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**6th International Conference on Evidence-based Policy in Long-term Care**
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7th-10th September 2022

# ALLEVIATING SOCIAL ISOLATION AND LONELINESS AMONG CARE HOME RESIDENTS DURING THE COVID PANDEMIC:
# A SCOPING REVIEW USING THE PRINCIPLES OF A REALIST SYNTHESIS

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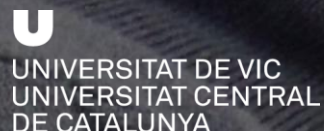
+ external advice from Adelina Comas (LSE)

# Loneliness before the pandemic

**Pre-pandemic:**

- Increase of the public awareness about loneliness and its health effects.

- Loneliness in LTC remained invisible.

- Although, loneliness among older people is more common in LTC than in the community.



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# With the pandemic loneliness increases...

- **Increases in loneliness** found in younger and **older participants.**
- **Women** were more likely to report increases in loneliness than men.

▪ Increase in loneliness and isolation in LTC.

## Loneliness Before and During the COVID-19 Pandemic: A Systematic Review With Meta-Analysis

Mareike Ernst[1], Daniel Niederer[2], Antonia M. Werner[1, 3], Sara J. Czaja[4], Christopher Mikton[5], Anthony D. Ong[4, 6], Tony Rosen[7], Elmar Brähler[1], and Manfred E. Beutel[1]

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## JAMDA

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journal homepage: www.jamda.com

### Editorial

## Loneliness and Isolation in Long-term Care and the COVID-19 Pandemic

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[a] University of Western Sydney, Sydney, Australia
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# The pandemic has increased loneliness and isolation in LTC

## Direct and Indirect Effects of COVID-19 on Long-Term Care Residents and Their Family Members

Jiska Cohen-Mansfield[a, b, c]   Guy Meschiany[b]

[a]Department of Health Promotion, School of Public Health, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel; [b]Minerva Center for the Interdisciplinary Study of End of Life, Tel Aviv University, Tel Aviv, Israel; [c]Igor Orenstein Chair for the Study of Geriatrics, Tel Aviv University, Tel Aviv, Israel
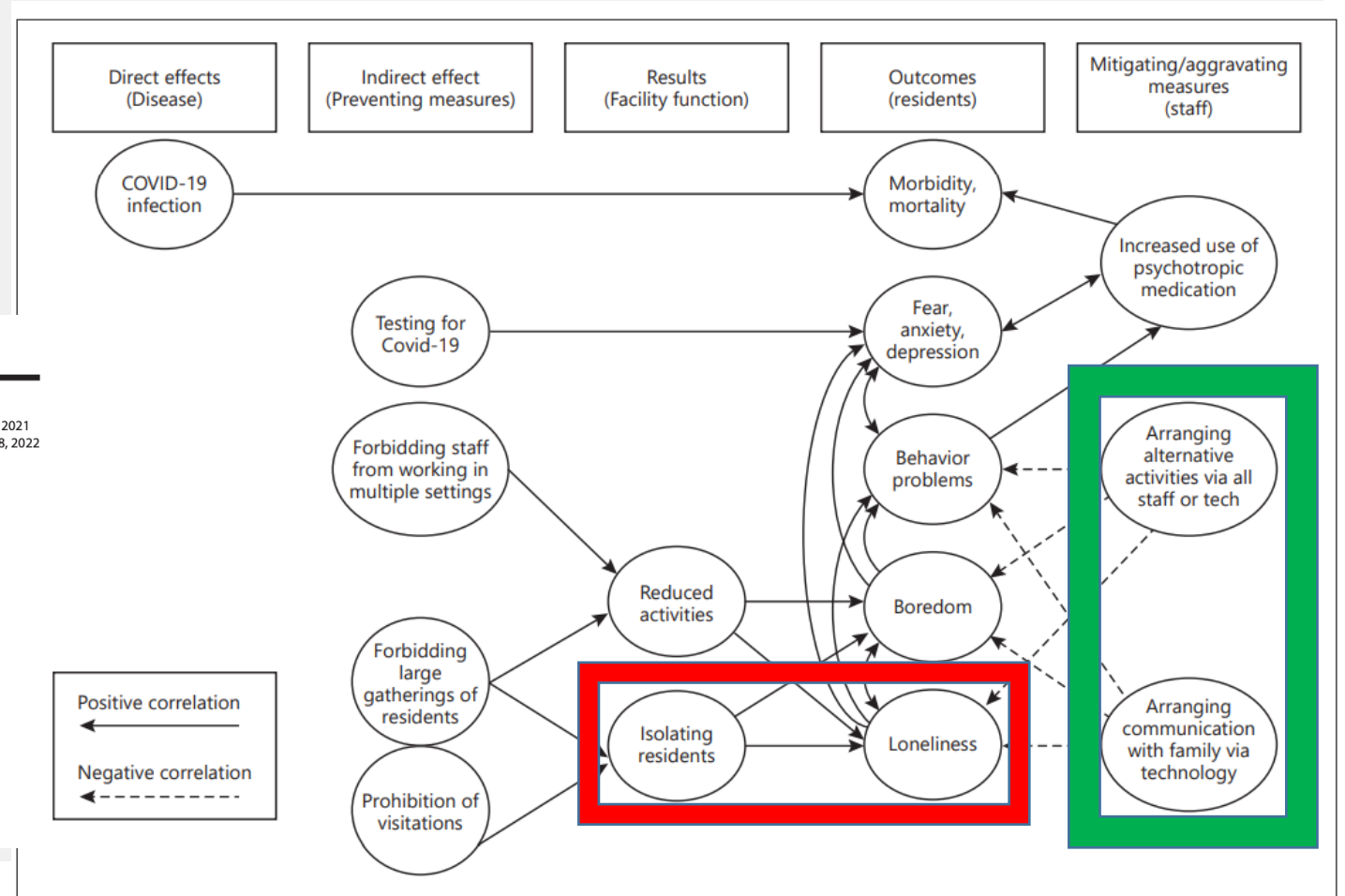


**Fig. 1.** Direct and indirect effects of COVID-19 on LTCF residents.

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# Pre-COVID knowledge on practices to alleviate loneliness in LTC

**12 strategies**, informed by studies published until 2019, that might help LTC residents, families, and staff build and maintain social connection for LTC residents.

1. Adressing **pain**.
2. Adressing **visual and hearing impairment**.
3. **Sleep** intervention.
4. **Creative expression programs**, such as art, music, and storytelling
5. **Exercise programs**: tai chi, physical activity interventions, exercise programe
6. **Religious activities**
7. Horticulture and indoor **gardening** programs
8. **Pet interactions, animal-assisted therapy and robotic animals**. *(any visits (ie, with or without pets) increased social interaction; robotic animals reported impacts on loneliness; impact of a robotic dog was similar to that of a live dog.)*
9. Regular **videoconferencing with family members**
10. **Humor therapy** and laughter therapy (using laughter and yoga breathing techniques)
11. **Reminiscence** therapy or programs
12. Examine **communication** (expressive and receptive communication specially among individuals with dementia).

Check for updates

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# Pre-COVID knowledge on practices to alleviate loneliness in LTC

**Cochrane Library**

Cochrane Database of Systematic Reviews

Search in CENTRAL, MEDLINE, PsycINFO and CINAHL from Jan-2004 to April-2020.

**Video calls for reducing social isolation and loneliness in older people: a rapid review (Review)**

Noone C, McSharry J, Smalle M, Burns A, Dwan K, Devane D, Morrissey EC

## Main results
Studies compared video call interventions to usual care in nursing homes.
Evidence was very uncertain: *video calls may result in little to no difference in scores on the UCLA Loneliness Scale.*

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# However, during the pandemic...

- Usual/known interventions to alleviate loneliness were not feasible.

- Control measures excluded families and isolated residents.

- Residents with deteriorating mental health.

- All strategies to alleviate loneliness rely on *"healthy, sustained LTC workforce".*

- *"already-strained LTC staff further challenged to provide care, including social connection, to residents".*

JAMDA, Bethell

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# Background:
## Initiatives in nursing homes against loneliness and isolation

*LTC staff implemented pragmatic innovations to alleviate loneliness in the hostile context.*

- Many professionals in long-term care have put efforts to provide quick answers adapting and re-structuring previous strategies or creating new answers to address residents' needs with very limited time and resources for this purpose in the context of the health and social crisis.

- **Several initiatives in forms of isolated actions or framed as social programmes focused on alleviating older people's loneliness or social isolation** have been put in place following a variety of strategies.

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# Aim and research question

**AIM**

We aim to understand **ways in which loneliness and social isolation could be alleviated** and the mechanisms that were expected to (or were found to) lead to these improvements among older people living in nursing homes.

**RESEARCH QUESTION**

Which **practices** aimed at increasing social connection or at preventing or alleviating social isolation or loneliness have worked on any health and wellbeing outcome for older people living in care homes and in which circumstances during the COVID pandemic?

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# Methodology: Realist Review

**Step 1: define the review scope**

A realist review starts by clarifying the scope of the review and developing initial programme theories, which provide the scaffolding for evidence synthesis.

Preliminary search (context) conduct to realist review questions

**Step 2: develop initial programme theories**

Programme theories are abstract descriptions of the content or components of interventions and how they are assumed to cause intended or observed outcomes.

Realist programme theories illustrate the **relationship between contexts, mechanisms and outcomes**.

**Step 3: evidence search**

This step will involve the identification of suitable papers to test and refine the initial programme theories selected in step 2.

Chose databases.

Search terms will be developed in discussion with the review team.

Review inclusion and exclusion criteria.

**Step 4: selection and appraisal of evidence**

Guidelines: Reporting standards for realist evaluations RAMESES
Realist And MEta-narrativeEvidence Syntheses: Evolving Standards. Wonget al.BMC Medicine, 2013

Pawson R, Greenhalgh T, Harvey G, et al. Realist review--a new method of systematic review designed for complex policy interventions. J Health Serv Res Policy 2005;10:21-34.

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# Publication of the protocol at OSF

**OSFHOME** ▾                                                    Search

ALLEVIATING SOCIAL ISOLATION AND L...    Files    Wiki    Analytics    Registrations

## ALLEVIATING SOCIAL ISOLATION AND LONELINESS AMONG CARE HOME RESIDENTS DURING THE COVID PANDEMIC: A SCOPING REVIEW USING THE PRINCIPLES OF A REALIST SYNTHESIS

Contributors: Montse Solé-Casals, Laura Coll-Planas, Adelina Comas-Herrera, Núria Gorchs-Font, Anna Ramon-Aribau

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# Realist review

**Step 1: define the review scope**

**Step 2: develop initial programme theories** ⬅

Step 3: evidence search

Step 4: selection and appraisal of evidence

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# REALIST REVIEW - Step 2: initial programme theory



Redefinition of professionals' role

Professionals

Residents

Family

Family

Volunteers

**TECHNICAL RESOURCES**
**Communication technologies**: phone, videocalls...
**Alternative visits** (windows visit, outdoor visits)
**Adapted activities**

*DISTANCE CARING*

## IMPACT

**IMPACT ON RESIDENTS:**
Reduction on loneliness, anxiety ...
Increase in wellbeing, social interaction and integration, attachment, distraction...

**IMPACT ON FAMILY:**
Reduction on anxiety ...
Increase in wellbeing and attachment

**IMPACT ON VOLUNTEERS:**
Communication skills, learning, understanding older people needs

**IMPACT ON PROFESSIONALS**
Better comumnication
Stress reduction

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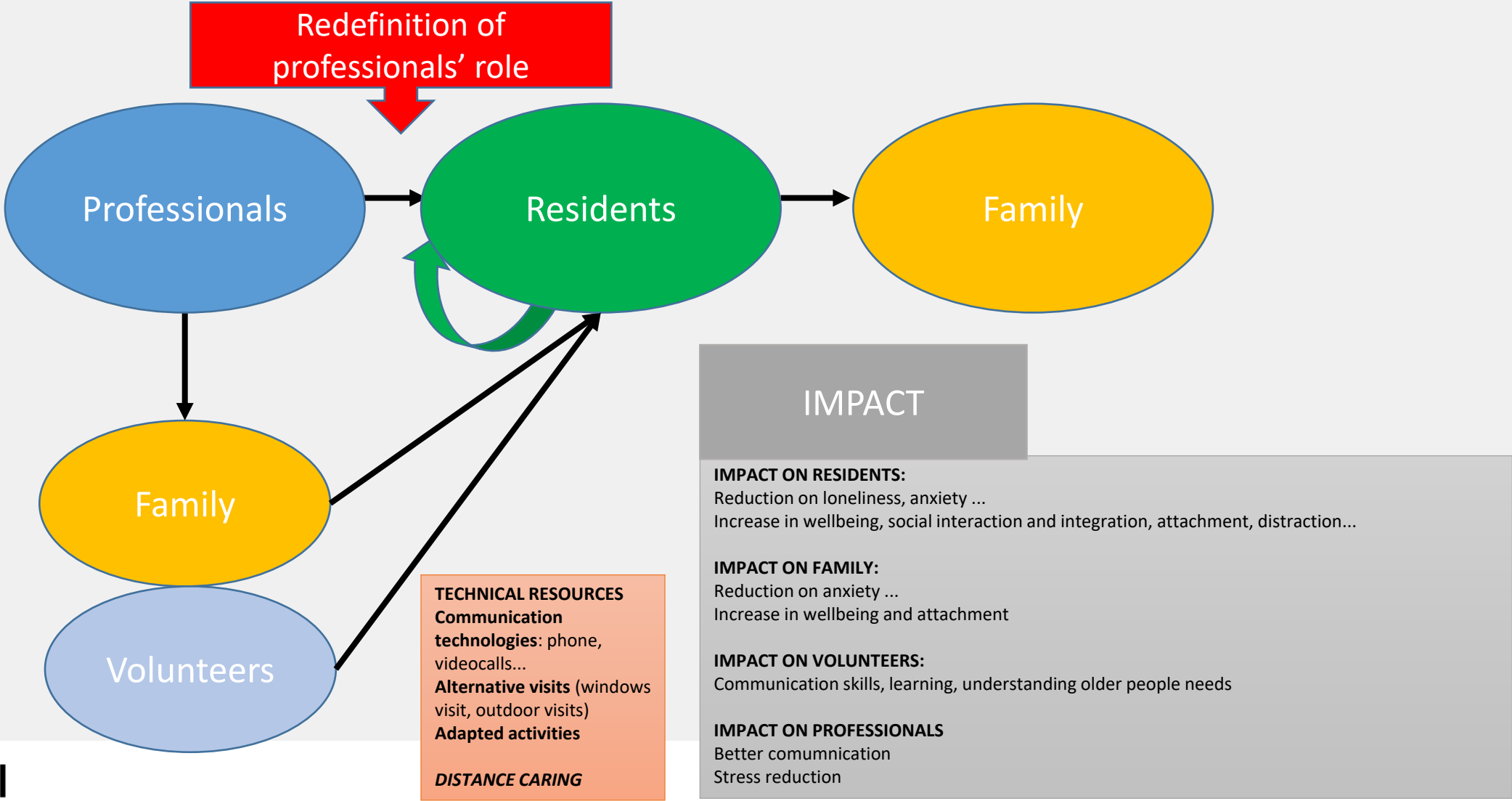UNIVERSITAT CENTRAL DE CATALUNYA

# Realist review

**Step 1: define the review scope**

**Step 2: develop initial programme theories**

Step 3: evidence search ⬅

Step 4: selection and appraisal of evidence

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# REALIST REVIEW: Step 3

Studies were identified from Byrd et al. 2020 and 2021 regarding interventions on loneliness and social isolation to:

- Check the feasibility of the review
- Define the scope
- Identify articles to be included
- Build and improve the search strategy

JOURNAL OF
LONG-TERM CARE

Byrd, W, et al. 2021. What Long-Term Care Interventions and Policy Measures Have Been Studied During the Covid-19 Pandemic? Findings from a Rapid Mapping Review of the Scientific Evidence Published During 2020. *Journal of Long-Term Care*, (2021), pp. 423–437. DOI: https://doi.org/10.31389/jltc.97

**RESEARCH**

## What Long-Term Care Interventions and Policy Measures Have Been Studied During the Covid-19 Pandemic? Findings from a Rapid Mapping Review of the Scientific Evidence Published During 2020

William Byrd, Maximilian Salcher-Konrad, Siân Smith and Adelina Comas-Herrera

Byrd, W., Salcher-Konrad, M., Smith, S., & Comas-Herrera, A. (2021). *Journal of Long-Term Care*.
Byrd, W (2022): Not yet published

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# REALIST REVIEW: Step 3 - evidence search

• **METHODS**

<u>Design:</u> Scoping review using the principles of realist synthesis.

<u>Eligibility of studies:</u>

Inclusion criteria:

•*Setting:* long-term care setting, exclusively nursing homes.

•*Population:* Nursing home residents with participants over 60 (or alternatively with a mean age over 64)

•*Study design:* Any study **describing or evaluating a programme or initiative that sought to alleviate loneliness or social isolation among nursing home residents**.

•*Outcomes:* No eligibility criteria regarding outcomes are stablished.

•*Time:* January 2020- June 2022

•*Language:* no initial language restrictions  (*English, Spanish, German, Italian, Catalan, French, Portuguese*).

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# REALIST REVIEW: Step 3

The **search strategy** combines terms related to:

      **1. Setting: nursing homes**
      **2. Context: COVID pandemic**
      **3. Target population: older people**
      **4. Intervention area: loneliness and social isolation.**

Outcomes were not pre-specified at the search algorithms.

The search strategy applied by Byrd et al. 2020 and 2021 as basis to build the search on setting, target population and COVID pandemic.
The search strategy applied by Coll-Planas et at. was taken as basis to build the search on loneliness and social isolation.
**Temporal restrictions were applied (January 2020- June 2022)** to the focus on the COVID pandemic.

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# REALIST REVIEW: Step 3

· **Results of the search strategy:**

Articles identified from Byrd et al. 2020 and 2021 (secondary analysis to refine the search):
- 7 from 2020
- 15 from 2021

Pubmed search:  9.867 <u>articles</u>

TOTAL: **30 articles included**
- 10 papers from 2020
- 16 papers from 2021
- 4 papers from 2022

Increasing number and increasing scientific robustness along time

Some shared content

Byrd, W., Salcher-Konrad, M., Smith, S., & Comas-Herrera, A. (2021). *Journal of Long-Term Care*.
Byrd, W (2022): Not yet published

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# REALIST REVIEW: Step 3

- **Results of the search strategy:**

| | |
|---|---|
| USA | 12 |
| Canada | 5 |
| UK | 3 |
| Germany | 2 |
| France | 2 |
| Italy | 1 |
| Slovenia | 1 |
| Spain | 1 |
| Autralia | 1 |
| Hong Kong | 1 |
| Taiwan | 1 |

*1 paper is multicentric:*
Canada, China, Japan, Switzerland, Brasil, USA

- Description of programmes
- Evaluation of the implementation of programmes
- Qualitative studies about programmes
- Quanitative evaluation of programmes (cross-sectional, pre-post studies and quasiexperimental designs)
- Mixed methods

Byrd, W., Salcher-Konrad, M., Smith, S., & Comas-Herrera, A. (2021). *Journal of Long-Term Care*.
Byrd, W (2022): Not yet published

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# Realist review

**Step 1: define the review scope**

**Step 2: develop initial programme theories**

Step 3: evidence search

Step 4: selection and appraisal of evidence ⬅

*preliminary results!*

*Pending search on the other bases:*
  o *Web of Science, Scopus, Cinahl and Psychinfo*

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# PRELIMINARY RESULTS (1)

- **Redefinition of staff's role**: Recreation staff were redeployed to focus on keeping family connected with LTC residents. (McArthur 2020)
- Promoting the **communication between residents and their families:**

  - Strengthening communication channels and **remote contact** (Ickert, 2020)

  - Regular phone calls and "virtual visitation" (e.g., Face Time, Skype, Zoom) (Hado, 2020)

  - Phone, phone while lookng through window at facility, video-conferencing (e.g., FaceTime, Zoom, and Skype), Internet/phone chat (e.g., texting, typing on Facebook messenger), Facebook posts, e-mail, letters directly delivered by staff, letters delivered by post, and dropping off personal items (e.g., photos, meaningful or comfort items) (Monin JK, 2020)

- **Supplying tablets and other technological resources** (McArthur 2020)
- **Alternative/adapted visit approaches:**

  - Window visits, outdoor in-person visits (Ickert, 2020)

  - Tent talks (Shanmuganathan, 2021)

- **Family support groups** and the assignment of **reference staff to each family** (Veiga-Seijo, 2022)

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# PRELIMINARY RESULTS (2)

- **Programmes based on students:**

    - **as volunteers:**

        - **telephone calls** by medical students (Office, 2020) through the Geriatrics Student Interest Group (Van Dyck, 2020)

        - mobilizing gerontological social work students to **assist staff** in long-term care facilities to maintain communication and provide social support (Hado, 2020)

    - **hired** to facilitate virtual calls and engage in one-on-one visits with residents (McArthur 2020)

- **Person-Centered Communication** Intervention During the COVID-19 Pandemic: Preferences for Activity and Leisure (PAL) Cards (including social sphere) (Abbot, 2021) and (Corpora, 2021)

- **Programme focused on health care** (Geriatric Engagement and Resource Integration in Post-Acute and Long-Term Care Facilities (GERI-PaL) program) with a subprogramme on resident social contact remote connections (Archbald-Pannone, 2020)

- **Psychological intervention** by teleconsultation with *"extra consultations to contrast the risk of isolation and to support patients strained by the long period of social restrictions, especially in the case of quarantine in the personal room"* (Renzi, 2020)

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# PRELIMINARY RESULTS (3)

- **Volunteer-based programmes:**

  - **Adopt-A-Resident Program**: send gifts and greetings (Shanmuganathan, 2021)

  - **Peer mentoring:** Java Mentorship was developed that engaged community volunteers and resident volunteers (mentors) as a team. The team met weekly, received education, and provided visits and guidance in pairs to socially disengaged residents (mentees). (Theurer, 2021)

  - **Befriending** Older Adults in Nursing Homes: Switching to Remote Befriending (Fearn 2021)

- **Activities:**

  - **Virtual Pet** via iPad to Replace Pet Therapy Visits (Jung, 2021)

  - **Digital music therapy** (Hoel, 2022)

  - **Personally meaningful activities**:

    - Personal level: religion, horticulture, games… (Ho, 2021)

    - Relationship-centered: Creative practices to enhance staff communication and teamwork (residents with residents, staff-resident-family) through technology: gaming, birthdays, new admission… (Hockley, 2021)

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# PRELIMINARY RESULTS (4)

- **Robots:**

  - Video telephony via a home care humanoid robot Temi (easy access to a digital platform for communication operated by voice control) (Follmann, 2021)

  - Social Companion Robot (Thunberg, 2021)

  - Robotic pets (Van Orden, 2021) (Folgeson, 2021)

  - Robots promoting group-based activities: *Can occupational therapy manpower be replaced with social robots (Zenbo) in a singing group during COVID-19?* (Liao, 2021)



Temi

Robotic pet

Zenbo

# PRELIMINARY RESULTS ON OUTCOMES (5)

- Some of those interventions have achieved **positive (self-reported) outcomes** in loneliness, support, mental health, social wellbeing and satisfaction.

- **Adverse events among residents** related with the technological gap and with the difficulties in communication in persons living with dementia, visual or hearing impairments.

- **Adverse events among families:** uncertainty and delay in meeting expectations, unsatisfaction, guilt and frustration.

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# DISCUSSION

1. Realist synthesis is a promising and challenging **methodology**.

2. **High variety of interventions** to (potentially) alleviate loneliness in nursing homes.

3. Practices identified are **not representative** and **not completed** of what has happened during the pandemic *(limitation!)*

4. Clearly increasing role and potential of **technology.**

    1. **Robots in nursing home:** Do they cover needs? Do they "solve" the lack of staff?

    2. Adverse effects **on residents and family** (specially among the most vulnerable profiles!)

5. Alleviation of loneliness (including facilitating communication residents-family; coordination and supervision of volunteers) requires the involvement of **nursing home professionals**.

6. Further studies are needed to **evaluate impacts** of those interventions on loneliness, social support, mental health, wellbeing ….

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THANK YOU!

*MOLTES GRÀCIES!*

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