

## SCOPING REVIEW ARTICLE

# Care Provided by Long-Term Care Facilities for Older Adults During COVID-19: A Scoping Review

*Cuidados Oferecidos por Instituições de Longa Permanência para Idosos durante a COVID-19: Revisão de Escopo*

*Cuidados Oferecidos por Instituciones de Larga Estancia para Personas Mayores Durante la COVID-19: Revisión Del Alcance*


Luciana Araujo Vieira<sup>1</sup>

 <https://orcid.org/0000-0001-6197-9900>

Henrique da-Silva-Domingues<sup>2</sup>

 <https://orcid.org/0000-0001-7860-5622>

Camilo Darsie de Souza<sup>3</sup>

 <https://orcid.org/0000-0003-4696-000X>

Adriana Roese Ramos<sup>1</sup>

 <https://orcid.org/0000-0003-1349-9560>

Deise Lisboa Riquinho<sup>1</sup>

 <https://orcid.org/0000-0002-6604-8985>

Cristianne Maria Famer Rocha<sup>1</sup>

 <https://orcid.org/0000-0003-3281-2911>

<sup>1</sup> Federal University of Rio Grande do Sul, School of Nursing, Porto Alegre, Rio Grande do Sul, Brazil

<sup>2</sup> University of Jaén, Department of Nursing, Jaén, Andalucía, Spain

<sup>3</sup> University of Santa Cruz do Sul, Postgraduate Program in Education, Santa Cruz do Sul, Rio Grande do Sul, Brazil

## Corresponding author

Henrique da Silva Domingues

E-mail: [hda@ujaen.es](mailto:hda@ujaen.es)

Received: 06.02.25

Accepted: 08.09.25

## Abstract

**Background:** The COVID-19 pandemic brought unprecedented visibility to long-term care institutions and their elderly residents, requiring protective measures for the prevention and control of SARS-CoV-2 infection.

**Objective:** To map the care provided by Long-Term Care Institutions to elderly residents during the COVID-19 pandemic.

**Methodology:** A scoping review with study selection from the PubMed and LILACS databases, resulting in a final sample of 43 studies analyzed in an exploratory and descriptive manner.

**Results:** The included articles were grouped into three categories: vaccines, mortality, and quality of life. The latter was subdivided into protocols, users, and professionals. Most of the texts focused on the creation or analysis of new protocols to combat COVID-19.

**Conclusion:** The pandemic represented a major challenge for elderly residents in long-term care institutions. Managers, workers, and family members learned from the experience, but public policies that improve the quality of life for these residents are still needed.

**Keywords:** aged; homes for the aged; COVID-19; nursing

## Resumo

**Enquadramento:** A pandemia da COVID-19 trouxe visibilidade inédita às instituições de longa permanência e aos idosos residentes, exigindo medidas protetivas para prevenção e controle da infecção pelo SARS-CoV-2.

**Objetivo:** Mapear os cuidados oferecidos pelas Instituições de Longa Permanência às pessoas idosas residentes, no período da pandemia da COVID-19.

**Metodologia:** Revisão de escopo com seleção dos estudos nas bases de dados PubMed e LILACS, resultando em uma amostra final de 43 estudos analisados de forma exploratória e descritiva.

**Resultados:** Os artigos incluídos foram organizados em três categorias: vacinas, mortalidade e qualidade de vida. Esta última foi subdividida em protocolos, usuários e profissionais. A maior parte dos textos abordou a criação ou análise de novos protocolos de enfrentamento à COVID-19.

**Conclusão:** A pandemia representou um grande desafio para os idosos em instituições de longa permanência. Gestores, trabalhadores e familiares adquiriram aprendizados, mas ainda são necessárias políticas públicas que melhorem a qualidade de vida desses residentes.

**Palavras-chave:** idoso; instituição de longa permanência para idosos; COVID-19; enfermagem

## Resumen

**Marco contextual:** La pandemia de COVID-19 otorgó visibilidad inédita a las instituciones de larga estancia y a los residentes mayores, exigiendo medidas protectoras para la prevención y el control de la infección por SARS-CoV-2.

**Objetivo:** Mapear los cuidados ofrecidos por las Instituciones de Larga Estancia a las personas mayores residentes durante la pandemia de COVID-19.

**Metodología:** Revisión de alcance con selección de estudios en las bases de datos PubMed y LILACS, resultando en una muestra final de 43 estudios analizados de manera exploratoria y descriptiva.

**Resultados:** Los artículos incluidos se agruparon en tres categorías: vacunas, mortalidad y calidad de vida. Esta última se subdividió en protocolos, usuarios y profesionales. La mayoría de los textos abordó la creación o análisis de nuevos protocolos para enfrentar la COVID-19.

**Conclusión:** La pandemia representó un gran desafío para los adultos mayores en instituciones de larga estancia. Los gestores, trabajadores y familiares adquirieron aprendizajes, pero aún se necesitan políticas públicas que mejoren la calidad de vida de estos residentes.

**Palabras clave:** anciano; hogares para ancianos; COVID-19; enfermería



Escola Superior de  
Enfermagem de Coimbra

fct

Fundação  
para a Ciência  
e a Tecnologia

**How to cite this article:** Vieira, L. A., da-Silva-Domingues, H., Souza, C. D., Ramos, A. R., Riquinho, D. L., & Rocha, C. M. (2025). Care Provided by Long-Term Care Facilities for Older Adults During COVID-19: A Scoping Review. *Revista de Enfermagem Referência*, 6(4), e40168. <https://doi.org/10.12707/RVI25.17.40168>



## Introduction

The World Health Organization (WHO) has reported more than 774 million confirmed cases of COVID-19 worldwide, including 278 million in the European Region and 193 million in the Region of the Americas (WHO, 2024). Older adults have shown high vulnerability to COVID-19, particularly those residing in long-term care facilities (LTCFs) for older adults. In the United States, 51% of COVID-19-related deaths occurred among LTCF residents (Telford et al., 2021); in Canada, more than two-thirds (Wister & Kadowaki, 2021); and in Brazil, in 2020, the mortality rate reached 23.3%, equivalent to one in every five older adults (Watanabe et al., 2020). The rapid global aging of the population has made family-based care insufficient, increasing reliance on LTCFs to provide care to older adults with varying levels of frailty (Armstrong & Braedley, 2023; Brasil, 2021).

During COVID-19 outbreaks, LTCFs faced major challenges due to the concentration of individuals at high risk of mortality, which required changes in routines and care protocols to protect residents (Brooks et al., 2020). In Brazil, public, private, or non-profit LTCFs are residential institutions that are not classified as healthcare facilities. Therefore, residents' dependency levels must be assessed in accordance with Resolution RDC 502/2021 (Brasil, 2021).

The debate over responsibility remains, highlighting that older adults were the age group most affected by COVID-19 incidence and mortality until the end of the Public Health Emergency of International Concern on May 5, 2023. However, no reviews were identified that systematized the care provided by Brazilian LTCFs during the pandemic. A scoping review on the topic, completed in 2018, did not cover the period of the COVID-19 pandemic (Wachholz et al., 2021). Given this gap, it is necessary to investigate the care provided to older adults residing in LTCFs during the pandemic. Therefore, this study aims to map the care provided by these institutions to older adults during the COVID-19 pandemic.

## Methodology

This scoping review followed the methodological framework proposed by the Joanna Briggs Institute (JBI; Peters et al., 2020) and the methodology established by Arksey and O'Malley (Arksey & O'Malley, 2005).

### Inclusion/exclusion criteria

This review was structured according to the PCC mnemonic, where P = Population (older residents in LTCFs), C = Concept (care provided), and C = Context (COVID-19 pandemic). The following research question was formulated: "What care was provided by long-term care facilities for older adults during the COVID-19 pandemic?"

The population was defined according to Law No. 10.741/2003, which classifies individuals aged 60 years or older as older adults (Brasil, 2003). LTCFs were de-

finied in accordance with Resolution RDC 502/2021 as public or private residential institutions intended for the collective care of older adults, ensuring freedom, dignity, and citizenship (Brasil, 2021).

### Search strategy and identification of information sources

A preliminary search was conducted in the Virtual Health Library (VHL) in August 2022 to assess the novelty of the study and plan the search strategy. In September 2022, a search was conducted in the following databases: PubMed (via the National Library of Medicine) and the Latin American and Caribbean Health Sciences Literature (LILACS), accessed through the VHL and the journal portal of the Coordination for the Improvement of Higher Education Personnel (CAPES). Keywords were selected using both standardized and free terms, adapted to each database, and combined with the Boolean operators AND and OR. Gray literature was excluded, and this limitation is discussed in the final considerations.

### Source of evidence selection

Two reviewers screened the titles, abstracts, and full texts of identified studies to determine eligibility. Any disagreements were resolved through consensus or consultation with the research team. No time or language restrictions were applied.

### Data extraction

The retrieved articles were organized using Rayyan® software (Ouzzani et al., 2016). Eligible studies included those investigating older residents in LTCFs between January 1, 2020, and May 5, 2023, encompassing the period of the COVID-19 pandemic. Exclusion criteria included duplicate records, studies outside the LTCF context, studies unrelated to the proposed theme, studies conducted outside of the required timeframe, and review protocols.

The data collection process involved extracting information on the characteristics of the included articles (year of publication, country, language, study design, population, authors, and main findings). Extracted data were synthesized using frequency and thematic analyses.

### Data synthesis

This scoping review used a narrative synthesis to map the literature, examine the included studies, and answer the research question. The findings are presented as a descriptive summary. The analysis was conducted through an iterative process of grouping, categorizing, and comparing the studies. The synthesized evidence was reported in alignment with the research question and presented in a clear and concise manner for unambiguous interpretation of conclusions.

## Results

The search yielded 1,538 records. After removing duplicates and applying inclusion criteria, 43 studies were included in this scoping review. Figure 1 illustrates the

search and selection process, and Table 1 details the main characteristics of included studies.

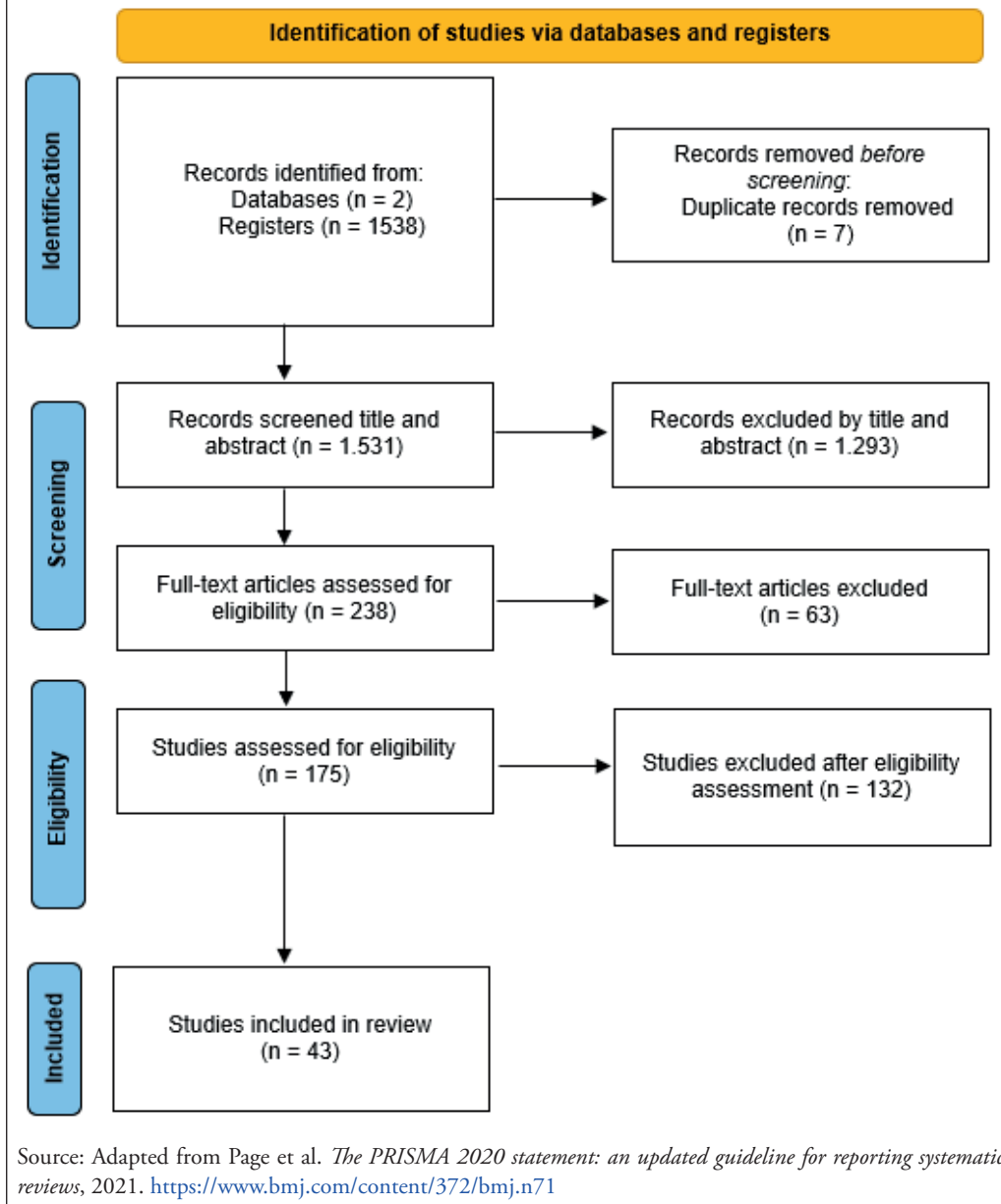
Most studies were published in English. Regarding the countries of publication, ten studies originated from the United States, five from Brazil, four from Australia, three from France, two each from Italy, the Netherlands, Spain, India, Germany, and the United

Kingdom, and one each from China, Croatia, Canada, Sweden, Switzerland, Ireland, Norway, Turkey, Poland, and Taiwan. The studies were published between 2020 and 2023.

Most studies (60.4%) used quantitative designs. The data collection tools used were reports and documents (34.9%) and interviews or questionnaires (30.2%).

**Figure 1**

*Flow diagram for the scoping review*



The selected studies were grouped into three analytical categories according to the main themes addressed: Vaccines, Mortality, and Quality of Life (focusing on

professionals and workers; older adults and families; and protocols and guidelines).

**Table 1***Characteristics of included studies*

Study	Population and sample
Belmin, J., Um-Din, N., Donadio, C., Magri, M., Nghiem, Q. D., Oquendo, B., ... & Lafuente-Lafuente, C. (2020). Coronavirus disease 2019 outcomes in French nursing homes that implemented staff confinement with residents. <i>JAMA network open</i> , 3(8), e2017533-e2017533.	N = 17 LTCFs; N = 794 staff members; N = 1,250 older adults.
Bolcato, M., Trabucco Aurilio, M., Di Mizio, G., Piccioni, A., Feola, A., Bonsignore, A., ... & Aprile, A. (2021). The difficult balance between ensuring the right of nursing home residents to communication and their safety. <i>International journal of environmental research and public health</i> , 18(5), 2484.	LTCFs.
Brouns, S. H., Brüggemann, R., Linkens, A. E., Magdelijns, F. J., Joosten, H., Heijnen, R., ... & Spaetgens, B. (2020). Mortality and the use of antithrombotic therapies among nursing home residents with COVID-19. <i>Journal of the American Geriatrics Society</i> , 68(8), 1647-1652.	N = 101 older adults in 14 ILPI.
Cabezas, C., Coma, E., Mora-Fernandez, N., Li, X., Martinez-Marcos, M., Fina, F., ... & Prieto-Alhambra, D. (2021). Associations of BNT162b2 vaccination with SARS-CoV-2 infection and hospital admission and death with COVID-19 in nursing homes and healthcare workers in Catalonia: prospective cohort study. <i>bmj</i> , 374.	N = 28,456 older adults; N = 26,170 nursing home staff; N = 61,791 healthcare workers.
Chan, D. K. Y., Mclaws, M. L., & Forsyth, D. R. (2021). COVID-19 in aged care homes: a comparison of effects initial government policies had in the UK (primarily focussing on England) and Australia during the first wave. <i>International Journal for Quality in Health Care</i> , 33(1), mzab033.	N = 18,212 LTCFs.
Chandran, D., Sreekumar, E., Prajitha, K. C., Sharahudeen, A., & Raveendran, C. L. (2022). Break-through Infection with SARS-CoV-2 Delta Variant in Old-Age Homes in a Southern District of Kerala, India. <i>Indian Journal of Public Health</i> , 66(Suppl 1), S36-S40.	N = 11 LTCFs.
Chandrasekaran, N., Thulasigam, M., Sahu, S. K., Sood, V., & Menon, V. (2022). Effects of web-based training for carers in old age homes using WHO-iSupport for dementia, as a training tool—A mixed-method study. <i>Asian Journal of Psychiatry</i> , 78, 103308.	N = 28 carers of older adults in LTCFs.
Chow, L. (2021). Care homes and COVID-19 in Hong Kong: how the lessons from SARS were used to good effect. <i>Age and ageing</i> , 50(1), 21-24.	N = 16 LTCFs.
Cousins, S. (2020). Experts criticise Australia's aged care failings over COVID-19. <i>The Lancet</i> , 396(10259), 1322-1323.	Older adults.
Cvijetić, S., Keser, I., Boschiero, D., & Ilich, J. Z. (2023). Osteosarcopenic adiposity and nutritional status in older nursing home residents during the COVID-19 pandemic. <i>Nutrients</i> , 15(1), 227.	N = 365 older adults.
El Haj, M., Altintas, E., Chapelet, G., Kapogiannis, D., & Gallouj, K. (2020). High depression and anxiety in people with Alzheimer's disease living in retirement homes during the COVID-19 crisis. <i>Psychiatry research</i> , 291, 113294.	N = 58 older adults.
El Haj, M., & Gallouj, K. (2022). Loneliness of residents in retirement homes during the COVID-19 crisis. <i>L'Encéphale</i> , 48(4), 477-479.	N = 63 older adults.
Faghanipour, S., Monteverde, S., & Peter, E. (2020). COVID-19-related deaths in long-term care: The moral failure to care and prepare. <i>Nursing Ethics</i> , 27(5), 1171-1173.	LTCFs.
Fernandes, M. T. D. O., Figueiredo, E. G. D., Vieira, T. C. L., & Moro, A. F. D. (2022). Protection against COVID-19 in long-term care facilities and political and technical foundations for operation in Brazil. <i>Geriatrics, Gerontology and Aging</i> , 16, 1-8.	LTCFs.
Fritch, W. M., Agnew, J., Rosman, L., Cadorette, M. A., & Barnett, D. J. (2021). Application of the Haddon matrix to COVID-19 prevention and containment in nursing homes. <i>Journal of the American Geriatrics Society</i> , 69(10), 2708-2715.	LTCFs.
Gilbert, G. L. (2020). COVID-19 in a Sydney nursing home: a case study and lessons learnt. <i>The Medical Journal of Australia</i> , 213(9), 393.	N = 76 older adults.
Gibson, D. M., & Greene, J. (2021). Admissions of COVID-positive patients to US nursing homes with personal protective equipment or staffing shortages. <i>Journal of the American Geriatrics Society</i> , 69(9), 2393-2403.	N = 15,371 LTCFs.
Gilman, M., & Bassett, M. T. (2021). Trends in COVID-19 death rates by racial composition of nursing homes. <i>Journal of the American Geriatrics Society</i> , 69(9), 2442.	N = 13,820 LTCFs.
Heudorf, U., Domann, E., Förner, M., Kunz, S., Latasch, L., Trost, B., & Steul, K. (2023). Development of morbidity and mortality of SARS-CoV-2 in nursing homes for the elderly in Frankfurt am Main, Germany, 2020–2022: What protective measures are still required?. <i>GMS Hygiene and Infection Control. GMS Hyg Infect Control</i> , 18(Doc05).	N = 5 LTCFs; N = total capacity for 705 residents.



Study	Population and sample
Kabir, Z. N., Boström, A. M., & Konradsen, H. (2020). In conversation with a frontline worker in a care home in Sweden during the COVID-19 pandemic. <i>Journal of Cross-Cultural Gerontology</i> , 35, 493-500.	<i>N</i> = 1 LTCF; <i>N</i> = 70 staff members; <i>N</i> = 48 residents.
Konetzka, R. T., & Gorges, R. J. (2020). Nothing much has changed: COVID-19 nursing home cases and deaths follow fall surges. <i>Journal of the American Geriatrics Society</i> , 69(1), 46.	<i>N</i> = 778 LTCFs.
Lai, V. S. K., Yau, S. Y., Lee, L. Y. K., Li, B. S. Y., Law, S. S. P., & Huang, S. (2022). Caring for older people during and beyond the COVID-19 pandemic: experiences of residential health care workers. <i>International Journal of Environmental Research and Public Health</i> , 19(22), 15287.	<i>N</i> = 6 LTCFs; <i>N</i> = 30 staff members.
Machado, C. J., Pereira, C. C. D. A., Viana, B. D. M., Oliveira, G. L., Melo, D. C., Carvalho, J. F. M. G. D., ... & Moraes, E. N. D. (2020). Estimates of the impact of COVID-19 on mortality of institutionalized elderly in Brazil. <i>Ciencia &amp; Saude Coletiva</i> , 25, 3437-3444.	Older adults and LTCF.
McConeghy, K. W., White, E., Panagiotou, O. A., Santostefano, C., Halladay, C., Feifer, R. A., ... & Gravenstein, S. (2020). Temperature screening for SARS-CoV-2 in nursing homes: evidence from two national cohorts. <i>Journal of the American Geriatrics Society</i> , 68(12), 2716-2720.	<i>N</i> = 1,301 older residents in 134 Veterans Affairs LTCFs; <i>N</i> = 3,314 older residents in 282 community LTCFs.
McGarry, B. E., Shen, K., Barnett, M. L., Grabowski, D. C., & Gandhi, A. D. (2021). Association of nursing home characteristics with staff and resident COVID-19 vaccination coverage. <i>JAMA internal medicine</i> , 181(12), 1670-1672.	<i>N</i> = 14,900 LTCFs.
Mehta, H. B., Li, S., & Goodwin, J. S. (2021). Risk factors associated with SARS-CoV-2 infections, hospitalization, and mortality among US nursing home residents. <i>JAMA network open</i> , 4(3), e216315-e216315.	<i>N</i> = 15,038 LTCFs; <i>N</i> = 482,323 older adults.
Moraes, E. N. D., Viana, L. D. G., Resende, L. M. H., Vasconcellos, L. D. S., Moura, A. S., Menezes, A., ... & Rabelo, R. (2020). COVID-19 in long-term care facilities for the elderly: laboratory screening and disease dissemination prevention strategies. <i>Ciência &amp; Saúde Coletiva</i> , 25, 3445-3458.	LTCF; Olders resident.
Morciano, M., Stokes, J., Kontopantelis, E., Hall, I., & Turner, A. J. (2021). Excess mortality for care home residents during the first 23 weeks of the COVID-19 pandemic in England: a national cohort study. <i>BMC medicine</i> , 19, 1-11.	<i>N</i> = 13,630 LTCFs; <i>N</i> = 29,542 excess deaths of residents in LTCFs in England.
Novae, H. P. D. O., Oliveira, L. M. S. D., Gomes, N. P., Santos, A. D. A., Soub, J., Duarte, M. B., ... & Oliva, T. M. D. M. (2023). Strategies to combat COVID-19 in long-term care facilities for older people. <i>Revista Gaúcha de Enfermagem</i> , 44, 20210323.	LTCF.
O'Neill, D., Briggs, R., Holmerová, I., Samuelsson, O., Gordon, A. L., Martin, F. C., & Special Interest Group in Long Term Care of the European Geriatric Medicine Society. (2020). COVID-19 highlights the need for universal adoption of standards of medical care for physicians in nursing homes in Europe. <i>European Geriatric Medicine</i> , 11(4), 645-650.	LTCF.
Ouslander, J. G., & Saliba, D. (2021). Early success of COVID-19 vaccines in nursing homes: Will it stick?. <i>Journal of the American Geriatrics Society</i> , 69(8), 2060.	<i>N</i> = 2,781 LTCFs; <i>N</i> = 18,242 residents.
Parks, J. A., & Howard, M. (2021). Dying well in nursing homes during COVID-19 and beyond: The need for a relational and familial ethic. <i>Bioethics</i> , 35(6), 589-595.	LTCFs.
Ranhoff, A. H., Myrstad, M., Kittang, B. R., & Wyller, T. B. (2021). Should all nursing home residents be vaccinated?. <i>Tidsskrift for Den norske legeforening</i> .	<i>N</i> = A total of 300–400 patients die every week in Norwegian LTCFs.
Renzi, A., Verrusio, W., Messina, M., & Gaj, F. (2020). Psychological intervention with elderly people during the COVID-19 pandemic: the experience of a nursing home in Italy. <i>Psychogeriatrics</i> , 20(6).	<i>N</i> = 1 LTCF; <i>N</i> = 19 older adults.
Rodriguez-Rodriguez, V., Rojo-Perez, F., Perez de Arenaza Escribano, C., Molina-Martínez, M. Á., Fernandez-Mayoralas, G., Sánchez-González, D., ... & Martín García, S. (2022). The impact of COVID-19 on nursing homes: study design and population description. <i>International Journal of Environmental Research and Public Health</i> , 19(24), 16629.	<i>N</i> = 447 persons over 60 years of age without cognitive; <i>N</i> = 220 in private LTCFs; <i>N</i> = 227 in LTCFs.
Santana, R. F., Silva, M. B. D., Marcos, D. A. D. S. R., Rosa, C. D. S., Wetzel, W., & Delvalle, R. (2020). Nursing recommendations for facing dissemination of COVID-19 in Brazilian Nursing Homes. <i>Revista Brasileira de Enfermagem</i> , 73(suppl 2), e20200260.	<i>N</i> = 6 nurses.
Soysal, P., Aydin, A. E., & Isik, A. T. (2020). Challenges experienced by elderly people in nursing homes due to the coronavirus disease 2019 pandemic. <i>Psychogeriatrics</i> , 20(6), 914	<i>N</i> = 426 LTCFs; <i>N</i> = 27,575 older adults; <i>N</i> = 8,302 staff members.

Study	Population and sample
Stemler, J., Kramer, T., Dimitriou, V., Wieland, U., Schumacher, S., Sprute, R., ... & Cornely, O. A. (2022). Mobile PCR-based surveillance for SARS-CoV-2 to reduce visiting restrictions in nursing homes during the COVID-19 pandemic: a pilot study. <i>Infection</i> , 1-10.	LTCFs; <i>N</i> = 1,587 swabs for SARS-CoV-2 detection.
Szczerbińska, K. (2020). Could we have done better with COVID-19 in nursing homes?. <i>European geriatric medicine</i> , 11, 639-643.	<i>N</i> = 9,395 LTCFs in the USA.
Usher, K., Hickman, L. D., & Jackson, D. (2021). Put 'nursing' back into aged care: nursing care is essential to aged care homes beyond the COVID-19 pandemic. <i>Contemporary nurse</i> , 57(1-2), 1-3.	Older adults in LTCFs.
Verbeek, H., Gerritsen, D. L., Backhaus, R., de Boer, B. S., Koopmans, R. T., & Hamers, J. P. (2020). Allowing visitors back in the nursing home during the COVID-19 crisis: A Dutch national study into first experiences and impact on well-being. <i>Journal of the American Medical Directors Association</i> , 21(7), 900-904.	<i>N</i> = 26 LTCFs; <i>N</i> = 30 participants represented 20 LTCFs.
Yeh, T. C., Huang, H. C., Yeh, T. Y., Huang, W. T., Huang, H. C., Chang, Y. M., & Chen, W. (2020). Family members' concerns about relatives in long-term care facilities: Acceptance of visiting restriction policy amid the COVID-19 pandemic. <i>Geriatrics &amp; gerontology international</i> , 20(10), 938-942.	<i>N</i> = 1 LTCF; <i>N</i> = 156 family members of residents in LTCFs.
Young, Y., Shayya, A., O'Grady, T., & Chen, Y. M. (2023). COVID-19 case and mortality rates lower in green houses compared to traditional nursing homes in New York state. <i>Geriatric Nursing</i> , 50, 132-137.	<i>N</i> = 3 Green homes; <i>N</i> = 44 small LTCFs; <i>N</i> = 561 large LTCFs.

Note. *N* = Sample; LTCFs = Long-Term Care Facilities for older adults; USA = United States of America.

## Discussion

This scoping review identified 43 studies addressing care provided by LTCFs during the COVID-19 pandemic. These articles originated from various countries and were classified into three main categories for discussion: Vaccines, Mortality, and Quality of Life.

### Vaccines

Studies indicate that vaccination among vulnerable groups reduced COVID-19-related hospitalizations and mortality, while low vaccine coverage among LTCF staff increased the risk of institutional outbreaks. The incidence of both asymptomatic and symptomatic infections decreased over time, with most infections among vaccinated individuals being asymptomatic. Partial vaccination reduced infection rates by 40–50%, while full vaccination offered 80–90% protection. Among frail older adults who experienced serious adverse effects after the first dose, the administration of the second dose required individual assessment. In developing countries such as Brazil, delays in acquiring pharmaceutical supplies slowed the start of vaccination campaigns. As a mitigation strategy, the Oswaldo Cruz Foundation requested emergency authorization from ANVISA to import two million ready-made vaccines from the Serum Institute, but deaths remained high due to this delay (Lang, 2021).

### Mortality

COVID-19 mortality increased in 2020 and 2021 but decreased in 2022 as vaccination advanced. Studie revealed that White residents in nursing homes had mortality rates three times higher than Black or Latino residents (Young et al., 2023). Facilities promoting greater resident autonomy and with lower staff turnover ("green homes") reported lower infection and mortality rates. In contrast,

LTCFs caring for individuals with dementia had higher mortality rates due to the difficulty of maintaining physical distancing and the presence of comorbidities. The ethical dimension of care was also underscored, emphasizing nurses' relational approach with family members and the essential role of relatives and close friends in end-of-life processes, while respecting personal beliefs and values (Eliopoulos, 2019).

### Quality of life focused on professionals and workers

Staff highlighted that infection prevention and control measures improved substantially during the pandemic and became indispensable in everyday work. One study emphasized that all LTCF personnel had to wear surgical masks to minimize infection risk.

### Quality of life focused on older adults and families

To combat COVID-19, LTCFs restricted in-person visits by family members, friends, and, in some cases, caregivers. These restrictions increased depression, anxiety, and malnutrition risks among older adults. Family members reported concerns about psychological stress, nursing care, and daily activities, although most accepted these measures.

### Quality of life focused on protocols and guidelines

Non-pharmacological interventions, such as quarantine, serial testing, mask use, and screening for signs and symptoms, proved effective in preventing COVID-19 transmission and should be implemented across different economic contexts to reduce the risk of epidemics and pandemics.

### Final considerations

This scoping review highlighted that protocols, guidelines, and the use of personal protective equipment (PPE) are

essential for caring for older adults in LTCFs. It also emphasized the importance of leveraging international experiences and information from competent authorities to enhance outbreak response. Rapid decision-making and preventive measures should involve professionals, residents, families, and service providers. Moreover, the use of digital technologies, such as teleconsultation and video calls, can improve older adults' quality of life.

During the pandemic, LTCFs worldwide faced similar challenges, including PPE management, case detection and isolation, visitation restrictions, vaccine shortages, and human resource management. The pandemic increased the visibility of these institutions, exposing structural deficiencies and inadequate care, including low caregiver wages, excessive working hours, lack of training in geriatrics and gerontology, as well as physical, psychological, and financial vulnerabilities among residents.

The care of institutionalized older adults requires specific public policies and a multidisciplinary approach involving areas such as education, architecture, technology, health, and communication.

Study limitations include the lack of methodological quality assessment of the included studies, as this was a scoping review. In addition, the descriptors used in the research may have different meanings across countries (e.g., Australia, the United States, and the Netherlands). The exclusion of gray literature may also have restricted the findings by omitting unpublished or limited-access sources. Finally, an online platform, available both in web and app versions, was used to clarify LTCF definitions. A potential publication bias cannot be excluded, although it likely did not influence study selection.

## Conclusion

This review mapped 43 studies on interventions implemented by LTCFs during the COVID-19 pandemic, focusing on vaccination, mortality, and quality of life. These results revealed common patterns across countries, highlighting both the limitations and the responses to the health crisis. This review reinforces the need for public policies that provide structured support for institutions, promote effective preventive strategies, and ensure person-centered care for older adults. Future research should assess the long-term impact of the pandemic on LTCFs, evaluate successful practices across contexts, and propose more participatory care models involving residents, families, and health teams in building sustainable solutions.

## Thesis/Dissertation

This article is derived from the dissertation entitled "Care provided by long-term care facilities for older adults during the COVID-19 pandemic: A scoping review," presented at the Federal University of Rio Grande do Sul in 2023.

## Acknowledgments

The authors would like to thank the Brazilian National Council for Scientific and Technological Development

(CNPq) for its support and encouragement of the research that led to the development of this article.

## Author contributions

Conceptualization: Vieira, L. A., Ramos, A. R., Souza, C. D., Riquinho, D. L., Rocha, C. M.

Data curation: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Formal analysis: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Investigation: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Methodology: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Project administration: Vieira, L. A., da-Silva-Domingues, H., Ramos, A. R., Souza, C. D., Riquinho, D. L., Rocha, C. M.

Resources: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Software: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Supervision: Vieira, L. A., da-Silva-Domingues, H., Ramos, A. R., Souza, C. D., Riquinho, D. L., Rocha, C. M.

Validation: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Visualization: Vieira, L. A., da-Silva-Domingues, H., Rocha, C. M.

Writing – original draft: Vieira, L. A., da-Silva-Domingues, H., Ramos, A. R., Souza, C. D., Riquinho, D. L., Rocha, C. M.

Writing – review and editing: Vieira, L. A., Ramos, A. R., da-Silva-Domingues, H., Souza, C. D., Riquinho, D. L., Rocha, C. M.

## References

- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19-32. <https://doi.org/10.1080/1364557032000119616>
- Armstrong, P., & Braedley, S. (Eds.). (2023). *Care homes in a turbulent era: Do they have a future?* Edward Elgar.
- Brasil. (2003) Lei nº 10.741, de 1º de outubro. [https://www.planalto.gov.br/ccivil\\_03/leis/2003/l10.741.htm](https://www.planalto.gov.br/ccivil_03/leis/2003/l10.741.htm)
- Brasil. (2021). Resolução de Diretoria Colegiada, RDC Nº 502. Brasília, 2021. Dispõe sobre a regulamentação do funcionamento das ILPI. <https://www.in.gov.br/en/web/dou/-/resolucao-rdc-n-502-de-27-de-maio-de-2021-323003775>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Eliopoulos, C. (Ed.). (2019). Ambientes e tópicos especiais nos cuidados geriátricos: Cuidados no final da vida. In *Enfermagem gerontológica* (9ª ed., pp. 514-528). Artmed.
- Lang, P. (2021). *Fiocruz entra com pedido de autorização para uso emergencial da vacina covid-19*. Agência Fiocruz de Notícias. <https://agencia.fiocruz.br/fiocruz-entra-com-pedido-de-autorizacao-para-uso-emergencial-da-vacina-covid-19>

- Peters, M. D., Godfrey, C., McInerney, P., Munn, Z., Tricco, A. C., & Khalil, H. (2020). Scoping reviews. In E. Aromataris, & Z. Munn (Eds.), *JBI reviewer's manual*. The Joanna Briggs Institute. <https://wiki.jbi.global/display/MANUAL/Chapter+11%3A+Scoping+reviews>
- Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan-a web and mobile app for systematic reviews. *Systematic Reviews*, 5, 210. <https://doi.org/10.1186/s13643-016-0384-4>
- Telford, C. T., Bystrom, C., Fox, T., Holland, D. P., Wiggins-Benn, S., Mandani, A., McCloud, M., & Shah, S. (2021). Covid-19 infection prevention and control adherence in long-term care facilities, Atlanta, Georgia. *Journal of the American Geriatrics Society*, 69(3), 581-586. <https://doi.org/10.1111/jgs.17001>
- Wachholz, P. A., Oliveira, D. C., Hinsliff-Smith, K., Devi, R., Villas Boas, P. J., Shepherd, V., Jacinto, A. F., Watanabe, H. A., Gordon, A. L., & Ricci, N. A. (2021). Mapping research conducted on long-term care facilities for older people in Brazil: A scoping review. *International Journal of Environmental Research and Public Health*, 18(4), 1522. <https://doi.org/10.3390/ijerph18041522>
- Watanabe, H. W., Giacomini, K., Domingues, M. A., Villas Boas, P. J., & Duarte, Y. A. (2020). *A vida de toda pessoa idosa institucionalizada importa!* Frente Nacional de Fortalecimento à ILPI. <https://frente-ilpi.com.br/wp-content/uploads/2021/08/Manifesto-Dezembro-2020.pdf>
- Wister, A., & Kadowaki, L. (2021). *Social isolation among older adults during the pandemic*. Federal, Provincial and Territorial Forum of Ministers Responsible for Seniors. <https://www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/covid-19-social-isolation/covid-19-social-isolation-en.pdf>
- World Health Organization (WHO). (2024). *WHO COVID-19 dashboard*. <https://data.who.int/dashboards/COVID19/deaths?n=c>