

Table 2. Distribution of scientific publications on interventions in the cognitive impairment of OAs by journal.

| n | Name of the magazine | f | % |
|----------|---|----------|----------|
| 1 | Nutrients | 6 | 11.8 |
| 2 | BMC Geriatrics | 3 | 5.9 |
| 3 | Alzheimer's Research and Therapy | 2 | 3.9 |
| 4 | Annals of Physical and Rehabilitation Medicine | 2 | 3.9 |
| 5 | BioMed Research International | 2 | 3.9 |
| 6 | Clinical Interventions in Aging | 2 | 3.9 |
| 7 | International Journal of Environmental Research and Public Health | 2 | 3.9 |
| 8 | Journal of Alzheimer's Disease Netherlands | 2 | 3.9 |
| 9 | Journal of Applied Physiology | 2 | 3.9 |
| 10 | Journal of Global Health | 2 | 3.9 |
| 11 | Journals of Gerontology - Series A Biological Sciences and Medical Sciences | 2 | 3.9 |
| 12 | Trials | 2 | 3.9 |
| 13 | Aging | 1 | 2 |
| 14 | Alzheimer's and Dementia | 1 | 2 |
| 15 | American Journal of Alzheimer's Disease and other Dementias | 1 | 2 |
| 16 | Atención Primaria | 1 | 2 |
| 17 | Biology of Sex Differences | 1 | 2 |
| 18 | BMJ, The | 1 | 2 |
| 19 | Clinical Nutrition | 1 | 2 |
| 20 | European Journal of Physical and Rehabilitation Medicine | 1 | 2 |
| 21 | Geriatric Nursing | 1 | 2 |
| 22 | <i>Human brain mapping</i> | 1 | 2 |
| 23 | International Journal of Methods in Psychiatric Research | 1 | 2 |
| 24 | International Journal of Psychophysiology | 1 | 2 |
| 25 | JAMA network open | 1 | 2 |
| 26 | Journal of Aging and Physical Activity | 1 | 2 |
| 27 | Journal of Health and Human Services Administration | 1 | 2 |
| 28 | Journal of Neuropsychiatry and Clinical Neurosciences | 1 | 2 |
| 29 | Medical Science Monitor | 1 | 2 |
| 30 | Multidisciplinary Digital Publishing Institute (MDPI)Nutrients | 1 | 2 |
| 31 | Neurodegenerative Disease Management | 1 | 2 |
| 32 | PLoS ONE | 1 | 2 |
| 33 | Revista de Neurologia | 1 | 2 |
| 34 | Translational Psychiatry | 1 | 2 |
| | Total | 51 | 100 |

Table 3. Scientific journals that publish intervention programs that improve cognitive function according to subject matter.

| Name of the magazine | Exercise and sport | Nutrition | Computerized training | Art therapy | Total |
|--|--------------------|-----------|-----------------------|-------------|-------|
| Nutrients | | 5 | 1 | | 6 |
| BMC Geriatrics | 1 | 1 | 1 | | 3 |
| Alzheimer's Research and Therapy | 2 | | | | 2 |
| Annals of Physical and Rehabilitation Medicine | 2 | | | | 2 |
| BioMed Research International | | | 2 | | 2 |
| Clinical Interventions in Aging | | | 1 | 1 | 2 |
| International Journal of Environmental Research and Public Health | 2 | | | | 2 |
| Journal of Alzheimer's Disease Netherlands | 1 | 1 | | | 2 |
| Journal of Applied Physiology | | 2 | | | 2 |
| Journal of Global Health | | | 2 | | 2 |
| Journals of Gerontology - Series A Biological Sciences and Medical Sciences | | 2 | | | 2 |
| Trials | | 1 | | 1 | 2 |
| Aging | 1 | | | | 1 |
| Alzheimer's and Dementia | | 1 | | | 1 |
| American Journal of Alzheimer's Disease and other Dementias | 1 | | | | 1 |
| Atención Primaria | | | 1 | | 1 |
| Biology of Sex Differences | 1 | | | | 1 |
| BMJ, The | | | 1 | | 1 |
| Clinical Nutrition | | 1 | | | 1 |
| European Journal of Physical and Rehabilitation Medicine 2020 February;56(1):47-57 | 1 | | | | 1 |
| Geriatric Nursing | | 1 | | | 1 |
| <i>Human brain mapping</i> | 1 | | | | 1 |
| International Journal of Methods in Psychiatric Research | | | 1 | | 1 |
| International Journal of Psychophysiology | | | 1 | | 1 |
| JAMA network open | 1 | | | | 1 |
| Journal of Aging and Physical Activity | 1 | | | | 1 |
| Journal of Health and Human Services Administration | 1 | | | | 1 |
| Journal of Neuropsychiatry and Clinical Neurosciences | 1 | | | | 1 |
| Medical Science Monitor | 1 | | | | 1 |
| Multidisciplinary Digital Publishing Institute (MDPI) | | 1 | | | 1 |
| Nutrients | | | | | |
| Neurodegenerative Disease Management | | | | 1 | 1 |
| PLoS ONE | | | 1 | | 1 |
| Revista de Neurologia | | | 1 | | 1 |
| Translational Psychiatry | 1 | | | | 1 |
| Total | 19 | 16 | 13 | 3 | 51 |

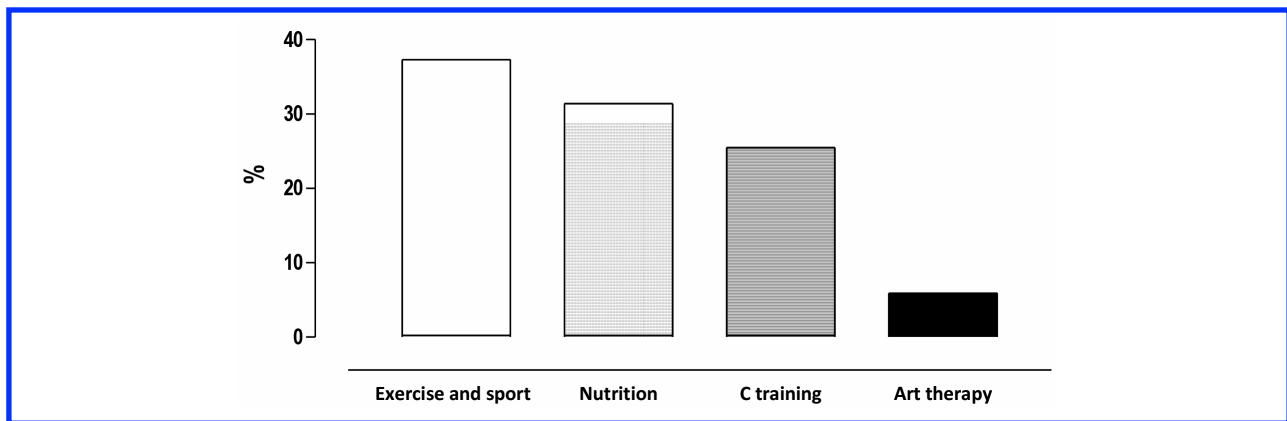


Figure 2. Prevalence of intervention programs that improve cognitive function in OAs.

The presence of multiple journals with moderate to low numbers of publications suggests that the topic is of interest to a wide range of disciplines and academic audiences. Both journals highlight the topics of exercise, sport and nutrition intervention programs, reflecting the relevance and multidisciplinary nature of these topics for academic research.

These findings underscore the multidisciplinary nature of research on cognitive impairment in OAs and the importance of diverse approaches and perspectives in this field. Hence, the importance of developing a bibliometric study, as it not only provides solid data support for current research, but also establishes a firm academic foundation to shape future research directions and strategies.^[31] Thus it also enables researchers to discern predominant themes within a research domain, accurately represent scholarly trends, and anticipate future research frontiers.

This study presents some strengths, for example, it is one of the first studies to focus on analyzing the scientific productivity of intervention programs used to improve cognitive impairment. These findings can not only serve as a basis for projecting new studies, but also contribute to filling an important gap in the scientific literature on this emerging topic. It also provides relevant information on the journals that publish these cognitive impairment topics. This information can serve as a data bank for researchers and professionals interested in further developing the field of cognitive impairment research, facilitating the identification of the main journals and platforms where advances and relevant studies in this area are published.

It also presents some weaknesses, for example, only one database, PubMed, was explored and was limited to the analysis of the last six years (2018-2023). Therefore, future bibliometric studies should consider including multiple databases for a more complete and extensive view of the landscape of publications on cognitive impairment intervention programs, spanning a longer time period to capture long-term trends and changes in research.

Conclusions

The results of this study indicate a growing recent interest in research on interventions for cognitive impairment in OAs, with a significant concentration of publications in the years 2020 and 2023. China leads in the production of studies, followed by the United States, Korea, and Singapore. In addition, there is a predominance of publications in English compared to Spanish. In terms of preferred topics, intervention programs focus mainly on exercise and sport, followed by nutrition and computerized training. In general, the journal “Nutrients” stands out with the highest number of articles, followed by “BMC Geriatrics”. These results suggest a global and multidisciplinary interest in addressing cognitive impairment in OAs, reflecting the importance of diverse approaches and perspectives in this field.

List of abbreviations

OAs, older adults.

Conflict of interest

The authors declare no potential conflict of interest.

Ethics approval and consent to participate

Not applicable.

Availability of data and materials

All data generated or analyzed during this study are included in this published article.

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