

Strategies and actions to enable meaningful family connections in nursing homes during the COVID-19: A Scoping Review

Raquel Veiga-Seijo MSC^{a,b}, María del Carmen Miranda-Duro MSC^{c,d}, and Silvia Veiga-Seijo MSC^e

^a Department of Health Sciences, Faculty of Nursery and Podiatry, Ferrol Campus, Universidade da Coruña (University of A Coruña), Ferrol, A Coruña, Spain; ^b Grupo de Investigación en Reumatología y Salud (GIR-S), Faculty of Physiotherapy, Oza Campus, Universidade da Coruña (University of A Coruña), A Coruña, Spain; ^c CITIC (Centre for Information and Communications Technology Research), TALIONIS Group, Elviña Campus, Universidade da Coruña (University of A Coruña), A Coruña, Spain; ^d Department of Physiotherapy, Medicine and Biomedical Sciences, Faculty of Health Sciences, Oza Campus, Universidade da Coruña (University of A Coruña), A Coruña, Spain; ^e Department of Health Sciences, Faculty of Health Sciences, Oza Campus, Universidade da Coruña (University of A Coruña), A Coruña, Spain

CONTACT María del Carmen Miranda-Duro carmen.miranda@udc.es Faculty of Health Sciences, CITIC-TALIONIS group, Universidade da Coruña (University of A Coruña), Oza, A Coruña, 15071, Spain

Abstract

Objectives. To better understand the impact of visitor restrictions on nursing home residents and their families as well as strategies and actions that were conducted in nursing homes during the COVID-19 pandemic.

Methods. A scoping review was carried out in October 2020. Several electronic databases were used: Cochrane Plus, Scopus, Web of Sciences and PubMed. 725 results were identified. We included 10 articles.

Results. Thematic analysis obtained the following categories: the impact of COVID-19 on nursing home residents' lives and their families, procedures and frameworks of nursing homes during and after lockdown, and solutions and resources implemented by health care professionals to improve the connection between older people and their families.

Conclusions. Visitor restrictions have a high impact on the health and well-being of older adults' and their families. The main strategies and solutions employed to reduce social isolation and facilitate the communication between older adults' and their families were the use of information and communication technologies, family support groups, and the assignment of reference staff to each family.

Clinical implications. The strategies and solutions mentioned should be internationally considered by health care providers in nursing homes to improve connections between family and older adults.

Keywords

Aging; caregivers; caregiving; elderly; gerontology; health; international aging; interventions; long-term care; nursing; Caregivers; Family; Health Care Providers; Long-term Care Facility; Older Adults; Wellbeing; Social Isolation; Social Participation

Introduction

The coronavirus 2019 (COVID-19) pandemic has been declared a public health emergency of international concern that has affected people's daily lives (Topcuoglu, 2020; World Health Organization, 2020a). The COVID-19 pandemic has wreaked havoc worldwide on quality of life, well-being, routines, and everyday life, leading to poverty (Malgesini, 2020), discrimination (Minority Rights Group International, 2020), loneliness (Piette et al., 2020), and social isolation (Hwang, Rabheru, Peisah, Reichman, & Ikeda, 2020), due to government restrictions related to mobility and social contact (World Health Organization, 2020a). Specifically, senior citizens, who have a diagnosis of COVID-19, are at high risk of severe complications or illnesses, requiring hospitalization and intensive care, or even death (Centers for Disease Control and Prevention, 2020b; Xie et al., 2020). For this reason, older adults have been highly affected by this virus, becoming the most vulnerable group around the world (Powell, Bellin, & Ehrlich, 2020).

Older adults who reside in long-term care facilities or nursing homes are a particularly vulnerable group (Barnett & Grabowski, 2020). In Europe, 19% to 72% of the total deaths from COVID-19 have occurred in nursing homes (Comas-Herrera et al., 2020). Long-term care institutions and nursing homes have been under restrictive measures, regulations, and guidelines to prevent and control COVID-19 infections, including avoiding social contact among residents and between residents and their relatives. For example, nursing homes that have closed to visitors have limited the number and frequency of the non-pharmacological interventions and the use of common areas of the center. Furthermore, institutions have advised older people to be isolated within their rooms to prevent infection between residents (Armitage & Nellums, 2020; Barnett & Grabowski, 2020; Centers for Disease Control and Prevention, 2020a).

Lockdown restrictions resulted in older people suffering from isolation, loneliness, anxiety, restrictive social contact, and sorrow due to their loss of independence or even fear of death (World Health Organization, 2020b). These restrictions have had a significant impact on the resident's well-being, quality of life, and health (Gordon et al., 2020) and have opened a broad debate about nursing home residents' rights and autonomy to make their own choices.

Families, which include relatives, partners, friends, and neighbors, have been affected by restrictions of residents' visits during confinement, which became a main uncertainty for both families and residents. Considering that families are the most important source of support for residents (Port et al., 2005), the lack of personal contact with them may affect their mental health or increase their relatives' worries. The importance of family roles have been highlighted in long-term care institutions during the COVID-19 pandemic (American Association of Retired Persons, 2020; Lebow, 2020; Wu, 2020).

At the moment, no study has been found that encompasses how the pandemic is being addressed in nursing homes in different parts of the world. Thus, we aim to contribute to the pandemic challenges related to older persons residing in a nursing home and their families, to provide evidence of how the pandemic is being addressed within nursing homes in each location, and information regarding the focus of the solutions adopted. There are several questions to be answered: 1) What are the focuses of the measures adopted? 2) Are these measures specific to the nursing home, or can they be extrapolated to other areas? And 3) Are they affected by the policies of the country of origin?

This scoping review in response to the pandemic challenges identifies key recommendations and actions to be implemented in nursing homes and other health care settings. The study findings, based on the existing literature, may support social and health care professionals in creating action plan protocols, guides, and interventions. In addition, this review may enrich nursing homes policies and contribute to safer and friendlier environments. This review may contribute to residents' and family's quality of life.

Our review aims to illustrate other researchers and professionals who carry out clinical trials the effectiveness of our recommendations in ensuring family and nursing home resident communication, a new potential research area. Likewise, our intention is to offer a summarized, clear, and easy to consult report of strategies that are being carried out to address this problem. This review will help social health professionals to implement evidence-based measures in nursing homes and to compare different strategies and decide which one is the most appropriate for the situation in which they find themselves.

The relationship between older people and their families has become a research area of concern that needs special attention. Therefore, we pose as a research question: What is known about the restrictions derived from COVID-19's impact on residents and their

families, and which strategies, actions, and procedures have been carried out in nursing homes? Accordingly, this study's main goal is to better understand the impact of nursing home restrictions on residents and their families and strategies and actions conducted in nursing homes during the pandemic of COVID-19. The specific aims are:

- To identify the authors focused on this topic, the year, the country and the journals of publication, the type of studies, the study population, settings area of the study, and the data collection methods used.
- To explore in the literature the experiences of residents' families regarding the nursing home restrictions during the COVID-19 pandemic.
- To identify which strategies, actions, and resources are implemented by health care professionals in nursing homes during the COVID-19 pandemic to ensure families and their relatives' communication.

Methods

This scoping review was conducted in October 2020 using the Arksey and O'Malley (2005) framework. We selected a scoping review method, because we wanted to better understand the main themes and trends in the scientific literature. Specifically, we wanted to identify literature gaps, as family connection in nursing homes among older residents is an emergent and recent theme worldwide. However, the studies included have not been assessed by a risk of bias, as opposed it must be done in Systematic reviews and Meta-Analyses (Arksey & O'Malley, 2005; Tricco et al., 2018).

In accordance with the framework, the research team included five key phases: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, and (5) collating, summarizing, and reporting the results (Arksey & O'Malley, 2005). The research team that carried out the review procedure and analysis are two researchers who are occupational therapists, and one researcher who is a nurse and podiatrist.

According to the second and third phases of the Arksey and O'Malley framework, this scoping review involved a systematic search which included the following selection criteria: original articles, reviews, and conference papers published in English, Portuguese, and Spanish that focused on older adults ages 65+ years old and their families

during the COVID-19 pandemic. The electronic databases employed were Cochrane Plus, PubMed, Web of Science, and Scopus. The search strategies used in each database and the total of records are shown in Table 1.

This search yielded 725 potentially relevant citations, which were imported into the web-based bibliographic manager Mendeley. Data were reported in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) (Tricco et al., 2018). After duplicates were removed, 495 citations were obtained. By applying the eligibility criteria, the authors screened the papers for inclusion. The first selection was from the title and abstract screening, and the second one was from a full-text review. All conflicts generated through the screening stages between the three authors were discussed. Finally, 21 documents met the eligibility criteria based on title and abstract, and the corresponding full-text articles were procured for review. Other sources were used to identify potential records (i.e., the search records' references).

After reading the 21 articles in full text, the authors excluded 13 articles. Articles were excluded because of the type of document: commentary (Carlucci, Carpagnano, Dalfino, Grasso, & Migliore, 2020; Millenson, 2020) and letter (Lloyd-Sherlock et al., 2020; Ruopp, 2020). Articles were also excluded because they were not focused on older adults' families (Bianchetti et al., 2020); were not focused in a nursing home and instead on community-dwelling adults (Goodman-Casanova, Dura-Perez, Guzman-Parra, Cuesta-Vargas, & Mayoral-Cleries, 2020; Rolandi et al., 2020), those in day centers (Benaque et al., 2020) or those at home (Jecker, 2020); did address the aim of the present review (Nicol, Piccirillo, Mulsant, & Lenze, 2020; Padala et al., 2020; Xie et al., 2020); or were not specific to the pandemic (Noone et al., 2020).

The authors reviewed and discussed the respective paper(s) to reach a consensus when additional discrepancies were highlighted before the final decision. The flow of articles through identification to final inclusion is represented in Figure 1. Lastly, two references were included from Miller (2020)'s study, for a total of 10 final records.

Once the papers were selected, data was compiled in a Microsoft Word table for validation, coding, and analysis. All articles were read by all authors.

The results contain both bibliometric and thematic analyses. Descriptive analysis was developed relating to bibliometric, specifically, frequencies were utilized to describe data.

Bibliometric parameters were authors, year, title, country, journal, and type of study. Thematic analysis was also conducted as a “method for identifying, analyzing, and reporting patterns (themes) within data” (Braun & Clarke, 2005, p. 79). To carry this out, the authors analyzed the main objective and findings of the records included, following the present review’s aims.

Results

A total of 10 articles are included in this scoping review. In only online supplementary material, Table 2, a summary of results is provided, which presents the main characteristics of each article: authors, year, title, country, journal, database, research objectives, type of study, and main findings. Also in this section, bibliometric and thematic categories are described.

Bibliometric categories

The publication year of all articles is 2020. Furthermore, only two articles were carried out in the United States of America (Hado & Friss, 2020; Miller, 2020). Regarding the journal of publication, two articles have been published in the *Journal of Aging & Social Policy* (Hado & Friss, 2020; Miller, 2020). PubMed is the main database that provided the included articles. The types of study were original articles (n = 5) (O’Caoimh et al., 2020; Sacco, Lléonart, Simon, Noublanche, & Annweiler, 2020; Strang, Bergström, Martinsson, & Lundström, 2020; Ting-Chun et al., 2020; Verbeek et al., 2020) and narrative review (n = 5) (Banskota, Healy, & Goldberg, 2020; Behrens & Naylor, 2020; Hado & Friss, 2020; Miller, 2020; Stokes & Patterson, 2020).

Data collection methods

The results reflect heterogeneous data collection methods. These methods can be classified as technological or conventional. Telephone interviews (Verbeek et al., 2020; Yeh et al., 2020) and a WhatsApp group (Verbeek et al., 2020) are included as technological methods. Additionally, O’Caoimh et al. (2020) used a cross-sectional survey through Google Docs, which included assessing visitors’ psychological status during COVID-19 visiting restrictions.

The conventional data collection methods include using a questionnaire and nursing homes' documentation (Verbeek et al., 2020), the national Swedish Register of Palliative Care (Strang et al., 2020), a survey with three options, and a 6-point Likert scale. Furthermore, O'Caiomh et al. (2020) employed the following scales: the World Health Organization Five Well-Being Index (WHO-5), the Major Depression Inventory measuring ICD 10 symptoms of depression, the University of California Los Angeles brief loneliness scale, and the Adult Carer Quality of Life (AC-QoL) Questionnaire.

Study population

The studies included different types of populations: older people who reside in long-term care institutions or nursing homes (Sacco et al., 2020); older people who died in nursing homes (Strang et al., 2020); older adults, families, and health care providers of nursing homes (Banskota et al., 2020; Hado & Friss, 2020; Miller, 2020); families of nursing home residents (O'Caiomh et al., 2020; Stokes & Patterson, 2020; Yeh et al., 2020); nursing homes leaders (Behrens & Naylor, 2020); and people from nursing homes, about who there is the most information on the policy, local protocol, and the local guidelines (Verbeek et al., 2020).

Thematic categories

Once the authors conducted the thematic analysis, the following three thematic categories were identified: 2.1. The impact of COVID-19 on older people's lives and their families in nursing homes, 2.2. Procedures and frameworks of nursing homes during and after lockdown, and 2.3. Solutions and resources implemented by health care professionals to improve the connection between older people and their families.

The impact of COVID-19 on older people's lives and their families in nursing home

The impact of COVID-19 on older adults and families' well-being is related to visitor restrictions, the care of the older adults, the support perceived by caregivers, and the older adults' dying process.

In the study by O'Caiomh et al. (2020), approximately 30% (n = 225) of the families were dissatisfied with older adults' care due to the restrictions during the COVID-19 pandemic.

In addition, this study mentioned that family caregivers of older adult residents perceived insufficient staff support to perform their role as caregivers. Thus, the study stated that family caregivers had a low self-reported quality of life. In addition, the families who were in contact with the older adults residents identified a decline in mood, daily living activities, and cognition. Accordingly, Stokes and Patterson (2020) suggest the need to implement policies that support family members in balancing work and caregiving responsibilities (i.e., supports and direct payments to caregivers) (Stokes & Patterson, 2020).

The COVID-19 pandemic also increased family concerns. Specifically, Yeh et al. (2020) indicated that family members' most common concern for their relative was psychological stress, nursing care, and daily activity during the lockdown period. Other stressful situations that family members identified were economic downturn, disaster-related instability, increased exposure to exploitative relationships, and reduced support options during the pandemic.

Furthermore, the visit restrictions have a further impact on people with dementia since they may not understand why their close family member (i.e., spouse, daughter, or son) is no longer coming to see them during the lockdown, as shown by O'Caioimh et al. (2020).

Lastly, the lockdowns have affected how older people die in nursing homes. Strang et al. (2020) highlight the importance of preparing for the end-of-life for both patients and families in the context of COVID-19. This research shows that the COVID-19 pandemic has caused people to die alone, without relatives present in this bereavement process. This study shows that women are the main group that die in nursing homes, and they could not express their will during the last week of life. Furthermore, the authors found that only 13% of relatives were present at the time of death. This situation negatively affects their grief process and has relevant social and existential consequences for older adults and families.

Procedures and frameworks of nursing homes during and after lockdown

This thematic category presents a framework about visitor restrictions and different procedures to allow family visits to residents after the confinement.

The narrative review of Miller (2020) includes the study of Behrens and Naylor (2020), which proposes a framework to facilitate decision making to address the COVID-19 crisis in nursing homes. It includes four different levels depending on the gravity of the situation: standard operations, contingency operations, crisis operations, and catastrophic operations, mainly to regulate family visits, residents' testing, staffing, and bed availability. In the first level family visits are open, in the second one they are limited, and in the third and fourth they are closed (Behrens & Naylor, 2020).

Accordingly, Verbeek et al. (2020) established how nursing homes carried out logistic organization to allow visitors back into the centers. These procedures included staff preparation, communication with all stakeholders, or the establishment of specific selection criteria of visitors. For visits, there were several options, for example: use of the own residents' room, taking a walk outside, or visiting through a window. Visit duration was around 45 minutes. Additionally, 15 minutes were dedicated to entering and leaving the nursing home as well as completing the check-in (for instance, symptom screening). The experiences were positive due to added value of the personal contact between residents and relatives (Verbeek et al., 2020).

Solutions and resources implemented by health care professionals to improve the connection between older people and their families

This thematic category presents resources related to the use of Information and Communication Technologies (ICT) for promoting meaningful family connections with residents in nursing homes. Furthermore, proactive solutions are implemented by health care providers in nursing homes to facilitate information and communication to families. Lastly, one study suggests the creation of family councils and online family caregiver support groups to easily share information and mutual support.

The ICT solutions employed were telephone, e-mail, or videocalls (Hado & Friss, 2020) or 15 applications (apps) (Banskota et al., 2020). The narrative review of Banskota et al. (2020) presented 15 inexpensive and accessible smartphone apps. These apps aim to protect older people in nursing homes from the risks of loneliness and social distancing during COVID-19 visitor restrictions. They are related with social networking, food and drink (for instance, ordering food), medical, telemedicine and medication adherence, health and fitness, as well as apps for vision and hearing-impairment. These apps have a

broad acceptability and positive user experience. Also, they promote older people staying connected to friends and family, improve social support and engagement in activities, and help them maintain independence and health while in COVID-19 lockdown.

In relation to the use of ICT, a study carried out by Sacco et al. (2020) in France found that older people were more satisfied with the use of video calls to communicate with their relatives (93%) versus the use of telephone calls (50%) ($p = .02$) in long-term care and nursing homes. Conversely, older adults often prefer telephone calls to video calls (Sacco et al., 2020).

Proactive strategies and solutions for maintaining the family caregiver role are presented by Hado and Friss (2020). In practice, nursing homes must strengthen and enable timely communication and virtual visitation. To facilitate regular communications between families and institutions, staff members can be assigned as primary contacts for families by telephone, e-mail, or videoconference. Besides, students and trainers (such as gerontological social work students) can be assigned to facilitate calls between family caregivers and residents, as well as to keep them informed about the older people's situation and offer support. Furthermore, the staff can facilitate information to families about the state of the center and the family's situation.

Another action is to ensure the activation of family councils through alternative means of communication (Skype, e-mail, etc.) in order to facilitate the exchange information and to support one another and stay informed. Institutions can facilitate the creation, and joining of online caregiver support groups which can foster the sharing of information, advice, and encouragement (Hado & Friss, 2020).

Discussion

This article presents the first interprofessional scoping review that aims to explore the experience of older adults' and their families during the visitor restrictions imposed during COVID-19, as well as the main strategies and solutions implemented by long-term care institutions. The purpose of these actions is to enable meaningful family connections with older people, promoting older people's and their relatives' health and wellbeing during the COVID-19 pandemic. The articles analyzed highlight the importance of meaningful human and family connections during the COVID-19 pandemic.

Articles included in this review bring to light how COVID-19 impacts the relationship between older adults and their families (Hado & Friss, 2020; Strang et al., 2020; Verbeek et al., 2020), which has caused social isolation and loneliness. These factors are the major risks that affect older adults' health (Jecker, 2020; Monahan, Macdonald, Lytle, Apriceno, & Levy, 2020; Wu, 2020).

Regarding the study population, there are few studies whose aim is focused particularly on people with dementia or cognitive impairment. Only one study in the present scoping review pointed out the needs of this population with restrictive visits (O'Caioimh et al., 2020). Goodman-Casanova (2020) carried out research to explore the impact on the health and well-being of community-dwelling older adults with this profile and to provide social support by telehealth. They concluded that telehealth had the potential to support cognitive stimulation. Congruently, Benaque et al. (2020) conducted research about telemedicine consultations in a Memory Unit. This model showed the importance of maintaining care and adapting health and social support during the COVID-19 pandemic. In the present scoping review, Yeh et al. (2020) and O'Caioimh et al. (2020) collected the family concerns and satisfaction about the care of their relatives in long-term care facilities during pandemic. Both indicated the importance of considering the families' opinion, also stated by Padala et al. (2020). Family opinions will also promote the launch of strategies and approaches according to their needs and desires in the future pandemics. Moreover, it may improve the quality of life of older people and their family caregivers in lockdowns contexts.

The main potential sources of virus transmissions are the families and intergenerational relationships. Nursing homes, therefore, established protocols to reduce virus transmissions during COVID-19 pandemic (Miller, 2020; Stokes & Patterson, 2020). Our review presents protocols about visitor restrictions and measures of how to allow families reentry into nursing homes (Behrens & Naylor, 2020; Verbeek et al., 2020). This idea is supported by Benaque et al. (2020), who proposed telemedicine consultations. Furthermore, this study mentions the need to schedule visits while older adults were confined (Benaque, 2020).

Regarding the resources and strategies employed, several studies (Banskota et al., 2020; Hado & Friss, 2020; Sacco et al., 2020; Verbeek et al., 2020) have stated the use of ICT

in order to improve the connectiveness between older people who live in nursing homes or long-term care facilities and their families.

Although ICT facilitates communication between families and older people, Verbeek et al. (2020) suggests giving guidance to older people to use ICT and deal with the digital divide. Hence, apps cannot substitute in-person care (Verbeek et al., 2020).

Hado and Friss (2020) and Sacco et al. (2020) showed video calls as a way to facilitate connection between families and older adults, because they combine audio and visual communication. Video calls simulate real-life contact while potentially addressing social isolation and feelings of loneliness in a time of physical distancing (Noone et al., 2020). Banskota et al. (2020) present 15 mobile phone apps that can be used, while Goulabchand, Boclé, Vignet, Sotto, and Loubet (2020) introduced digital tablets as a tool to be used by close relatives and older people. In the latter study, both older people and families accepted the use of tablets, which has become a meaningful tool for them (Goulabchand et al., 2020).

The use of digital tablets (Goulabchand et al., 2020) has also benefited families and older people in dealing with end-of-life situations. The use of tablets allows last communications between relatives and older people, because they provide a last chance to say “goodbye”. This article suggests that communications should be as soon as possible, since they provide the opportunity of sharing moments with a relative. This study supports the idea of Strang et al. (2020), who demonstrated that dying during the COVID-19 pandemic negatively affects the quality of life of families and the process of older people dying alone.

Furthermore, Jecker (2020, p. 7) propose sociable robots or virtual reality to “fill a gaping hole in human social life”. It may help to decrease social isolation and loneliness in older people that live in nursing home and long-term care facilities during lockdown episodes, which threaten their health and wellbeing.

The introduction of ICT in nursing home residents’ everyday life during the COVID-19 pandemic has increased the connectivity of older people with technology, resulting in increased skills in online platforms. This has allowed a strengthening of family and intergenerational connections and it has combatted ageism (Monahan et al., 2020; Morrow-Howell, Galucia, & Swinford, 2020). Nevertheless, Benoit-Dubé et al. (2020) concluded that the pandemic context has further highlighted the barriers that older people

face with the use of ICT, which was and is the main medium that population has employed to be in touch with their loved ones (Benoit-Dubé et al., 2020). Taking into account that ICT may be a tool to promote social participation, health, and wellbeing throughout the lifespan, this issue can situate older people in a vulnerable and inequal situation.

Promoting the use of ICT in older people in a pandemic context requires hybrid solutions, such as developing informatics tools to enable older people to contribute to society or helping older adults stay connected with friends (Xie et al., 2020). Based in information initiatives, his hybrid solution should be promoted by community organizers because of its provides understanding about older people's needs and the available resources in nursing homes (Xie et al., 2020).

Carlucci et al. (2020) supports that using technology tools as a role in supporting health insurance creates a highly performing and technologically advanced system that reduce distances and has a decisive role in COVID-19 pandemic. During the pandemic, Carlucci et al. (2020) mentioned the need of care humanization and understanding of the person from a holistic approach. For this purpose, using ICT could have a decisive role in supporting health insurance, creating a highly performing system that reduce distances, suffering of disease, and the weight of necessary isolation. For these purposes, ICT could make the management of COVID-19 more optimal, safer, and better in all the spheres that jointly define the concept of health.

Future research areas

In this review, the authors suggest the need of further original articles, both quantitative and qualitative, to better understand the study phenomenon. Needed articles include clinical trials about the effectiveness and effectivity of these recommendations and strategies and action plans focused on overall well-being improvement. Thus, key research directions may be to identify resources (i.e., the use of apps or e-mails) that are more suitable to promote communication between residents and families during quarantine or confinement periods.

Furthermore, it is necessary to carry out non-pharmacological interventions to address the needs of families and older adults during the COVID-19 pandemic. Moreover, the literature gaps identified in the literarture showed the importance of focusing on people with dementia who present specific needs regarding the use of ICT.

However, the population's vaccination is being developed in most of the nursing homes in developed countries. It means that most of the older people who reside in nursing homes are vaccinated. New strategies and action plans must consider the vaccination, which solves the main problems identified during the pandemic (i.e., loneliness and isolation). Future reviews are needed to include the vaccination on the search terms.

Clinical implications

The strategies and solutions mentioned in this scoping review should be internationally considered by health care providers in long-term care facilities. This scoping review presents procedures that have a positive impact on the connection between family and older adults. The main clinical implications of this scoping review may apply in future lockdowns within nursing homes or other care settings.

Limitations

One of the main limitations of the present study is the relatively small number of studies included. In this sense, the results do not allow generalization of the main conclusions and new studies are, therefore, necessary. In addition, the COVID-19 pandemic is a rapidly developing situation which is changing overtime, and studies are needed in order to adapt the research to these changes.

Conclusions

In conclusion, visitor restrictions have a high impact on the health and well-being of older adults and their families. The main strategies and solutions employed to reduce social isolation and facilitate the communication between older adults and their families, were the use of ICT, family support groups, and the assignment of reference staff to each family. Also, further research and actions to enable the relationship between residents of long-term care facilities and families during the covid-19 pandemic is needed.

Acknowledgments

MDMC's scholarship was funded by Galician University System (GUS), which obtained funds through Regional Development Fund (RDF) (European Social Fund 2014 -2020) with 80%, Operational Programme RDF Galicia 2014 -2020, and the remaining 20% by the Secretaría Xeral de Universidades of the Galicia with the reference ED481A 2018/205. MDMC's is supported by C.I.T.I.C., as the research center accredited by Galician University System, which is funded by “Consellería de Cultura, Educación e Universidades from Xunta de Galicia,“ which provided 80% of funds through E.R.D.F. Funds, E.R.D.F. Operational Programme Galicia 2014 -2020, and the remaining 20% was provided by “Secretaría Xeral de Universidades“ [Grant ED431G 2019/01]. RVS's scholarship was funded by Galician University System (GUS), which obtained funds through Regional Development Fund (RDF) (European Social Fund 2014 - 2020) with 80%, Operational Programme RDF Galicia 2014 -2020, and the remaining 20% by the Secretaría Xeral de Universidades of the Galicia with the reference ED481A- 2020/034.

The authors would like to recognize the reviewers contributions to this paper.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Supplementary material

Supplemental data for this article can be accessed on the publisher's website.

Funding

This work was supported by the European Social Fund [ED481A-2018/205; ED481A-2020/034].

References

- American Association of Retired Persons. (2020). Family caregiving. Retrieved from <https://www.aarp.org/caregiving/>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice*, 8(1), 19–32. doi:<https://doi.org/10.1080/1364557032000119616>

- Armitage, R., & Nellums, L. B. (2020). COVID-19 and the consequences of isolating the elderly. *The Lancet Public Health*, 5(5), e256. doi:[https://doi.org/10.1016/S2468-2667\(20\)30061-X](https://doi.org/10.1016/S2468-2667(20)30061-X)
- Banskota, S., Healy, M., & Goldberg, E. M. (2020). 15 smartphone apps for older adults to use while in isolation during the Covid-19 pandemic. *Western Journal of Emergency Medicine*, 21(3), 514–525. doi:
- Barnett, M. L., & Grabowski, D. C. (2020). Nursing homes are ground zero for COVID-19 pandemic. In *JAMA health forum* (Vol. 1, Issue 3). American Medical Association (AMA). doi:<https://doi.org/10.1001/jamahealthforum.2020.0369>
- Behrens, L. L., & Naylor, M. D. (2020). “We are alone in this battle”: A framework for a coordinated response to COVID-19 in nursing homes. *Journal of Aging & Social Policy*, 32(4–5), 316–322. doi:<https://doi.org/10.1080/08959420.2020.1773190>
- Benaque, A. (2020). Dementia care in times of COVID-19: Experience at Fundació ACE in Barcelona, Spain. *Journal of Alzheimer’s Disease*, 76(1), 33–40. doi:<https://doi.org/10.3233/JAD-200547>
- Benaque, A., Gurruchaga, M. J., Abdelnour, C., Hernández, I., Cañabate, P., Alegret, M., Boada, M. (2020). Dementia care in times of COVID-19: Experience at Fundació ACE in Barcelona, Spain. *Journal of Alzheimer’s Disease: JAD*, 76(1), 33–40. doi:<https://doi.org/10.3233/JAD-200547>
- Benoit-Dubé, L., Jean, E. K., Aguilar, M. A., Zuniga, A.-M., Bier, N., Couture, M., ... Belchior, P. (2020). What facilitates the acceptance of technology to promote social participation in later life? A systematic review. *Disability and Rehabilitation: Assistive Technology*, 1–11. doi:<https://doi.org/10.1080/17483107.2020.1844320>
- Bianchetti, A., Bellelli, G., Guerini, F., Marengoni, A., Padovani, A., Rozzini, R., & Trabucchi, M. (2020). Improving the care of older patients during the COVID-19 pandemic. *Aging Clinical and Experimental Research*, 32(9), 1883–1888. doi:<https://doi.org/10.1007/s40520-020-01641-w>
- Braun, V., & Clarke, V. (2005). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 77–101. Retrieved from <https://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa>
- Carlucci, M., Carpagnano, L. F., Dalfino, L., Grasso, S., & Migliore, G. (2020). Stand by me 2.0. Visits by family members at Covid-19 time. *Acta Biomedica*, 91(2), 71–74. doi:<https://doi.org/10.23750/abm.v91i2.9569>

- Centers for Disease Control and Prevention. (2020a). Preparing for COVID-19 in nursing homes. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.html>
- Centers for Disease Control and Prevention. (2020b, December). *Older adults and COVID-19* / CDC. Coronavirus Disease 2019 (COVID-19). Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html>
- Comas-Herrera, A., Zalakaín, J., Lemmon, E., Henderson, D., Litwin, C., Hsu, A. T., Fernández, J. L. (2020). Mortality associated with COVID-19 outbreaks in care homes: Early international evidence – Resources to support community and institutional long-term care responses to COVID-19. Retrieved from <https://ltccovid.org/2020/04/12/mortality-associated-with-covid-19-outbreaks-in-care-homes-early-international-evidence/>
- Goodman-Casanova, J. M., Dura-Perez, E., Guzman-Parra, J., Cuesta-Vargas, A., & Mayoral-Cleries, F. (2020). Telehealth home support during COVID-19 confinement for community-dwelling older adults with mild cognitive impairment or mild dementia: survey study. *Journal of medical Internet research*, 22(5), e19434. <https://doi.org/10.2196/19434>
- Gordon, A. L., Goodman, C., Achterberg, W., Barker, R. O., Burns, E., Hanratty, B., Spilsbury, K. (2020). Commentary: COVID in care homes—challenges and dilemmas in healthcare delivery. *Age and Ageing*, 49(5), 701–705. doi:<https://doi.org/10.1093/ageing/afaa113>
- Goulabchand, R., Boclé, H., Vignet, R., Sotto, A., & Loubet, P. (2020). Digital tablets to improve quality of life of COVID-19 older inpatients during lockdown. *European Geriatric Medicine*, 11(4), 705–706. doi:<https://doi.org/10.1007/s41999-020-00344-9>
- Hado, E., & Friss, L. (2020). Amid the COVID-19 pandemic, meaningful communication between family caregivers and residents of long-term care facilities is imperative. *Journal of Aging & Social Policy*, 32(4–5), 410–415. doi:<https://doi.org/10.1080/08959420.2020.1765684>
- Hwang, T.-J., Rabheru, K., Peisah, C., Reichman, W., & Ikeda, M. (2020). Loneliness and social isolation during the COVID-19 pandemic. *International Psychogeriatrics*, 32(10), 1217–1220. doi:<https://doi.org/10.1017/S1041610220000988>
- Jecker, N. S. (2020). You’ve got a friend in me: Sociable robots for older adults in an age of global pandemics. *Ethics and Information Technology*, 0123456789. doi:<https://doi.org/10.1007/s10676-020-09546-y>
- Lebow, J. L. (2020). Family in the age of COVID-19. *Family Process*, 59(2), 309–312. doi:<https://doi.org/10.1111/famp.12543>

- Lloyd-Sherlock, P. G., Kalache, A., McKee, M., Derbyshire, J., Geffen, L., & Casas, F. G.-O. (2020, March). WHO must prioritise the needs of older people in its response to the covid-19 pandemic. *BMJ*, 1164, m1164. doi:<https://doi.org/10.1136/bmj.m1164>
- Malgesini, G. (2020). *The impact of COVID-19 on people experiencing poverty and vulnerability*. Retrieved from https://www.eapn.eu/wp-content/uploads/2020/07/EAPN-EAPN_REPORT_IMPACT_COVID19-4554.pdf
- Millenson, M. L. (2020). “will you hear my voice?”: To engage older patients online, listen to them about their lives offline. *Israel Journal of Health Policy Research*, 9(1), 4–6. doi:<https://doi.org/10.1186/s13584-020-00408-y>
- Miller, E. A. (2020). Protecting and improving the lives of older adults in the COVID-19 era. *Journal of Aging and Social Policy*, 32(4–5), 297–309. doi:<https://doi.org/10.1080/08959420.2020.1780104>
- Minority Rights Group International. (2020). *Report COVID-19 discrimination - Minority rights group*. Retrieved from <https://minorityrights.org/coronavirus/report-discrimination/>
- Monahan, C., Macdonald, J., Lytle, A., Apriceno, M., & Levy, S. R. (2020). COVID-19 and ageism: How positive and negative responses impact older adults and society. *American Psychologist*, 75(7), 887–896. doi:<https://doi.org/10.1037/amp0000699>
- Morrow-Howell, N., Galucia, N., & Swinford, E. (2020). Recovering from the COVID-19 pandemic: A focus on older adults. *Journal of Aging & Social Policy*, 32(4–5), 526–535. doi:<https://doi.org/10.1080/08959420.2020.1759758>
- Nicol, G. E., Piccirillo, J. F., Mulsant, B. H., & Lenze, E. J. (2020). Action at a distance: Geriatric research during a pandemic. *Journal of the American Geriatrics Society*, 68(5), 922–925. doi:<https://doi.org/10.1111/jgs.16443>
- Noone, C., McSharry, J., Smalle, M., Burns, A., Dwan, K., Devane, D., & Morrissey, E. C. (2020). Video calls for reducing social isolation and loneliness in older people: A rapid review. *Cochrane Database of Systematic Reviews*. doi:<https://doi.org/10.1002/14651858.CD013632>
- O’Caoimh, R., O’Donovan, M.R., Monahan, M.P., O’Connor, D., Buckley, C., Kilty, C., Fitzgerald, S., Hartigan, I., & Cornally, N. (2020). Psychosocial Impact of COVID-19 Nursing Home Restrictions on Visitors of Residents With Cognitive Impairment: A Cross-Sectional Study as Part of the Engaging Remotely in Care (ERIC) project. *Frontiers in psychiatry*, 11, 1115. <https://doi.org/10.3389/fpsy.2020.585373>
- Padala, P. R., Jendro, A. M., Gauss, C. H., Orr, L. C., Dean, K. T., Wilson, K. B., Padala, K. P. (2020). Participant and caregiver perspectives on clinical research during Covid-19

pandemic. *Journal of the American Geriatrics Society*, 68(6), 14–18.

doi:<https://doi.org/10.1111/jgs.16500>

Piette, J., Solway, E., Singer, D., Kirch, M., Kullgren, J., & Malani, P. (2020). *Loneliness among older adults before and during the COVID-19 pandemic | National poll on healthy aging*. Retrieved from <https://www.healthyagingpoll.org/report/loneliness-among-older-adults-and-during-covid-19-pandemic>

Port, C. L., Zimmerman, S., Williams, C. S., Dobbs, D., Preisser, J. S., & Williams, S. W. (2005). Families filling the gap: Comparing family involvement for assisted living and nursing home residents with dementia. *The Gerontologist*, 45(Supplement 1), 87–95. doi:https://doi.org/10.1093/geront/45.suppl_1.87

Powell, T., Bellin, E., & Ehrlich, A. R. (2020). Older adults and Covid-19: The most vulnerable, the hardest hit. *Hastings Center Report*, 50(3), 61–63. doi:<https://doi.org/10.1002/hast.1136>

Rolandi, E., Vaccaro, R., Abbondanza, S., Casanova, G., Pettinato, L., Colombo, M., & Guaita, A. (2020). Loneliness and social engagement in older adults based in lombardy during the covid-19 lockdown: The long-term effects of a course on social networking sites use. *International Journal of Environmental Research and Public Health*, 17(21), 1–12. doi:<https://doi.org/10.3390/ijerph17217912>

Ruopp, M. D. (2020). Overcoming the challenge of family separation from nursing home residents during COVID-19. *Journal of the American Medical Directors Association*, 21(7), 984–985. doi:<https://doi.org/10.1016/j.jamda.2020.05.022>

Sacco, G., Lléonart, S., Simon, R., Noublanche, F., & Annweiler, C. (2020). Communication technology preferences of hospitalized and institutionalized frail older adults during COVID-19 confinement: Cross-sectional survey study. *JMIR MHealth and UHealth*, 8(9), e21845. doi:<https://doi.org/10.2196/21845>

Stokes, J. E., & Patterson, S. E. (2020). Intergenerational relationships, family caregiving policy, and COVID-19 in the United States. *Journal of Aging & Social Policy*, 32(4–5), 416–424. doi:<https://doi.org/10.1080/08959420.2020.1770031>

Strang, P., Bergström, J., Martinsson, L., & Lundström, S. (2020). Dying from COVID-19: Loneliness, end-of-life discussions, and support for patients and their families in nursing homes and hospitals. A National Register Study. *Journal of Pain and Symptom Management*, 60(4), e2–e13. doi:<https://doi.org/10.1016/j.jpainsymman.2020.07.020>

Topcuoglu, N. (2020). Public health emergency of international concern: Coronavirus disease 2019 (COVID-19). *The Open Dentistry Journal*, 14(1), 71–72. doi:<https://doi.org/10.2174/1874210602014010071>

- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., ... Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467. doi:<https://doi.org/10.7326/M18-0850>
- Verbeek, H., Gerritsen, D. L., Backhaus, R., De Boer, B. S., Koopmans, R. T. C. M., & Hamers, J. P. H. (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. *Journal of the American Medical Directors Association*, 21(7), 900–904. doi:<https://doi.org/10.1016/j.jamda.2020.06.020>
- World Health Organization. (2020a). Mental health and psychosocial considerations during the COVID-19 outbreak. Retrieved from <https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf>
- World Health Organization. (2020b). *Older people and COVID-19*. Older People & COVID-19. Retrieved from <https://www.who.int/teams/social-determinants-of-health/covid-19>
- Wu, B. (2020). Social isolation and loneliness among older adults in the context of COVID-19: A global challenge. *BMC Global Health Research and Policy*, 5(1). Retrieved from <https://ghrp.biomedcentral.com/articles/10.1186/s41256-020-00154-3>
- Xie, B., Charness, N., Fingerman, K., Kaye, J., Kim, M. T., Xie, B., Kim, M. T. (2020). When going digital becomes a necessity: Ensuring older adults' needs for information, services, and social inclusion during COVID-19 when going digital becomes a necessity: Ensuring older adults' needs for information, services, and social. *Journal of Aging & Social Policy*, 32(4–5), 460–470. doi:<https://doi.org/10.1080/08959420.2020.1771237>
- 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. *Geriatrics & gerontology international*, 20(10), 938–942. <https://doi.org/10.1111/ggi.14022>
- 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. *Geriatrics & Gerontology International*, 20(10), 938–942. doi:<https://doi.org/10.1111/ggi.14022>

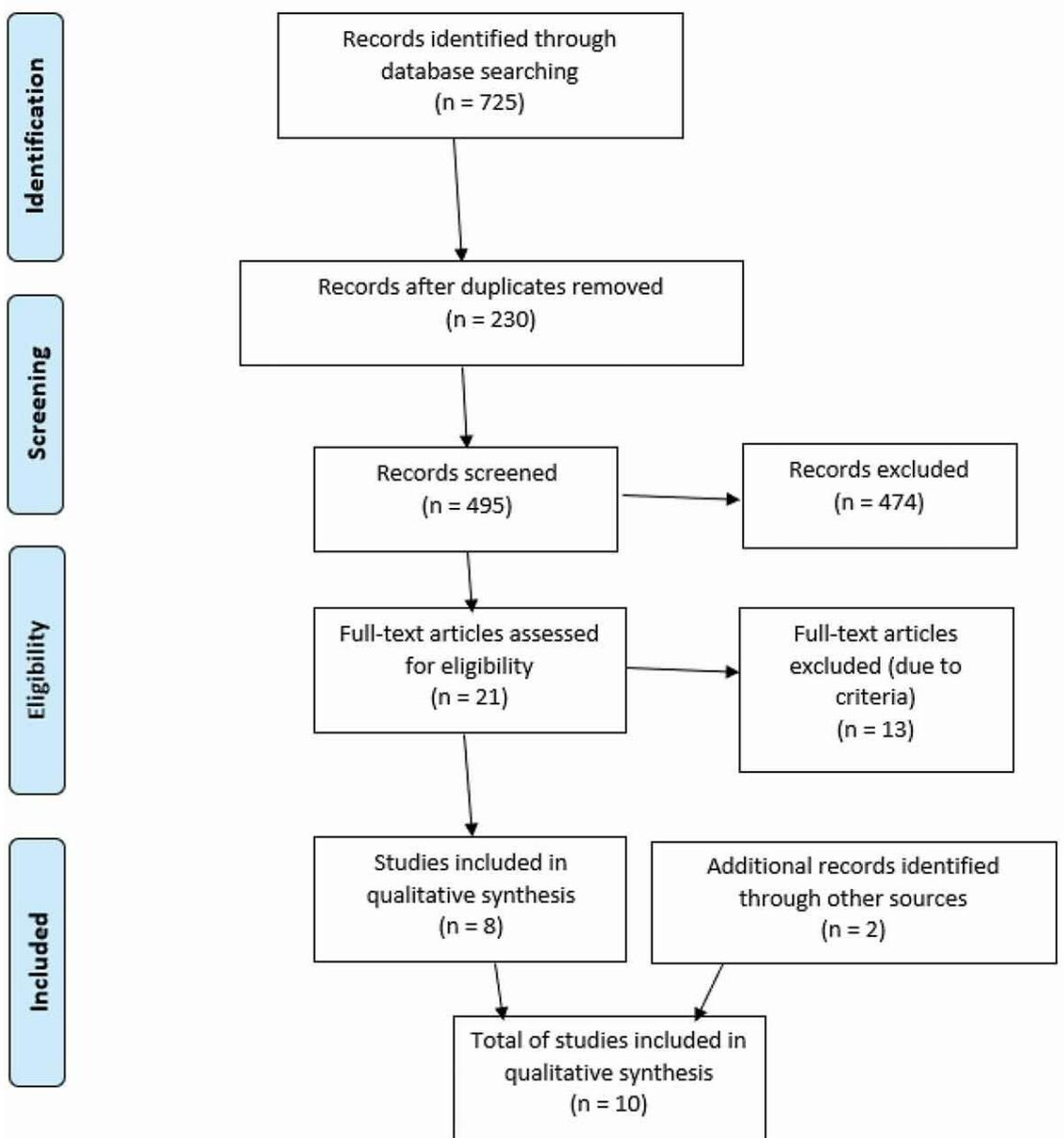


Figure 1. PRISMA flowchart of the studies selection process.