support for people with dementia, focused on word-based activities, required slightly more advanced cognitive abilities and was therefore better suited to earlier stages of the condition. In line with the project's methodology, these activities aimed to create opportunities for interaction and emotional connection between caregivers and their loved ones by sharing reading experiences, engaging in wordplay, or telling stories. Training sessions introduced families to ideas for using reading, recitation, and wordbased activities as tools for interaction. Occupational therapists demonstrated how to engage people with dementia in accessible, enjoyable tasks and create opportunities for meaningful dialogue.

The first activity involved reading aloud to the person with dementia. Texts were chosen to reflect their literary interests and adapted to their ability to process





spoken content. Listening to a story and discussing it afterward helped spark their interest, evoke memories, and reduce restlessness or anxiety, which often result from a lack of engaging activities. The second activity promoted language-based interaction between caregivers and individuals with dementia through shared texts. These could include poems, short passages read aloud with assigned roles, recipes read together while cooking, or family stories told by the patient, illustrated with personal photographs. These activities fostered moments of meaningful connection and closeness, which positively impacted the caregiver-care recipient relationship.

The third activity involved listening to audiobooks, which not only supported attention and memory but could also have a calming and relaxing effect. Sharing an audiobook made it easier to connect, maintain eye contact, respond together to the story, smile, or hold hands. Word games and puzzles, such as riddles and verbal challenges, were another favorite activity among participants. These exercises aimed to enhance cognitive functions like memory, attention, concentration, association, and logical thinking. For indi-

viduals with dementia, these activities offered a sense of accomplishment and competence, which is crucial for their emotional well-being. Participating in these games together also deepened the bond between caregiver and care recipient.

For many participants, word-based activities became more than just a way to spend meaningful time together. They incorporated reciting rhymes, sharing proverbs or sayings, or listening during meals or relaxation, which helped people with dementia navigate daily tasks more easily.

The advantages of the music and reading activities in the project were their accessibility, affordability (often free), and adaptability to the preferences and needs of both caregivers and individuals with dementia. These tools supported daily functioning at different stages of the disease, allowing caregivers and their loved ones to share meaningful moments, manage symptoms more effectively, and find practical ways to cope. The therapeutic use of literature and music in everyday life can become an integral part of the care and support process for individuals with dementia and their home caregivers.

Further reading:

Baker F.A. et al., Home-based family caregiver-delivered music and reading interventions for people living with dementia (HOMESIDE trial): an international randomised controlled trial, eClinicalMedicine (The Lancet Discovery Science), 2023.

Odell-Miller H. et al., The HOMESIDE Music Intervention: A Training Protocol for Family Carers of People Living with Dementia, European Journal of Investigation in Health, Psychology and Education, 12/2022.

Smrokowska-Reichmann A. et al., The HOMESIDE Study

— A Research Project to Support
People Living With Dementia and
Their Family Caregivers:
Preliminary Report on Reading
Intervention, Gerontology and
Geriatric Medicine, 10/2024.