

Research article

A musical group to improve the quality of life. Background and proposal

Un grupo musical para mejorar la calidad de vida. Antecedentes y propuesta

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Abstract

Introduction: Active music practice can be considered a good tool for improving the quality of life of people with dementia. This paper combines an experience with a brief theoretical review. **Objectives:** The objectives were to show the experience of a group of older people who have no knowledge of music, but who learn songs from memory and share them in a hospital. **Methods:** observation and ethnographic methodology, which are part of the qualitative methodology, were combined. This methodology made it possible to observe the participants and at the same time to live with them during the active music sessions. **Results:** several articles were found that support the use of active music to improve the quality of life, in addition to reducing stress in hospital situations. It was also observed that the hospital experience with the musical group was beneficial for participants, caregivers, and physicians.. **Conclusions:** Programs that use music to improve the quality of life of people with dementia are useful, although more research is still needed. It is necessary to be able to design specific programs that can be adapted to specific patient profiles. Music is suitable as a non-invasive treatment, and can be combined with pharmacological treatments.

Key words: music; dementia; quality of life; therapy.

Resumen

Introducción: La práctica musical activa puede considerarse una buena herramienta para mejorar la calidad de vida de las personas con demencia. Este artículo combina una experiencia con una breve revisión teórica. **Objetivos:** Los objetivos fueron mostrar la experiencia de un grupo de personas mayores sin conocimientos musicales, que aprenden canciones de memoria y las comparten en un hospital. **Métodos:** Se combinaron la observación y la metodología etnográfica, parte de la metodología cualitativa. Esta metodología permitió observar a los participantes y, al mismo tiempo, convivir con ellos durante las sesiones de música activa. **Resultados:** Se encontraron varios artículos que respaldan el uso de la música activa para mejorar la calidad de vida, además de reducir el estrés en situaciones hospitalarias. También se observó que la experiencia hospitalaria con el grupo musical fue beneficiosa para los participantes, los cuidadores y los médicos. **Conclusiones:** Los programas que utilizan la música para mejorar la calidad de vida de las personas con demencia son útiles, aunque aún se necesita más investigación. Es necesario diseñar programas específicos que se adapten a perfiles específicos de pacientes. La música es adecuada como tratamiento no invasivo y puede combinarse con tratamientos farmacológicos.

Palabras clave: música; demencia; calidad de vida; terapia.

1. Introducción

This paper presented shows the experience of a group of older people who use music—without being musicians—to improve the quality of life of others. This musical group, consisting of men and women between the ages of 55 and 86, meets once a week for an active music session.

Their musical training is based on improving song memory, practicing physical and instrumental expression, and developing body rhythm. These participants take their musical experience into hospitals, nursing homes, and care homes to involve patients and users in their activities. This study is completed with a brief review of the literature, presented in the state of the art, with the intention of theoretically justifying the use of music in a practical way as an appropriate tool to improve the quality of life.

2. State of the art

In an increasingly ageing world, Alzheimer's disease (AD) is the leading cause of dementia and one of the first chronic diseases of old age. Affecting 55 million people affected, AD is considered a public health priority by WHO. Unfortunately, there is no definitive cure for this disease. Currently, the best approaches to control the disease seem to a combination of pharmacological and non-pharmacological therapies to stimulate cognitive reserve (Buccellato et al., 2023).

Dementia, a significant cognitive impairment, is characterized by a decline in memory. It affects a person's mood and behavior, which can affect their quality of life and well-being. Studies show that the demand for the use of music as a new method of therapy for dementia has increased in recent decades. Current studies using music as a non-invasive therapy are inconclusive. For this reason, it is necessary to design a non-pharmacological musical treatment for each cognitive impairment profile (Soufneyestani, Khan, and Soufneyestani, 2021).

There are many musical experiences available for people with dementia and their caregivers, including but not limited to individualised playlists, music and singing groups, dementia-friendly choirs and concerts, and music therapy (Kelly et al., 2023). The benefits of music have been well researched, particularly from the perspective of passive patient participation, as it is very difficult for people with other than mild cognitive impairment other than mild to participate in a practical way.

Music interventions (MIs) have been widely used in clinical settings to reduce anxiety in people with dementia. Evidence supports the benefits of MI in reducing anxiety symptoms in patients with dementia is supported (Ting et al., 2023).

A quasi-experimental, non-randomised study reports on the effect of person-centred and culturally appropriate music on the psychological well-being of residents with advanced dementia in five rural residential aged care homes in Australia. Seventy-four residents participated in person-centred music sessions and culturally appropriate group sessions. Residents' interest, responsiveness, initiation, participation, enjoyment, and overall reactions were assessed using the Music in Dementia Assessment Scale (MiDAS), and interviews and focus groups were conducted with aged care staff and musicians.

Residents showed a moderate to high levels of interest, response, initiation, participation, and enjoyment during the session and after the intervention. The themes of the qualitative data collected in relation to the culturally appropriate group music sessions were behaviour change, meaningful interaction, initiative, increased participation, and satisfaction. The findings suggest that integrating music into care plans can reduce residents' agitation and improve their emotional well-being in rural aged care homes (Hamiduzzaman et al., 2023).

Knowledge of emotional state enables musical intervention to alleviate negative emotions by eliciting positive emotions in PwD. In this direction, a state-of-the-art review is conducted on two aspects: (i) the effect of music on PwD and (ii) both wearable and non-wearable sensing systems for emotional state monitoring. After describing the application of musical interventions for PwD, including sensors and emotion monitoring algorithms, several challenges are identified.

Key findings include the need to apply rigorous research methods to develop adaptable solutions that can accommodate the dynamic changes brought about by cognition decline in people with disabilities. Advances can be made in leveraging music and emotion monitoring for people with disabilities, which will facilitate the creation of more resilient and scalable solutions to support caregivers and people with disabilities (Vuijk et al., 2023).

One study investigated the effects of digital device, exercise, and music intervention programs for the older people in Korea on their cognition and depression. It was found that digital device programs using digital devices had a smaller effect size on improving cognitive functions than programs that did not use digital devices. The results provide evidence for the development program that combines practical music, exercise, and digital devices, which may be effective in addressing both cognition and depression (Yoo et al., 2022).

Other studies (Ting et al., 2023) highlight that MI (Musical Intervention) is suitable for alleviating anxiety symptoms in patients with dementia. The following table provides brief definitions to help clarify the nomenclature used in this paper:

Table 1.*Key Definitions Related to Music-Based Interventions in Aging and Cognitive Health*

Term	Definition
Cognitive impairment	A progressive decline in higher mental functions such as memory, attention, language, or perception. It may range from mild cognitive impairment (MCI) to more severe forms like dementia.
Quality of life	A multidimensional concept encompassing physical, emotional, social, and functional well-being, especially significant in health and aging contexts.
Active intervention	A therapeutic approach in which the participant is directly and consciously engaged in structured activities aimed at stimulating cognitive, emotional, or physical functions (e.g., musical practice).
Non-pharmacological therapy	A set of treatments that do not involve medication and are aimed at improving health or well-being, such as music therapy, physical activity, or cognitive stimulation.
Music therapy	The professional use of music and its elements as a therapeutic tool to promote physical, emotional, cognitive, and social health in individuals or groups.
Reminiscence	A therapeutic technique that stimulates memories of the past using triggers like photographs, objects, or music, supporting emotional well-being and personal identity.
Multisensory stimulation	The simultaneous activation of multiple senses (e.g., sight, hearing, touch) to enhance cognitive responses, particularly beneficial for older adults or those with neurological decline.
Active aging	A concept promoted by the World Health Organization (WHO) aimed at optimizing opportunities for health, participation, and security to enhance quality of life as people age.

Note. Definitions compiled from scholarly literature related to music-based interventions and aging. Terms are contextualized for use in non-pharmacological cognitive care frameworks.

Source: Own elaboration.

3. Methodology

Observation as a methodology is part of qualitative research methods. Combined with the stenographic method, it allows for an understanding of a group of people experiencing a research process living together in a given context.

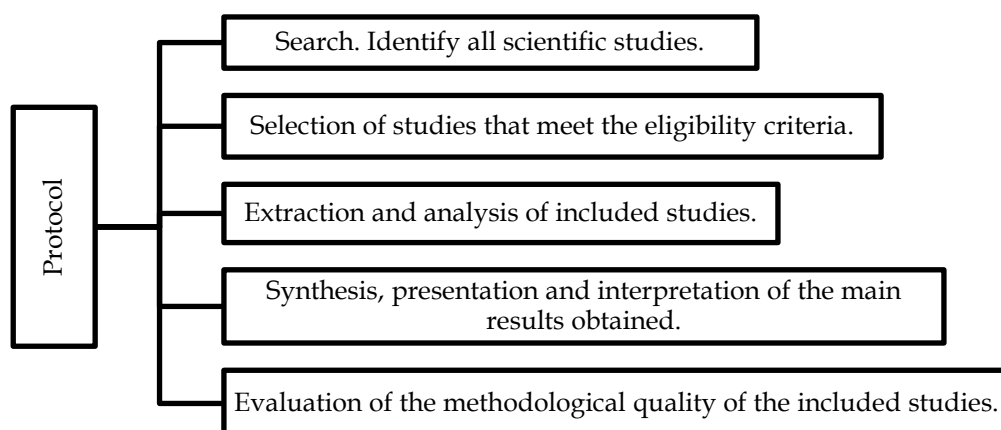
This study combines observation with the ethnographic experience of a group of older people who use music to improve their quality of life and improve the lives of others in nursing homes, hospitals, and day care centers. This study is completed with a brief review of the literature, presented in the state of the art, with the intention of theoretically justifying the use of music in a practical way, as an appropriate tool to improve the quality of life.

3.1. Review Procedure

The Protocol that was followed is detailed in the following figure:

Figure 1.

Search protocol



Source: Own elaboration

Below are the eligibility criteria (inclusion and exclusion) that were taken into account

Inclusion:

Between the years 2020-2024

In English and Spanish

Containing the keywords in the same document

Exclusion:

Reason 1: Books and documents

Reason 2: The word "music therapy"

The initial search was conducted in the PudMed database, using the keywords: Music AND Dementia. The same keywords were used in the WoS and Scopus databases. A specific search was started, after having conducted the initial search, with the results found the research question or PICO question was reached: "Does active musical practice have benefits for mental health and quality of life in people with some type of cognitive im-pairment?"

The search for documents continued with the same inclusion and exclusion criteria and keywords with the Scopus and Web of Science (WoS) databases.

For this search, the filters allowed by each search engine were applied, in addition to the years, review articles or articles, randomized controlled trial, clinical trial or me-ta-analysis.

The search was conducted as follows (See Table 2):

Table 2.*Search for articles*

Resource	Search words	No. of Items	Chosen	Reviewed
PudMed	Music AND dementia	76		Lam HL, Li WTV, Laher I, Wong RY. Effects of Music Therapy on Patients with Dementia-A Systematic Review. <i>Geriatrics (Basel)</i> . 2020 Sep 25;5(4):62. doi :10.3390/geriatrics5040062. PMID: 32992767; PMCID: PMC7709645.
				Baker FA, Lee YC, Sousa TV, Stretton-Smith PA, Tamplin J, Sveinsdottir V, Geretsegger M, Wake JD, Assmus J, Gold C. Clinical effectiveness of music interventions for dementia and depression in elderly care (MIDDEL): Australian cohort of an international pragmatic cluster- randomized controlled trial. <i>Lancet Healthy Longevity</i> . 2022 Mar;3(3):e153-e165. doi : 10.1016/S2666-7568(22)00027-7. Erratum in: <i>Lancet Healthy Longev</i> . 2022 Oct;3(10):e 653. doi : 10.1016/S2666-7568(22)00227-6. PMID: 36098290.
Scopus	Music AND dementia	804		McCreedy EM, Sisti A, Gutman R, Dionne L, Rudolph JL, Baier R, Thomas KS, Olson MB, Zediker EE, Uth R, Shield RR, Mor V. Pragmatic Trial of Personalized Music for Agitation and Antipsychotic Use in Nursing Home Residents With Dementia. <i>J Am Med Dir Assoc</i> . 2022 Jul;23(7):1171-1177. doi : 10.1016/j.jamda.2021.12.030. Epub 2022 Jan 14. PMID: 35038407; PMCID: PMC9256757.
			10	Van't Hooft JJ, Pijnenburg YAL, Sikkes SAM, Scheltens P, Spikman JM, Jaschke AC, Warren JD, Tijms BM. Frontotemporal dementia, music perception and social cognition share neurobiological circuits: A meta-analysis. <i>Brain Cogn</i> . 2021 Mar;148:105660. doi :10.1016/j.bandc.2020.105660. Epub 2021 Jan 7. PMID: 33421942
				Polden M, Faulkner T, Holland C, et al. The effects of singing interventions on quality of life, mood and levels of agitation in community-dwelling people living with dementia: A quantitative systematic review. <i>Dementia</i> . 2024;0(0). doi:10.1177/14713012241273837
				Motta-Ochoa R, Incio -Serra N, Boulet A, et al. Mouvement de passage: Creating connections through movement among persons with dementia. <i>Dementia</i> . 2021;20(7):2573-2596. doi:10.1177/14713012211004009
				Polden M, Faulkner T, Holland C, et al. The effects of singing interventions on quality of life, mood and levels of agitation in community-dwelling people living with dementia: A quantitative systematic review. <i>Dementia</i> . 2024;0(0). doi:10.1177/14713012241273837
				Ridder HM, Anderson- Ingstrup J, Ridder LO. The effect of choir-singing on self-reported embodied cognition in persons with dementia. A pilot study . <i>Dementia</i> . 2024;0(0). doi:10.1177/14713012241272910
				Schneider, J., Ablewhite, J., Boska, J., Gold, C., Orrell, M., Dowson, B., McArdle, C., Tooth, H., Trevers, S., Narippatta, S.M., Fan, Y., Wake, J.D., Peach, A., Duckworth, B., & Sveinsdottir, V. (2024). Music in Care Home Settings: Guidelines for Implementation and Evaluation Based on the Music Interventions for Depression and Dementia in Elderly Care (MIDDEL) Study in the UK. <i>Journal of Long-Term Care</i> , 2024, 252–262. https://doi.org/10.31389/jltc.294
				Dowlen R, Keady J, Milligan C, et al. In the moment with music: an exploration of the embodied and sensory experiences of people living with dementia during improvised music-making. <i>Aging and Society</i> . 2022;42(11):2642-2664. doi:10.1017/S0144686X21000210

WoS
Music AND dementia

655

8

Ting B, Chen DT, Hsu WT, Liang CS, Malau IA, Li WC, Lee SL, Jingling L, Su KP. Does Music Intervention Improve Anxiety in Dementia Patients? A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *J Clin Med* . 2023 Aug 24;12(17):5497. doi :10.3390/jcm12175497. PMID: 37685564; PMCID: PMC10488399.

Wong ARK, Ng LTE, Lee MH, Yeow JLH, Lim YJ, Yap KH. The effectiveness of group music reminiscence therapy for people thriving with dementia: A systematic review of randomized controlled trials. *Aging Med (Milton)*. 2024 Aug 17;7(4):528-534. doi :10.1002/agm2.12344. PMID: 39234199; PMCID: PMC11369345.

Ong A, Namasivayam -MacDonald A, Kim S, Werden Abrams S. The use of music and music-related elements in speech-language therapy interventions for adults with neurogenic communication impairments: A scoping review. *Int J Lang Commun Disord* . 2024 Nov-Dec;59(6):2632-2654. doi :10.1111/1460-6984.13104. Epub 2024 Aug 22. PMID: 39169848.

Sun L, Wang Q, Ai J. The underlying roles and neurobiological mechanisms of music-based intervention in Alzheimer's disease: A comprehensive review. *Aging Res Rev*. 2024 Apr;96:102265. doi :10.1016/j.arr.2024.102265. Epub 2024 Mar 12. PMID: 38479478.

Wang YN, Wen XN, Chen Y, Xu N, Zhang JH, Hou X, Liu JP, Li P, Chen JY, Wang JH, Sun XY. Effects of movement training based on rhythmic auditory stimulation in cognitive impairment: a meta-analysis of randomized controlled clinical trial. *Front Neurosci* . 2024 Apr 15;18:1360935. doi :10.3389/fnins.2024.1360935. PMID: 38686327; PMCID: PMC11057238.

Rogers F, Metzler-Baddeley C. The effects of musical instrument training on fluid intelligence and executive functions in healthy older adults: A systematic review and meta-analysis. *Brain Cogn* . 2024 Mar;175:106137. doi :10.1016/j.bandc.2024.106137. Epub 2024 Feb 9. PMID: 38340535.

Source: Own elaboration.

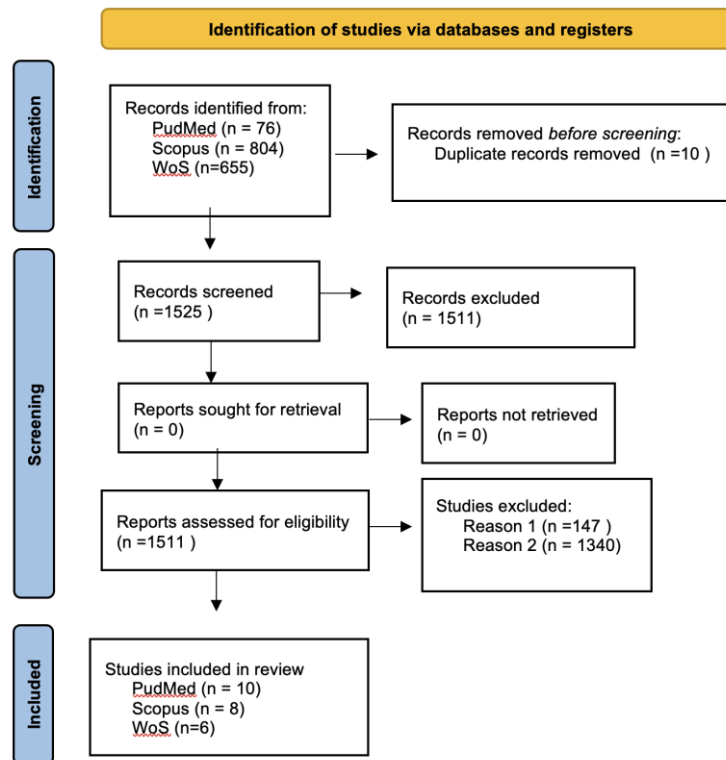
3.1.1. Procedure of the experiment

For 6 months, one day a week and for an hour and a half, the intervention group participates in combination in a hospital with patients with some type of cognitive impairment.

This work complies with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines. In Figure 2 shows the process.

Figure 2.

Flow chart (PRISMA)



Source: Own elaboration.

As a summary of the previous figure, a total of 1,535 records were identified through three databases: PubMed (76), Scopus (804), and Web of Science (655). After removing 10 duplicate records, 1,525 records remained for screening. During the screening phase, 1,511 records were excluded for not meeting basic inclusion criteria. No additional reports were sought for retrieval, and none were excluded due to access issues. In the eligibility assessment phase, 1,511 reports were evaluated in full. Of these, 1,487 reports were ex-cluded:

- 147 for the first exclusion reason.
- 1,340 for the second exclusion reason.
- Finally, 24 studies were included in the review:
- PubMed: 10 studies.
- Scopus: 8 studies.
- Web of Science (WoS): 6 studies.

4. Findings

The response of the hospitalized patients was so positive that a musical group was formed among the patients themselves. Both family members/caregivers and the medical team, and especially the patients, have indicated that they need this activity to improve their quality of life, even if only once a week. Many participants say that they have remembered songs that they thought they had forgotten, and they remember when they learned them. One participant says that he remembers hearing one of the remembered tunes for the first time when he was 14 years old.

Most said that one session a week was not enough. Some say that a daily session would be better.

All participants, 100%, and their family members and caregivers, as well as the medical team agree that the MAP (Musical Active Program) is very beneficial for everyone.

- Observed Impact (Qualitative Feedback)

From Patients:

“I now sleep better after active music practice sessions... I feel calmer all day.” – Patient with mild cognitive impairment

“When I know it's time for music, I get excited. It's the best time of day!” – Patient with mild cognitive impairment

From Caregivers and Healthcare Staff:

If I see him happy, I'm happy – Family caregiver

“Patients sleep better at night. That means we get rest, too.” – Medical staff

In addition, the 45-percentage-point increase in participants who “look forward to the music session” (rising from 36% to 81%) demonstrates a significant positive impact on motivation and emotional well-being. This change shows that integrating active musical practice not only enhances the caregiving experience but also creates positive anticipation, which can improve cooperation and reduce resistance. Furthermore, this eagerness fosters a stronger emotional bond between caregiver and care recipient, promoting a more harmonious and effective daily routine.

5. Discussion and conclusions

It is agreed that group reminiscence therapy (RT) is a relatively inexpensive intervention, with musical cues being the preferred choice due to the strong musical memory in the early stage of dementia. However, a synthesis of current evidence is needed to inform research and clinical use of group musical RT in dementia care (Wong et al., 2024).

Along these lines, non-pharmacological therapy has gained popularity in Alzheimer's disease (AD) intervention due to its apparent therapeutic effectiveness and the limitations of biological drugs. A large body of research indicates that musical interventions can improve cognition, mood, and behavior in people with AD (Sun and Wang, 2024).

Some reviews indicate that speech and language therapists are using music-based interventions to achieve therapeutic goals. These include improving speech, language, voice, and quality of life, often in collaboration with other clinicians and professional musicians (Ong et al., 2024). It is important to know that mild cognitive impairment (MCI) refers to the pre-dementia pathological state, characterized by progressive decline in memory or other cognitive functions, but without impairment in daily living activities. Therefore, pre-venting or delaying the progression from MCI to dementia is crucial.

In this regard, research has shown positive effects of rhythmic auditory stimulation-based movement training (RASMT) interventions on cognitive function. The RASMT program – involving activities such as playing percussion instruments for 30–60 minutes, 2–3 times per week, over more than 12 weeks – has proven to be effective in improving cognitive performance. However, the sample sizes used have been relatively small, and further studies are needed (Wang et al., 2024). Continuing with the importance of active musical practice, intervention studies combining cognitive and motor demands have reported far-transfer cognitive benefits in healthy aging. Some research reviews the effects of music and rhythm interventions on cognition in older adults. Meta-analyses suggest that learning to play a musical instrument improves attention inhibition, cognitive flexibility, and processing speed in aging populations (Rogers and Metzler-Baddeley, 2024).

It can be concluded that this experience of implementing an active and participatory music program is suitable for improving the quality of life of participants in hospital settings. Dementias are a major concern in today's world, and there is still no pharmacological cure that offers a definitive solution. Currently, non-invasive therapies such as music are being considered by medical professionals as appropriate tools to improve quality of life, slow cognitive decline, and reduce stress or anxiety, especially in hospitalization contexts. Music also has a positive impact on interactions between patients, doctors, and caregivers.

In addition, music should be integrated into care plans to reduce agitation in older people who are in nursing homes or hospital environments. It is recognized that active music engagement is often more effective than exercise alone or the use of new technologies. However, a combination of these approaches may be even more beneficial.

As a final conclusion, it is important to highlight that active music practice can be implemented as a targeted intervention for elderly people with dementia, and in some cases, also for individuals with disabilities. Therefore, active music presents itself as a valuable tool to improve quality of life. Nonetheless, definitive conclusions cannot yet be reached. Further research is necessary, and treatment approaches should continue to be combined and refined to maximize their effectiveness.

5.1. Proposal

It is proposed to expand the experience and design a study with the following instruments: RBANS battery for the evaluation of neuropsychological status:

The RBANS is a brief test that is administered individually and whose objective is to evaluate the neuropsychological status of adults aged 20 to 89 years with neurological damage or mental illnesses such as dementia, brain damage, or strokes. It has been shown to be sensitive for the detection of cognitive disorders in degenerative or non-degenerative pathology (Randolph, Tierney, Mohr and Chase, 1998).

The RBANS assesses different cognitive functions:

- Immediate memory.
- Spatial skills.
- Language.
- Attention.
- Delayed recall.

It allows obtaining a standard score through percentiles for each cognitive domain, as well as a global measure of cognitive performance (Muntal Encinasa et al., 2011).

WHOQOL-BREF quality of life questionnaire (WHO., 2012).

The WHO WHOQOL-BREF quality of life questionnaire provides a profile of quality of life perceived by the person. It was designed to be used both in the general population and in patients.

There are two versions, the WHOQOL-100 and the WHOQOL-BREF, both with validation studies in Spanish. The version we applied in this study is the abbreviated version, with 26 items that cover 4 dimensions:

- Physical health.
- Psychological health.
- Social relationships.
- Environment.

The intervention part will consist of a control group and an experimental group that will be part of a musical group. It will not be necessary to know music. The proposed activities, based on the success of the musical group in the hospital, will be the following table:

Table 3.*Proposed activities for each practical music session*

No. Session	Duration	Activity
1	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	30'	Songs to remember. Think of songs you like and sing fragments that participants remember.
	10'	Sing a song you remember with rhythmic accompaniment and mark the beat with your feet
	10'	Remember the entire session
	5'	Breathing and warming up the voice
2	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	30'	Memory songs. Add new songs. Provide participants with song lyrics. Sing and read along with help from caregivers/family/medical team.
	10'	Sing a song you remember with rhythmic accompaniment and mark the beat with your feet
	10'	Remember the entire session
	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
3	30'	Memory songs. Add new songs. Provide participants with song lyrics. Sing and read along with help from caregivers/family/medical team.
	10'	Sing a song you remember with rhythmic accompaniment and mark the beat with your feet
	10'	Remember the entire session
	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	30'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics.
4	10'	Sing a song you remember with rhythmic accompaniment and mark the beat with your feet
	10'	Remember the entire session
	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	30'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics.
	10'	Sing a song you remember with rhythmic accompaniment and mark the beat with your feet
5	10'	Remember the entire session
	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	30'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics.
	10'	Sing a song you remember with rhythmic accompaniment and mark the beat with your feet
	10'	Remember the entire session
6	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	40'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics. Accompany the songs that are sung from memory with small percussion instruments (maracas, sticks, xylophones). Mark the beat with your feet.

7	10'	Remember the entire session
	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	40'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics. Accompany the songs that are sung from memory with small percussion instruments (maracas, sticks, xylophones). Mark the beat with your feet.
	10'	Remember the entire session
8	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	40'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics. Accompany the songs that are sung by heart with small percussion instruments (maracas, sticks, xylophones). Mark the beat with your feet.
	10'	Remember the entire session
	5'	Breathing and warming up the voice
9	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
	40'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics. Accompany the songs that are sung from memory with small percussion instruments (maracas, sticks, xylophones). Mark the beat with your feet.
	10'	Remember the entire session
	5'	Breathing and warming up the voice
	5'	Rhythmic expression: with small percussion instruments such as maracas or sticks. Maintaining the rhythm. Short rhythmic ostinatos, at the same time marking the movement with the tips of the feet.
10	40'	Songs to remember. Add new songs. Provide participants with lyrics. Sing and read along with help from caregivers/family/medical team. Sing a song from memory, without reading the lyrics. Accompany the songs that are sung from memory with small percussion instruments (maracas, sticks, xylophones). Mark the beat with your feet.
	10'	Remember the entire session

Source: Own elaboration.

Before starting each session and at the end of each session, participants will answer a questionnaire on quality of life and self-esteem, on their perception of their state of tiredness, happiness, joy and energy to face life. This questionnaire has been designed specifically for this musical program. In addition, the medical team will verify whether participants rest better on the days when they have active music sessions. Participants' relatives and caregivers will also be asked.

After the 10 sessions of practical musical intervention, the results will be compared with the control group.

As a Practical Contribution: Strengthening Implementation Protocols and Caregiver Guides through Active Musical Practice a proposal is shown below:

Objective: To enhance the quality and effectiveness of care provided to dependent individuals or those with special needs by integrating active musical practice into clear, practical, and evidence-based care protocols, serving as tools for family and professional caregivers.

Proposal:

1. Development of detailed implementation protocols including active musical practice. Create step-by-step care procedures that incorporate music-based activities to promote emotional well-being, cognitive stimulation, and social interaction, such as:
 - Personal hygiene and grooming routines supported by familiar songs to reduce anxiety.
 - Medication administration accompanied by rhythmic cues or songs to improve compliance.
 - Feeding times enriched with calming music to encourage appetite and relaxation
 - Fall prevention exercises combined with musical movement or rhythm-based activities.
 - Emergency preparedness drills that use music or chants to enhance memory and attention.
2. Illustrated and easy-to-understand guides with musical components. Include infographics, images, and short videos demonstrating how to apply music actively in caregiving tasks, making the instructions accessible and engaging for caregivers of all literacy levels.
3. Practical examples and case studies involving active musical practice techniques. Provide real or simulated scenarios illustrating:
 - Adapting musical activities to different care needs (e.g., singing familiar songs with dementia patients vs. interactive musical games).
 - Documenting the effects of active musical engagement on patient mood, cooperation, and physical activity.
4. Ongoing training and evaluation integrating musical practice. Offer workshops and courses teaching caregivers how to effectively use music as part of their caregiving routine, including hands-on sessions and practical evaluations to ensure confident and proper implementation.

It is hoped that this proposal can be implemented in different hospitals and care homes, increasing patient participation.

As future directions, we propose the validation and expansion of these findings. Longitudinal studies are also planned to monitor the long-term effects of active music practice integrated into care protocols. Furthermore, the incorporation of cognitive variables measurement using standardized instruments such as the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) is being considered.

This would provide a deeper understanding of the cognitive benefits for the individuals served. Implementing these studies with control groups will help establish causal relationships and strengthen the evidence supporting music interventions in care settings.

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