What are effective befriending, social support, and low intensity psychosocial interventions delivered remotely to reduce social isolation and loneliness among older adults and how do they 'work'? A rapid review of systematic reviews

Citation

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Review question

What are effective befriending, social support, and low intensity psychosocial interventions delivered remotely to reduce social isolation and loneliness among older people and how do they 'work'? A rapid review of systematic reviews

Searches

To locate systematic reviews, relevant electronic sources will be searched. While this is a rapid review the literature is likely to be scattered. We will search 7 electronic databases that are health, social care, psychology and social science-related including: Applied Social Sciences Index and Abstracts (ASSIA), Emerging Sources Citation Index, Medline, PsycInfo, Social Policy and Practice (SPP), Social Sciences Citation Index and Sociological Abstracts. We will also search four systematic review-rich resources: Epistemonikos, Database of promoting health effectiveness reviews (DoPHER), NHS Evidence, and Social Systems Evidence. If capacity allows, forward citation searching and related publication searching of all included reviews will be conducted using Microsoft Academic Graph and targeted filtering in order to screen a subset of potentially relevant records that have not been identified by the other searches.

No date criteria will be imposed on when reviews were published, although due to capacity within the team the review will be limited to English language publications only.

Search strings based on a combination of free-text and database-specific terms will be developed in collaboration with our Information Scientist (CS). The search strings will be structured around the following four concepts: 1) Intervention delivery modes and broad types of interventions that enable remote delivery: technology, remote communication, telephone, helplines, self-help, bibliotherapy 2) Population: older and middle-aged populations 3) Outcomes: loneliness, social isolation, social contact 4) Study designs: systematic reviews and reviews of reviews. The search strings were informed by: previous systematic searches, notably Burchett et al. (in preparation), Dickson et al. (2019), and NICE (2018); topic knowledge of the review team; and test searches and examination of potentially-relevant reviews.

Types of study to be included

This study represents an overview of existing systematic reviews, and will synthesise evidence from multiple systematic reviews that draw on different forms of synthesis including meta-analyses, meta-syntheses and qualitative evidence syntheses, and narrative synthesis.

To help to identify studies as systematic reviews, we will draw on the Database of Abstracts of Reviews of Effects (DARE) criteria, and include studies that meet at least four of the following criteria:

1. Were inclusion/exclusion criteria reported?

2. Was the search adequate?

3. Were the included studies synthesised?

4. Was the quality of the included studies assessed?

5. Are sufficient details about the individual included studies presented?

We will not include any other reviews of reviews, but will use these to identify any additional systematic reviews as appropriate.

We will not include reviews of reviews, but any identified by our searches will be used to identify any additional systematic reviews as appropriate.

All reviews of intervention outcomes and/or implementation will be included, including qualitative syntheses of mechanisms of intervention effects. Reviews involving qualitative evidence synthesis will be integrated with quantitative evidence through the use of Intervention Component Analysis (ICA) and Qualitative Comparative Analysis (QCA).

Condition or domain being studied

This review focusses on interventions that seek to ameliorate loneliness or social isolation, or both. Here we conceptualise loneliness as a state in which there is a deficit within individuals between the desired and actual quality and quantity of social engagement and relationships, and is identified as 'the emotional response to the discrepancy between desired and available relationships' (1). Social isolation meanwhile is defined as 'having minimal quantity and

quality of structural and functional support' and can involve having social networks of low density that are not maintained through frequent engagement (2). Both are conceptually separate from living alone, the latter having limited utility as a proxy for either social isolation or loneliness (3).

Older people are more likely to be characterised by risk factors for loneliness including having poorer health, having a long-term illness or disability, living alone, and being widowed (4). During the current coronavirus crisis, millions of older people (70+) across the UK and elsewhere are advised to be particularly stringent about social distancing, and to avoid contact with those outside their household. This places older people at even higher risk of social isolation and loneliness (5). Social isolation and loneliness adversely affect quality of life, wellbeing and mental health, and are associated with physical ill health and mortality (6). However, what works to prevent or mitigate loneliness is less clear. The requirement for older people to restrict their activities during the COVID-19 pandemic has identified a need to understand how to minimise the impact of loneliness and isolation, at a distance.

A number of evidence reviews have highlighted the diverse range of interventions aimed to address and alleviate loneliness (and the consequences of loneliness) amongst older people in a variety of settings (e.g. 7). In the main, these have been face-to-face interventions, either in groups or between individuals. Given the current 'stay at home' instructions from Government, these face-to-face interventions are not possible. Much of our social contact now has to be conducted over the telephone, or through use of videoconferencing tools.

In the Voluntary and Community Sector, many existing social care services are no longer operating as they are conventionally commissioned (e.g. day services, home visits from befrienders, shopping and cleaning services) and there is a shift to providing remote support instead, often via the telephone. The new call for NHS Volunteers includes roles to make 'regular phone calls to check on people isolating at home', through GoodSAM. Whilst the public's response to calls to provide support to others isolating at home is welcome, there is a need to ensure that volunteers making phone calls are adequately trained and supported to fulfil these roles. Training and guidance is essential, to equip volunteers to support others.

Additionally, there is scope to adopt and scale-up remotely delivered low intensity structured psychosocial interventions based on established models of psychological theory and treatment (such as cognitive behaviour therapy (CBT)). The advantage of these approaches is that they might be useful in non-clinical populations who are at a high risk of developing clinical depression or 'malignant loneliness' in the context of social isolation. For such interventions to be suitable for delivery at scale and within the context of the COVID lockdown, they must be (a) effective; (b) suitable for delivery by telephone/or online, and (c) have a low requirement for training and/or no pre-existing experience as a mental health professional.

This rapid review focusses on whether befriending, social support, and low intensity psychosocial interventions (e.g. CBT and bibliotherapy) delivered remotely can work to ameliorate social isolation and/or loneliness among older people. We will also unpack how these interventions 'work' to reduce isolation and loneliness.

(1) Victor, Christina, Linda Grenade, and Duncan Boldy. "Measuring loneliness in later life: a comparison of differing measures." *Reviews in Clinical Gerontology* 15, no. 1 (2005): 63-70.

(2) Hayanga, Brenda, Dylan Kneale, and Ann Phoenix. "Understanding the friendship networks of older Black and Minority Ethnic people living in the United Kingdom." *Ageing & Society* (2020).

(3) Smith, Kimberley J., and Christina Victor. "Typologies of loneliness, living alone and social isolation, and their associations with physical and mental health." *Ageing & Society* 39, no. 8 (2019): 1709-1730.

(4) Pyle, E., & Evans, D. (2018). Loneliness-What characteristics and circumstances are associated with feeling lonely. Newport: Office for National Statistics.

(5) PHE (2020) Guidance on Social Distancing for Everyone in the UK. London: Public Health England https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people/guidance-on-social-distancing-for-everyone-in-the-uk-and-protecting-older-people-and-vulnerable-adults (Accessed April 22nd)

(6) Steptoe, A., Shankar, A., Demakakos, P. and Wardle, J., 2013. Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of Sciences*, *110*(15), pp.5797-5801.

(7) Cattan, M., White, M., Bond, J., & Learmouth, A. (2005). Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. *Ageing & Society*, 25(1), 41-67.

Participants/population

Inclusion: We use a broad definition of 'older' adults (50+) that includes people moving between middle and older ages, to capture differences in economic activity, family structures, living circumstances and health that are experienced in the later life course. Where possible, the synthesis will examine whether the effectiveness and suitability of the intervention approach differs among the younger 'older' (e.g. 50-69 years) compared with the older 'older' population (e.g. 70+ years).

Participants should be located in community settings (i.e. people's own homes including general purpose housing, sheltered housing, extra care housing, independent living facilities etc.) or in residential care settings. Where the evidence allows, we will examine whether the effectiveness of the interventions used in community-based studies differ compared to studies based in care settings.

Reviews focussed on particular groups of the population (e.g. caregivers) or sections of the population at particularly high risk of social isolation and/or loneliness (such as bereaved people or those with long term health problems) will be included provided that most of the participants meet our criteria around age. Studies included in reviews are expected to include those who are socially isolated, lonely, or who are otherwise at risk of loneliness and/or isolation.

Exclusion: Reviews focused on the use of ICT solely for educational or training purposes. We will not exclude reviews that are focused on older people with particular conditions (e.g. dementia); however, these may be examined separately in the synthesis.

Intervention(s), exposure(s)

Included reviews will examine interventions that seek to reduce levels of social isolation and/or loneliness, as a core or implicit aim. They may seek to achieve this through strengthening individuals' social contacts and social relationships (e.g. befriending) or through low intensity psychosocial interventions (e.g. internet-delivered CBT - iCBT), using remote methods and technologies.

These may be offered on a one-to-one basis through befriending or other forms of social contact and social support, or remote group-based interventions (e.g. remote book clubs). We will also consider low intensity psychosocial interventions (e.g. internet-based cognitive behavioural therapy or guided self-help). Due to the different rationale and theoretical underpinnings of these more structured interventions, reviews focussed on these interventions will be synthesised separately.

All included reviews will focus on the delivery of the intervention through remote means. This can include more traditional telephone-based interventions, as well as smartphone and online interventions. Reviews may include interventions that utilise social network or social media applications that support one-to-one interactions, or that can support group-based interactions (e.g. forms of video conferencing). Reviews that focus on models of intervention that involve any form of physical contact with those outside the household will not be included.

Included reviews must include social isolation and/or loneliness as an outcome.

For the planned Intervention Component Analysis (ICA) and Qualitative Comparative Analysis (QCA), further data extraction is planned around a subset of primary studies to enable identification of intervention mechanisms, including the type of training and support for intervention deliverers. The subset of studies included in the ICA/QCA synthesis will be based on studies from a high quality review that exhibit a high level of heterogeneity (i.e. most effective and least effective), based on an approach trialled by members of the review team previously (1).

> (1) Melendez-Torres, G. J., Sutcliffe, K., Burchett, H. E., Rees, R., Richardson, M., & Thomas, J. (2018). Weight management programmes: re-analysis of a systematic review to identify pathways to effectiveness. *Health Expectations*, *21*(3), 574-584.

Comparator(s)/control
Inclusion criteria: Reviews focussed on studies with most forms of control group (randomised and non-randomised) and those without a control group (pre-post designs) will be included; where possible the effectiveness of RCT studies will be examined separately. Reviews focussed on the implementation of interventions, including Qualitative Evidence Syntheses are also included, in order to identify potential processes and mechanisms of interest for the

Exclusion criteria: Reviews of case reports or reviews of intervention theory.

Context
Participants should be located in community settings (i.e. people's own homes including general purpose housing, sheltered housing, extra care housing, independent living facilities etc.) or in residential care settings. Where the evidence allows, we will examine whether the effectiveness of the interventions used in community-based studies differ compared to studies based in care settings. Interventions delivered to older people in hospital settings will be excluded.

Main outcome(s)
Included reviews must include social isolation and/or loneliness as an outcome.

Data on the impact of the interventions on social isolation and/or loneliness will be extracted, along with effect sizes from any statistical associations that are reported.

The Qualitative Comparative Analysis (QCA) & Intervention Component Analysis (ICA) synthesis will identify studies as un/successful on the basis of the main outcome (effect sizes for social isolation and/or loneliness), and explore intervention and contextual characteristics aligned with success including training available.

Additional outcome(s)

Secondary outcomes of interest, particularly from reviews focussed on other study designs include evidence of any adverse impacts (e.g. increase in health inequalities), and outcomes around implementation (e.g. acceptability, adherence, dosage) and/or cost-effectiveness.

Additional effects will be extracted and categorised as they emerge from the reviews.

Data extraction (selection and coding)

We will export search records to EPPI-Reviewer and begin with de-duplicating the records. Reviewers will examine, independently and in duplicate, each title and abstract for relevance and possible inclusion, having first piloted the inclusion/exclusion criteria. Other members of the broader review team will be consulted in the case of disagreements on inclusion/exclusion. For those records marked for full-text screening, we will obtain full texts for each of these records for assessment. Two reviewers will examine, independently and in duplicate, each full text for inclusion. Reasons for exclusion will be recorded and reported for both title and abstract screening and full text screening stages.

Exclusion reasons will be recorded hierarchically around whether studies are excluded due to (i) study type (not a systematic review, i.e. primary study or commentary study etc.); (ii) age group (not focussed on older people aged 50+); (iii) outcome focus (i.e. insufficient focus on social isolation and/or loneliness as an intervention objective); (iv) intervention mode (i.e. not remote or involves physical contact); (v) intervention approach (not focussed on befriending, social support, low intensity psychological interventions or related interventions); (vi) hospital setting; (vii) language (not in English). Where disagreements cannot be resolved between two reviewers, a third reviewer will be consulted.

Data extraction frameworks will be developed to code the included reviews according to key characteristics, which would build on existing research in the area, and will facilitate us when it comes to visualising the evidence. These codes will allow us to describe the type and quantity of evidence available, including:

• Lead author and team;

• Year of publication;

• Number of primary studies included in the review;

• Primary study design(s) (e.g., RCT studies, qualitative studies);

• Aims of review and main topic focus; (e.g. if focussed on social isolation/loneliness)

• Target population (e.g., if focussed on particular group e.g. bereaved older people);

• Participant characteristics (e.g., age, gender);

• Intervention approaches in primary studies (e.g., type of remote intervention);

• Synthesised outcomes/Key findings relating to Social Isolation and/or Loneliness; secondary outcomes relating to implementation and adverse effects

• Quality assessment characteristics and rating.

Labelling will help to identify priority areas for further extraction and synthesis and other labels will be added to all studies if they emerge from the data. As this is a rapid review taking place against the context of the COVID-19 pandemic, one reviewer will undertake extraction, with the findings checked by a second reviewer.

For the planned analysis of 'how' interventions work, further data extraction is planned around a subset of primary studies to enable identification of intervention mechanisms using Intervention Component Analysis (ICA) and Qualitative Comparative Analysis (QCA).

Risk of bias (quality) assessment

Included full-text studies will be retrieved and assessed for methodological quality. Included systematic reviews will be assessed for risk of bias according to AMSTAR 2 criteria (1). Use of the tool will be piloted by 2-3 reviewers to establish consistency in agreement before independent assessment. Criteria will be summed and categories of quality created (e.g., low, medium and high), if and where appropriate. GRADE-CERQual will be used to assess confidence in the findings from qualitative evidence syntheses (2).

(1) Shea, B.J., Reeves, B.C., Wells, G., Thuku, M., Hamel, C., Moran, J., Moher, D., Tugwell, P., Welch, V., Kristjansson, E. and Henry, D.A., 2017. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. *bmj*, *358*, p.j4008.
(2) Lewin, Simon, Claire Glenton, Heather Munthe-Kaas, Benedicte Carlsen, Christopher J. Colvin, Metin Gülmezoglu, Jane Noyes, Andrew Booth, Ruth Garside, and Arash Rashidian. "Using qualitative evidence in decision making for health and social interventions: an approach to assess confidence in findings from qualitative evidence syntheses (GRADE-CERQual)." *PLoS medicine* 12, no. 10 (2015).

Strategy for data synthesis

We will employ the following descriptive and synthesis methods in order to address our aims:

A. Coded reviews with their quality rating and other characteristics (as appropriate) will be mapped visually using EPPI-Mapper.
B. Rapid narrative synthesis of the results will be conducted to further understand the findings of the map, focussing on the results from high quality systematic reviews. This will involve:
   1. *First developing a preliminary understanding of the reviews by producing textual descriptions and reviews and their findings in a tabular format.*
   2. *Next we will identify key themes from the findings of high-quality reviews and develop an understanding of the topics covered and the outcomes synthesised, identifying interventions that are showing clinically significant effects.*

3. *Next we will explore relationships between themes within reviews, and explore any sub-group analyses that are reported within reviews to identify differential interventions impacts by participant characteristics (e.g. age or gender).*
4. *We will identify connections between different systematic reviews, through developing a framework for understanding different groupings and clusters of reviews. We will seek to understand similarities and differences in findings and interpretation between systematic reviews that are closely related in terms of topic area, and explore whether any of the review characteristics explain any differences. We acknowledge overlap in included studies will be a limitation and will informally consider whether there is significant overlap although the confines of a rapid review means that we will not have time to formally examine/account for overlap.*
5. *Finally, will develop a common rubric to describe these findings, which may result in the further generation/identification of themes. We will also consider the robustness of the synthesis methods and the quality of evidence in terms of its relevance to the ambitions of the review.*

C. Focussing on higher quality reviews, and effective studies within these reviews, further rapid narrative synthesis will be conducted focussing on the training materials used and implementation methods, which will be supplemented with evidence from policy documents/contacts of the OPF-PRU.

D. Focussing on selected higher quality review(s), the core components of effective interventions will be identified using Intervention Component Analysis (ICA, (1)) and Qualitative Comparative Analysis (QCA) to further understand how different interventions 'work' (EPPI-Centre, (2)); these will be based on a preliminary logic model to anchor the synthesis (3). We anticipate a range of dimensions might be important, including populations factors (who receives the intervention), the role of training, supervision, the duration of input, and the mode of delivery.

E. We will 'sense check' our findings with a small number of stakeholders experienced in delivering remote befriending and social support interventions, such as Age UK (OPF PRU/NUIG).

(1) Sutcliffe, K., Thomas, J., Stokes, G., Hinds, K. and Bangpan, M., 2015. Intervention component analysis (ICA): a pragmatic approach for identifying the critical features of complex interventions. *Systematic reviews*, 4(1), p.140.
(2) Thomas, James, Alison O'Mara-Eves, and Ginny Brunton. "Using qualitative comparative analysis (QCA) in systematic reviews of complex interventions: a worked example." *Systematic reviews* 3, no. 1 (2014): 67.
(3) Kneale, D., Thomas, J. and Harris, K., 2015. Developing and optimising the use of logic models in systematic reviews: exploring practice and good practice in the use of programme theory in reviews. *PloS one*, 10(11).

Analysis of subgroups or subsets

In most cases the synthesis will examine less structured social support and befriending interventions separately from low intensity structured psycho-social interventions.

Organisational affiliation of the review

National Institute for Health Research (NIHR) Older People and Frailty Policy Research Unit & Department of Health and Social Care Reviews Facility to support national policy development and implementation.

Review team members and their organisational affiliations

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Type and method of review
Rapid review of reviews, Narrative Synthesis, Qualitative Comparative Analysis

Conflicts of interest
None

Language
English