

Social connection in residents of long-term care homes: mental health impacts and strategies during COVID-19

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“The Relationship Between Social Connectedness and Mental Health for Residents of Long-term Care Homes: Knowledge Synthesis and Mobilization”

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BACKGROUND: Social connection is an important health issue for LTC homes

SOCIAL CONNECTION¹

An umbrella term that encompasses the structural, functional, and quality aspects of how individuals connect to each other

SOCIAL NETWORK²

The web of social relationships that surround an individual and the characteristics of those ties

SOCIAL CONNECTEDNESS³

The opposite of *loneliness*, unlike other aspects of social connection, it is a *subjective* evaluation of the extent to which one has meaningful, close, and constructive relationships with others

SOCIAL SUPPORT^{1,2}

The actual or perceived availability of resources (e.g., informational, tangible, emotional) from others, typically one's social network

SOCIAL ENGAGEMENT²

Enactment of potential ties in real life activity, typically with one's social network e.g., getting together with friends, attending social functions, participating in occupational roles

BACKGROUND: Social connection is an important health issue for LTC homes

In long-term care (LTC) homes, social connection is key to:

- Resident quality of life¹
- Person-centred care²⁻⁴

Social connection is associated with better health (for everyone!)⁵ – possibly explained by:⁶

- Health-related behaviors/lifestyle
- Instrumental support
- Stress-buffering
- Biological mechanisms (e.g., chronic inflammation)

...but most research in this area is not from LTC homes

BACKGROUND: Social connection is an important health issue for LTC homes

Social connection has specific considerations for LTC homes, e.g.,

- **Residents:** mostly older adults, many with vision or hearing loss, cognitive impairment,¹ and mobility impairment which can impact social connection²
- **Families:** a range - many provide vital social support (e.g., participating in care)³ whereas some residents are “unbefriended” (incapacitated and have no surrogate decision maker)⁴
- **Staff:** provide daily support to residents
- **Homes:** communal setting (e.g., meals, group activities)
- **Communities:** community organisations and care professionals participate the life of the home

LTC residents are a population with unique needs and opportunities for building and maintaining social connection

BACKGROUND: Social connection is an important health issue for LTC homes

Limited research evidence on social connection in LTC, e.g.,:

- **Mikkelsen et al (2019):** 10 “social intervention” studies; limited and very diverse evidence, but good potential
- **Quan et al (2019):** 15 (loneliness) intervention studies in past 10 years
- **Brimelow & Wollin (2017):** 15 (loneliness or social network) intervention studies since 1995
- **Victor (2012):** “This review failed to identify compelling evidence for the effectiveness of interventions to remediate loneliness in care home populations”

METHODS: A scoping review on social connection in LTC homes

Conducted a 6-stage scoping review^{1,2}

Developed and executed a detailed search strategy:³

- MEDLINE(R) ALL, CINAHL (EBSCO), PsycINFO (Ovid), Scopus, Sociological Abstracts (Proquest), Embase and Embase Classic (Ovid), Emcare Nursing (Ovid) and AgeLine (EBSCO)
- From databases' inception to July 2019 (i.e., pre-COVID)

Included published journal articles that reported:

- Observational or intervention (randomized, non-randomized) studies
- A quantitative measure of social connection in a population of adult residents of LTC homes, nursing homes or care homes⁴

Did not conduct any critical appraisal/assessment of study quality

Study selection and data extraction conducted in duplicate

METHODS: A scoping review on social connection in LTC homes

Our team was funded by CIHR (May 2020) through Knowledge Synthesis: COVID-19 in Mental Health and Substance Use grant

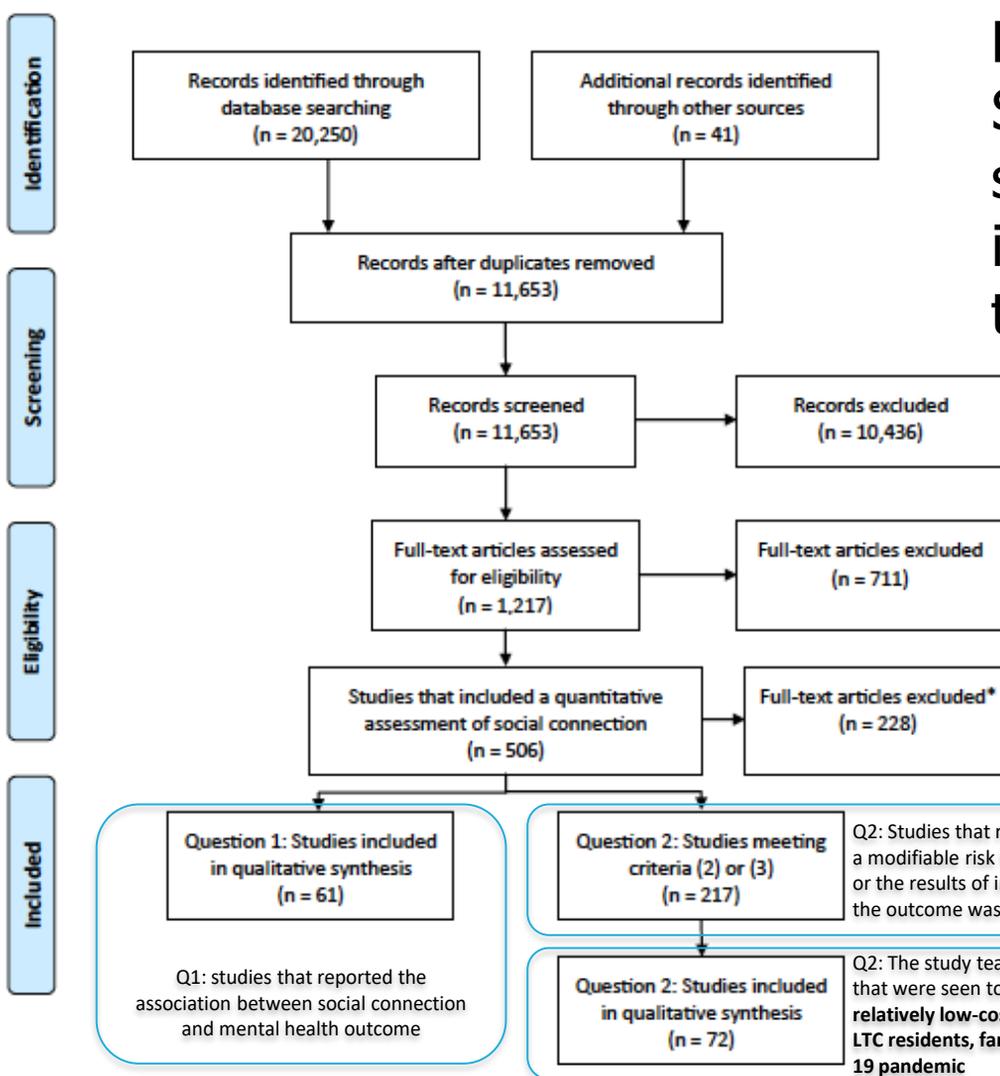
Our scoping review questions:

1. What mental health outcomes are associated with social connection for people living in LTC homes?
2. What interventions/strategies might support social connection for people living in LTC homes in the context of infectious disease outbreaks like COVID-19?

We collected examples from across Ontario, including a Behavioural Supports Ontario survey.

RESULTS:

Summary of studies included in the review



RESULTS: Summary of research studies included in the review

Table 1
Description of Published Research Articles Included in Scoping Review

Study Characteristics	Question 1 (N=61)		Question 2				Total (N=133)	
			Observational (N=23)		Intervention (N=49)			
	n	%	n	%	n	%	n	%
Year of publication								
Pre-1990	1	2	1	4	4	8	6	5
1990-1999	8	13	2	9	1	2	11	8
2000-2009	16	26	6	26	13	27	35	26
2010-2019	36	59	14	61	31	63	81	61
Region								
Asia	20	33	3	13	16	33	39	29
Europe	11	18	9	39	9	18	29	22
North America	24	39	10	43	18	37	52	39
Other/multiple	6	10	1	4	6	12	13	10
Study design								
Cross-sectional	47	77	20	87	NA	NA	67	50
Cohort	11	18	3	13	NA	NA	14	11
Other/not stated	3	5	0	0	3	6	6	5
Quasi-experimental	NA	NA	NA	NA	29	59	29	22
Randomized controlled trial	NA	NA	NA	NA	17	35	17	13
Sample size (LTC home residents)								
<100	13	21	4	17	32	65	49	37
100-249	26	43	5	22	11	22	42	32
250-499	10	16	4	17	3	6	17	13
≥500	12	20	10	43	2	4	24	18
Not stated	0	0	0	0	1	2	1	1
Aspect(s) of social connection*								
Loneliness	11	18	3	13	18	37	32	24
Social capital	1	2	0	0	0	0	1	1
Social engagement	23	38	12	52	6	12	41	31
Social interaction	6	10	1	4	10	20	17	13
Social isolation	0	0	1	4	4	8	5	4
Social network	10	16	0	0	4	8	14	11
Social participation	0	0	1	4	3	6	4	3
Social relations	0	0	5	22	8	16	13	10
Social support	26	43	1	4	7	14	34	26
Social withdrawal	1	2	2	9	1	2	4	3

NA, not applicable.

*Column percentage adds to more than 100% because some studies investigated multiple aspects of social connection.

Most published in past 10 years

Most often from United States

Often cross-sectional (observational) & quasi-exp. (intervention)

Some larger (observational) studies using health admin data. Most intervention studies were small.

Often social engagement or support (observational) or loneliness (intervention)

RESULTS: What mental health outcomes are associated with social connection for people living in LTC homes?

Mental health outcome	Number of studies reporting:	
	Mental health outcome	Positive impact of social connection*
Depression	35	28
Responsive behaviors	9	7
Mood, affect and emotions	8	7
Anxiety	3	2
Medication use	3	0
Cognitive decline	2	2
Death anxiety	2	2
Boredom	2	2
Suicidal thoughts	2	2
Psychiatric morbidity	1	1
Daily crying	1	1

*where studies report unadjusted and adjusted estimates, classified by adjusted estimates; where studies report cross-sectional and longitudinal analyses, classified by longitudinal analysis [note: some studies included multiple outcomes; total does not reflect number of studies included in review]

RESULTS: What interventions/strategies might support social connection for people living in LTC homes in the context of infectious disease outbreaks like COVID-19?¹³

- Research supplemented by Behavioural Supports Ontario (BSO) Survey: **Establishing and Maintaining Social Connections - BSO Strategies & Innovations during COVID-19**
- Practical strategies collected separated based on the 12 key themes



Manage Pain



Address vision and hearing loss



Sleep at Night, Not During the Day



Find Opportunities for Creative Expression, like Art, Music and Storytelling



Exercise



Maintain Religious and Cultural Practices



Garden, Either Indoors or Outside



Visit with Pets



Use Technology to Communicate



Laugh Together



Reminisce About Events, People and Places



Communicate Non-verbally

SOME NOTES ABOUT THE STRATEGIES

- 1) Some of these strategies are fundamental aspects of care (e.g., pain) whereas others will not all be relevant to every LTC resident, family or home (e.g., resident's needs, values, family situation and circumstances; technology capabilities and infrastructure)
- 2) These strategies rely on a healthy, sustained LTC workforce

MANAGE PAIN



Observational studies 3 (of 8)

Intervention studies 4 (of 5)

Example: Screening, monitoring and treating pain

ADDRESS VISION AND HEARING LOSS



Observational studies 8 (of 8)

Intervention studies 1 (of 1)

Example: When using videoconference, check volume and screen (clean, full-screen mode), consider noise-cancelling headsets.

SLEEP AT NIGHT, NOT DURING THE DAY

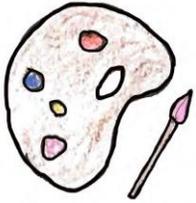


Observational studies 1 (of 2)

Intervention studies 1 (of 1)

Example: Daily sunlight and physical activity; structured bedtime; decrease nighttime noise and light

FIND OPPORTUNITIES FOR CREATIVE EXPRESSION

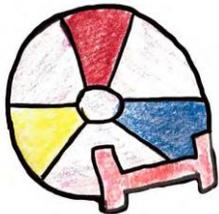


Observational studies 0 (of 0)

Intervention studies 5 (of 5)

Example: Art, music and storytelling; individualized activity kits during isolation.

EXERCISE



Observational studies 0 (of 2)

Intervention studies 3 (of 6)

Example: Using pre-recorded, freely available online videos to assist with instructing residents in one-on-one exercise (with supervision).



MAINTAIN RELIGIOUS AND CULTURAL PRACTICES



Observational studies 2 (of 3)

Intervention studies 0 (of 0)

Example: mass organized by families with families in the parking lot, residents observing from their windows; in Indigenous LTC homes, incorporating traditional wellness practices, such as residents making cedar tea; staying connected to religious community online or by phone.



Wikwemikong Nursing Home
- Making Cedar Tea

GARDEN, EITHER INDOORS OR OUTSIDE



Observational studies 0 (of 0)

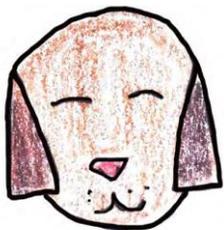
Intervention studies 3 (of 5)

Example: in-room gardening and outdoor vegetable gardens.



St. Joseph's Villa -
Windowsills

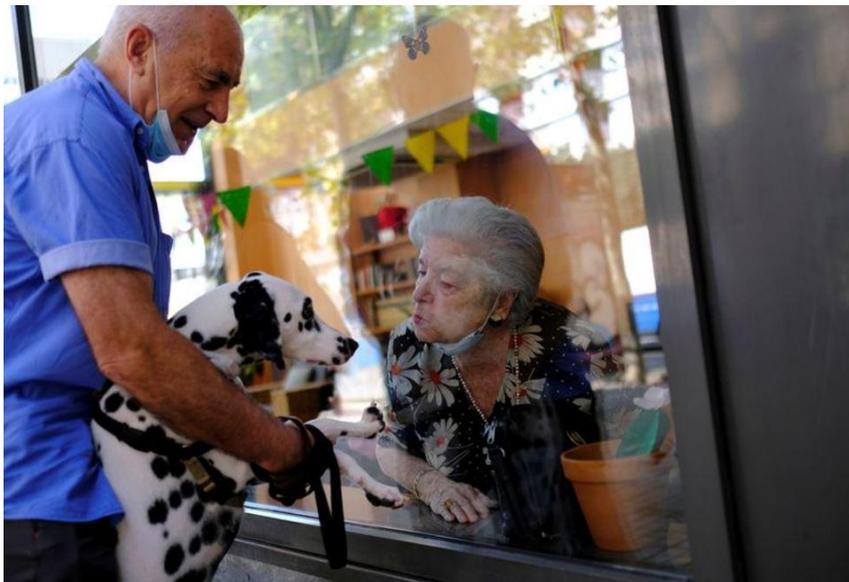
VISIT WITH PETS



Observational studies 1 (of 1)

Intervention studies 10 (of 13)

Example: window visits with family pets (and other animals, including some bigger animals) and community-based pet-therapy



Reuters, 2020

USE TECHNOLOGY TO COMMUNICATE



Observational studies	0 (of 0)
Intervention studies	2 (of 4)



Example: facilitate videocalls, mostly using tablets, with schedules and allocated time (e.g., 45-minutes) for each resident; resident forums coordinated by Ontario Association of Residents' Councils (OARC)

LAUGH TOGETHER



Observational studies	0 (of 0)
Intervention studies	1 (of 3)



OARC Resident Forum - Online Meeting

Example: hallway happy hours; games ("kissing booth", dry eraser markers) at window visits



Low et al, 2020. Australian Journal of Dementia Care, 9 (3), July/Aug/Sept 2020



REMINISCE ABOUT PEOPLE, PLACES AND EVENTS



Observational studies 0 (of 0)

Intervention studies 6 (of 7)

 Ka'nehshio Deer · CBC News · Posted: Nov 22, 2020 4:00 AM ET | Last Updated: November 22, 2020



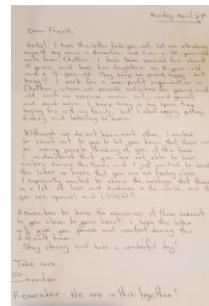
The Wikwemikong Nursing Home has been lifting the spirits of its elders during the coronavirus pandemic with many activities, including deer hunting. (Wikwemikong Nursing Home/Facebook)

ADDRESS COMMUNICATION IMPAIRMENTS, COMMUNICATE NON-VERBALLY



Observational studies 5 (of 5)

Intervention studies 0 (of 0)



Example: use communication strategies (e.g., eliminate background noise and distractions, pause and give time to speak and respond, use drawings, gestures, writing and facial expressions in addition to speech); encourage letter-writing, including friendly letter program (partnership with local Alzheimer Society).

DISCUSSION: Knowledge gaps

Most of the studies linking social connection and mental health outcomes were cross-sectional

- Is social connection a risk factor or a consequence of mental health problems?

Very few studies looking at differences across subpopulations (e.g., by sex/gender, by length of time living in the home, etc.)

- Does social connection impact residents differently? How should strategies be tailored?

Intervention studies are small, typically not randomized

- But should we expect gold standard (randomized controlled trials) in this setting?

No studies conducted in the context of a pandemic or infectious disease outbreak

- COVID is new but outbreaks are not; how should LTC homes prepare?

DISCUSSION: Study limitations

We reviewed social connection measures together (but they are different)

- We need to delineate the relationships between measures of social connection¹ and mechanisms by which any interventions/strategies might impact social connection²

We did not include studies of “social” interventions (unless the outcome was a measure of social connection)

- Understanding the impact of such interventions on mental health outcomes (e.g., responsive behaviours)³ would strengthen evidence on mental health impacts

We limited our measures of social connection to exclude “social behavior or communication” (e.g., eye contact, facial expressions, body language)

- What is the best way to measure social connection among persons with dementia?

We did not assess the quality of the studies included in our review

- We started pre-COVID (and with different intentions)

DISCUSSION: Imperfect evidence



“All scientific work is incomplete – whether it be observational or experimental. All scientific work is liable to be upset or modified by advancing knowledge. That does not confer upon us a freedom to ignore the knowledge we already have or to postpone the action that it appears to demand at a given time”

- Sir Austin Bradford Hill, 1965

SUMMING UP

What did we already know?

- Social connection is important to quality of life and care in LTC homes
- Social connection is associated with better health (but most of this research does not come from LTC homes)
- Social connection has distinct considerations for LTC homes

What does our study add?

- We summarized published research and showed good social connection is associated with better mental health for LTC residents
- We identified 12 strategies from published research that might help LTC staff, families and residents build and maintain social connection for LTC residents right now (during COVID-19) and to help plan for future disease outbreaks

NEXT STEPS: Coming soon....

- What LTC home- and community-level characteristics are associated with resident social connection?
- What physical health outcomes are associated with social connection for people living in LTC homes?

Thank you!

I 
ROCHESTER
NY

QUESTIONS?

Please contact me at: Jennifer Bethell
jennifer.bethell@uhn.ca

Or read the (open access) publication: Bethell J, Aelick K, Babineau J, Bretzlaff M, Edwards C, Gibson JL, et al. Social Connection in Long-Term Care Homes: A Scoping Review of Published Research on the Mental Health Impacts and Potential Strategies During COVID-19. J Am Med Dir Assoc. 2020 Nov 26;S1525-8610(20)30991-9. doi: 10.1016/j.jamda.2020.11.025.

You can also find the paper, report and infographic at: www.encoatteam.com (where you can request free printed copies of the infographic)

