

insights

evidence summaries to support
social services in Scotland

preventing social isolation and loneliness in older people

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written by

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Key points

- Loneliness and isolation are common problems amongst older people in Scotland and have a profound detrimental effect on many aspects of health and wellbeing.
- Tackling loneliness and isolation is inherently preventative in terms of delaying or avoiding the need for more intensive support.
- While the evidence around which interventions are most effective in alleviating loneliness and isolation has limitations, we know that flexible support, ideally based within the community, and developed with the involvement of older people is effective. Group activities are also especially helpful.
- We can identify several aspects of promising practice, but further evaluations are necessary to identify the most effective work in this field.

Introduction

Prevention has been identified as a key aspect of Scottish public service reform. In response to the findings of the Christie Commission (2011), the Scottish Government has called for a ‘decisive shift towards prevention’¹. This Insight looks specifically at the prevention of isolation and loneliness amongst older people, with a particular focus on what practitioners in the fields of health and social care should bear in mind when working to tackle this important and growing issue.

Social isolation and loneliness

Anyone can find themselves disconnected from their community or feeling lonely and it has been shown that the experience of loneliness varies across the life course. Older people are one group at particular risk (Griffin, 2010). Estimates of the extent of the problem vary. Some studies suggest that 5 to 16% of people aged 65 and over are lonely (Luanaigh and Lawlor, 2008), and similarly, Age UK (2010) states that research shows the figure of those often or always lonely is between 6 and 13%. From research such as this we can estimate that around 10% of UK residents aged over 65 are lonely most or all of the time (Victor, 2011), with many more at risk of loneliness (Bolton, 2012). Amongst the older old, those aged over 80 years, rates of self-reported loneliness climb steeply to approximately 50% (Age UK, 2010).

There are many interpretations of loneliness in the literature. Often, studies use social isolation and loneliness interchangeably or conflate them into a single construct. However, many would argue that they are distinct, with loneliness being categorised as a subjective negative feeling, while social isolation is an objective state mediated by the presence or absence of strong social networks (Weiss, 1973; Cacioppo, Fowler and Christakis, 2009; Golden et al, 2009). A person can, therefore, have a large number of connections and still

¹ <http://www.scotland.gov.uk/about/performance/scotperforms/outcome/pubserv>

experience the subjective feeling of loneliness or, alternatively, be objectively isolated but not experience associated negative emotions.

Despite these variable definitions, evidence points clearly to a large overlap between social isolation and loneliness (Golden et al, 2009), with social isolation being one of the biggest predictors of subjective loneliness (Age UK, 2010). Importantly, both circumstances result in negative self-assessment of health and wellbeing (Luanaigh and Lawlor, 2008; Golden et al, 2009).

For older people the onset of loneliness can happen gradually, sometimes preceded by a specific life event, especially one associated with loss, such as retirement, or bereavement. Becoming a carer also increases the risk of loneliness (Victor et al, 2005; Cann and Jopling, 2011). The fact that these life transitions are more likely to happen at an older age is one reason that older people are at greater risk of loneliness and isolation. A further factor is that social networks may diminish in size due to death or illness of previous contacts, or older people may be unable to take part in previously enjoyed activities due to their own ill health (Schnittger et al, 2012). Other factors associated with loneliness and isolation in older people are low income, and older age (being 80 years old or more) (Age UK, 2010), poor health and cognitive and sensory impairment (Victor et al, 2005). A more in-depth analysis of how different factors play into the occurrence of

loneliness has been published by *The Campaign to End Loneliness* (Bolton, 2012).

Fifteen cigarettes a day?

The effects of social and emotional loneliness on physical and mental health and wellbeing are extensive. Adverse effects include increased blood pressure, abnormal stress response, heart disease and poor sleep, and its associated health problems (Luanaigh and Lawlor, 2008). Additionally, several studies indicate a strong association with depression (eg Cacioppo, Hughes and Waite, 2006; Golden et al, 2009). Older people who are lonely or isolated also have substantially increased chances of developing dementia (Fratiglioni et al, 2000) and, specifically, Alzheimer's disease (Wilson et al, 2007; Valtorta and Hanratty, 2012), compared to better-connected individuals.

A meta-analysis of all relevant studies between 1900 and 2007 (Holt-Lunstad et al, 2010) showed that older people who have unsatisfactory or limited social relationships have a significantly greater risk of mortality than people with stronger social networks. Those with good connections had a 50% greater chance of survival. This remained true when a number of different factors such as gender, age, initial health status and length of follow-up were considered, suggesting the finding is highly generalisable. The authors highlighted that this is comparable to the impact of smoking fifteen

cigarettes each day and has a greater effect on mortality than current public health priorities such as obesity, drinking alcohol or being sedentary. A further study (Steptoe et al, 2013) attempted to disentangle the effects of social isolation and loneliness on all-cause mortality. They found that while both factors were associated with increased mortality, the effect of loneliness did not independently contribute to this. The authors recommend that efforts to reduce mortality, therefore, be concentrated on ameliorating social isolation.

It is important to note that amongst older adults, both loneliness and social isolation are associated with a greater likelihood of engaging in multiple behaviours which carry a risk to health such as smoking and being inactive (Shankar et al, 2011), which in turn exacerbates the effects on health already noted.

With such large negative effects on health and wellbeing, it is unsurprising that lonely and isolated older people make greater use of health and social services than people who have sufficient satisfactory connections (Pitkala et al, 2009).

What evidence is there about what works?

Many different interventions have been implemented to attempt to reduce, either directly or indirectly, isolation and loneliness in older people. *The Campaign to End Loneliness* (Bolton, 2012) has identified the following categories:

- Information and signposting services
- Support for individuals
- Group interventions - social
- Group interventions - cultural
- Health promotion
- Wider community engagement

Research highlights wide variation in the success of such interventions in improving outcomes in terms of loneliness, health and wellbeing of older adults. This lack of certainty is further exacerbated by the fact that evidence is limited and robust evaluations are scant. All systematic reviews and meta-analyses discussed below have noted the lack of appropriate studies for inclusion and the methodological weaknesses of those that are available, and this should be borne in mind. Nevertheless, this evidence

represents the best currently available on the topic and taken together yields lessons for practice.

Findlay's (2003) review suggests that along with interventions such as group support and other methods of social network enhancement, interventions that connect people with appropriate services are successful in reducing loneliness. He also highlights the importance of training and support of facilitators and co-ordinators. To increase the likelihood of success, he advocates including older people in all stages of the development and implementation of interventions and also using community resources to build community capacity. In this he is unique amongst the reviews available, but this strongly chimes with current thinking in Scotland around participation and co-production.

A systematic review by Catton and colleagues (2005) identifies several characteristics of effective interventions. They found that educational or social group interventions, targeted at a specific group with characteristics in common, had the greatest positive effects on reduction of loneliness. Allowing the participants some level of control over the content of the intervention was also associated with positive outcomes. This review found that one-to-one interventions in the participant's own home were consistently ineffective in reducing loneliness. However, of the 11 interventions that were identified in this category, only two were specifically designed to provide social support (and one of

these was judged to be effective). Additionally, the authors state that volunteers who are 'like' the recipient of the service and with whom a reciprocal relationship can be built, have been identified as important aspects of successful social support and none of the one-to-one services evaluated had these characteristics. The finding of a lack of effectiveness of one-to-one supports should, therefore, be treated with caution.

Greaves and Farbus (2006) further highlight the importance of active (eg the development of meaningful social roles and community engagement) rather than passive social contact (eg home visiting) in reducing loneliness amongst older people.

The ineffectiveness of one-to-one interventions is contradicted in other studies. Cattan, Kime and Bagnall (2011) conducted a series of in-depth interviews of recipients of a national telephone befriending scheme for lonely and isolated older

“One study showed that taking part in social group interventions including art activities, group exercise and therapeutic writing increased older people's subjective health and significantly reduced mortality”

people. Their responses were overwhelmingly positive and included the perception of being less lonely. Cattan et al (2011) speculate that these beneficial outcomes could lead to increased participation and improved social networks, but, although plausible, this is not directly supported by the evidence. A further national telephone intervention, which shows potential to improve outcomes for lonely or isolated older people, is The Silver Line (www.thesilverline.org.uk), a free confidential national helpline launched in late 2013. This helpline not only offers regular befriending calls, but also provides friendly help and advice and links callers into local groups and services. The service currently being provided follows a pilot phase, which was evaluated qualitatively. This evaluation found that while the service was valued by the older people, who found it increased their confidence and wellbeing in the short term, they also identified limitations such as a need for face-to-face contact which could not be addressed by this sort of service, a need for greater flexibility in the timing of regular befriending calls and a need for the service to have greater knowledge of support available locally (Callan, 2013). As a result of the evaluation some improvements were made to The Silver Line before its national launch and it will be useful to track further evaluations of this initiative as they become available.

Windle and colleagues (2011) also conclude that certain one-to-one activities, such as befriending and Wayfinders or Community Navigator services (which link people to appropriate community interventions, either directly or through the provision of information) are effective in reducing loneliness. They also note that befriending additionally reduced depressive symptoms (which, as we have seen, are strongly linked to social isolation and loneliness) by a small but significant margin.

As Windle and colleagues (2011) noted, community mentoring is another intervention with mixed evidence of success. In this type of intervention socially isolated older people are mentored to facilitate their participation in individually tailored activities, with support withdrawn over time. Early qualitative work suggested that this improved the participants' social support and various other measures of health and wellbeing (Greaves and Farbus, 2006), whereas a later more methodologically rigorous study found no such improvements (Dickens et al, 2011b).

One study (Pitkala et al, 2009) showed that taking part in social group interventions including art activities, group exercise and therapeutic writing increased older people's subjective health and significantly reduced mortality over a two year period (97% survival) compared to a control group who received traditional community care (90% survival). The intervention group also used

fewer health care services in the follow up period compared to the control group. The savings from this exceeded the cost of the intervention. The group self-selected which activity they wanted to take part in. Interestingly, this paper charts the group's progression as the participants became more comfortable with each other and their participation improved their sense of mastery and self-esteem. The authors attribute this to the practitioners using facilitative processes such as peer-support and the practitioners actively avoiding becoming leaders rather than supporters. Further evidence of the success of this approach is that nearly half of the original groups (6 out of 15) continued to meet on their own after the study finished. However, it is important to note that this study excluded older people who had disabilities such as blindness, deafness or severe mobility issues. This was done to ensure the groups were more homogenous, but certainly introduces bias into the sample and would raise issues about replicability in a whole community setting.

A recent systematic review (Dickens et al, 2011a) of a wide range of interventions looked at beneficial effects in one or more domains (social, mental and physical health). Positive effects were, again, more often found with group rather than one-to-one activities. Echoing Farbus and Greaves (2006) above, participatory interventions which required active input from the older person (though not necessarily face-to-face) were more beneficial

than interventions where the person was a passive recipient of a service or training/education. Social activities were also more likely to be beneficial, as were interventions that had a clear theoretical base. As with previous reviews, many of the studies included had methodological shortcomings. Additionally, only 12 out of the 32 studies included were explicitly targeted at people who were lonely or isolated, with the remaining studies presuming that the participants were in this situation due to other factors.

The only available meta-analysis of interventions to reduce loneliness (which pooled together the data from all the studies included, rather than reviewed each one individually) (Masi et al, 2011) found that changing how people think about or approach social situations (eg increased surveillance of social threats, negative social expectations, behaving in ways that confirm such expectations) has greater success in reducing loneliness than interventions designed to increase social support or opportunities for social interaction. Nevertheless, both the latter types of intervention also showed significant, though smaller, reductions in loneliness, and the authors acknowledge that the most successful intervention may well be determined by the unique characteristics and circumstances of the person being supported. One strong conclusion from this meta-analysis was that it did not support the use of technology as a means of ameliorating loneliness, a finding which is echoed by Windle and colleagues

(2011). It should also be noted that this meta-analysis was concerned with loneliness in all adults and not restricted to older people.

A potentially crucial point from the literature is that most interventions evaluated look at social support provided by strangers. It is, therefore, not possible to draw conclusions about the effects of reconnecting people into naturally occurring support or communities (Holt-Lunstad et al, 2010). This is supported by other research, which notes that while older people emphasise the importance of family and preserving existing relationships, sometimes services focus more on the need to meet new people and create new connections (Lee, 2006).

It is also important to remember that the above evidence represents what can be drawn from evaluated studies of interventions designed to reduce social isolation and loneliness. However, as Age UK point out in their 2010 evidence review, there are large numbers of schemes running in the UK such as befriending initiatives, lunch clubs, arts and cultural clubs and more innovative initiatives such as time-banking, which may well be achieving significant successes in this area, but there simply is not enough evidence at this point to confirm it.

In summary, the following characteristics are most widely agreed on as being part of successful interventions:

- Older people are active participants rather than passive recipients
- Older people are involved in the planning and implementation of support
- Support is flexible and adaptable to the needs of the participants
- Support consists of group activities, particularly those with a defined goal
- Support is rooted in the community
- The intervention has a theoretical basis

There is less supportive evidence around one-to-one interventions and those involving the use of technology; however, the majority of researchers recommend further investigation into these areas rather than dismissing them as potential interventions.

Is this prevention?

It is possible to argue that the interventions described above are aimed at tackling loneliness and isolation after they have occurred and that this is, perhaps, reactive rather than preventative. While there are various definitions of prevention, most would agree that the first level of prevention ('primary' or 'upstream') involves preventing harm before it occurs, maintaining good health, independence and wellbeing and tackling the causes rather than the symptoms of problems (eg Coote, 2012). Thus, while loneliness and social isolation, in themselves, are rarely cause for the intervention of agencies like social services, as we have seen in the previous sections, their effects certainly are. Therefore, tackling isolation and loneliness in older people (at as early a stage as possible) sits squarely within the preventative agenda, relating to the causes of poor health and wellbeing rather than the symptoms. That said, it is possible to intervene further upstream by increasing screening for and responding to the risk factors associated with loneliness.

What can practitioners in health and social care do?

While we should not underestimate the cultural change involved in moving towards a more preventative way of working and the time this may take, there are a number of implications for practice that can be distilled from the evidence. Careful analysis of the research around characteristics of successful interventions sheds light on what practitioners in the fields of health and social care can do to increase impact and success of the support they provide to older people who are, or who are at risk of becoming, isolated and lonely.

Be aware of the issue

Throughout, this review has shown both how common and how detrimental loneliness and social isolation can be amongst older people. It is crucial that people working in health and social care are aware of the issue and its potential consequences and remain alert to the key risk and precipitating factors when interacting with older people. For example, research indicates that widowhood is one of the biggest predictors of loneliness in older people (Luanaigh and Lawlor, 2008; Golden et al, 2009), so it is likely to be worth assessing loneliness in bereaved older people. As discussed above, other key factors associated with loneliness and social isolation include living alone, a lack of

economic resources, less education, having poorer perceived health, limiting long-standing illnesses and not seeing family and friends as often as desired (Losada et al, 2012; Steptoe et al, 2013). It is particularly important for health professionals to be aware of the strong relationship between loneliness and depression in the case of older patients presenting with the latter (Cacioppo et al, 2006).

Be aware the range of supports available and let others know about the support you provide

The evidence indicates that building community capacity, using existing community resources and making sure that older people are linked in to these can assist in tackling loneliness and isolation of older people (Findlay, 2003; Windle et al, 2011). To be able to do this effectively, practitioners must ensure that they are aware of what is available in the community for older people and connect them with appropriate resources. It is also important that practitioners ensure that others are aware of the support that they can offer so that referrals are made by agencies such as GPs and social work. Potentially this points to the need for a role which links together information about local supports, capacity and resources, and consideration should be given to this need and the form it would take.

Involve older people in the planning of services

Much research (eg Wilson, 2003; Catton et al, 2005) has shown that the involvement of older people in planning and implementing services and support increases its effectiveness in reducing loneliness and isolation. This fits very neatly into the current policy discourse around co-production, working towards individual outcomes and promoting self-directed support, which lends further weight to the need for practitioners to embrace these ways of working.

While the focus of this Insight is on what practitioners can do to support older people to avoid or reduce loneliness, other work has concentrated on what communities, groups and individuals can do to reduce loneliness in their neighbourhoods. The Loneliness Resource Pack (www.jrf.org.uk/publications/loneliness-resource-pack) is the result of a three-year action research project undertaken by the Joseph Rowntree Foundation (Robbins and Allen, 2013). It contains a number of documents with helpful tips and guidance on what people can do to help themselves and their communities. Practitioners may want to refer to this for suggestions or signpost older people to it, so that they can consider the recommendations for themselves.

Be adaptable

Windle and colleagues (2011) report that where constructive criticism was given by older people receiving services, they were looking for less rigidity and greater adaptability of the interventions. This included being able to change the day their befriender visited (Butler, 2006), and ensuring that mentoring was tailored to their individual needs and interests (Greaves and Farbus, 2006). This is related to the above point about involvement, and further highlights the need for practitioners to be flexible about the support they provide wherever possible.

Understand personal differences and preferences

Following on from the previous points is the need to understand personal differences and preferences. As Masi and colleagues (2013) acknowledge in their meta-analysis, unique personal circumstances may well affect what intervention will be most successful. Additionally, as we've seen, several authors advocate participants selecting which programme of activities they wish to join as a key aspect for improved outcomes (Cattan et al, 2005; Pitkala et al, 2009). Part of this is undoubtedly because such groups then consist of members with similar interests and are naturally more cohesive.

It is also important to note that while goal-oriented group activities and social cognition work have been shown to have positive effects on reducing loneliness and isolation, this may not suit every older person. Some older people may be restricted in their ability to attend group sessions or may prefer one-to-one activities. For these individuals such interventions are worth considering despite the weaker evidence of their effectiveness (Cattan et al, 2011; Windle et al, 2011).

Enhancing personal independence rather than providing a service

Ideally, services that focus on primary prevention would provide a 'helping hand' at critical times, which would allow people to get back on their feet and avoid or delay further intervention by statutory services. Some of the success of the interventions described, especially in terms of older people becoming empowered, having increased self-esteem and a feeling of being in control of their own lives, has been attributed to the practitioners' abilities to remain in a facilitative rather than leadership role. This helped to ensure that the group members relied on themselves and each other to problem solve and provide support. This can also contribute to groups becoming self-sufficient and able to continue without input from practitioners (Pitkala et al, 2009). Sometimes this can involve practitioners remaining at arms length.

The issue of transport

Many of the evaluated interventions have provided transport and the activities have been free of charge (eg Pitkalas et al, 2009). However, this provision, while enabling people to attend does run contrary to some of the principles outlined around encouraging independence and providing support that is sustainable when the practitioner (ideally) withdraws. Clearly this is a judgement call that practitioners need to make based on their knowledge of the people they are working with and the type of community they work within (eg transport provision may be more necessary to allow participation in a rural community).

Workforce development

There is a need for workforce training and development to support practitioners to embrace these recommendations. Training which includes the risk factors for loneliness and isolation and their consequences should be provided. This would sit alongside other workforce development initiatives to support practitioners to adopt approaches based on co-production and on promoting person-centred support. While some of these development needs are already underpinned by existing frameworks such as the Continuous Learning Framework (Donnelley, 2008), further tailored training around the issues outlined in this Insight would be welcome.

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Document your successes

As discussed in previous sections, while there is some evidence about what works to achieve better outcomes for older people facing isolation and loneliness, the evidence in this area has limitations both in quantity and quality. Increasing our understanding of what is effective in this crucial area is very important. To do this, people working in this field need to record, highlight and share their successes.

References

Age UK (2010) *Loneliness and isolation evidence review*, London: Age UK

Bolton M (2012) *Loneliness - the state we're in: A report of evidence compiled for the Campaign to End Loneliness*, Oxfordshire: Age UK

Butler SS (2006) Evaluating the Senior Companion Programme: A mixed method approach, *Journal of Gerontological Social Work*, 47 (1-2), 45-70

Cacioppo JT, Hughes ME and Waite LJ (2006) Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses, *Psychology and Aging*, 21(1), 140-151 http://psychology.uchicago.edu/Cacioppo_Loneliness&DepressiveSymptoms_Psych&Aging_2006.pdf

Cacioppo JT, Fowler JH and Christakis NA (2009) Alone in the crowd: The structure and spread of loneliness in a large social network, *Journal of Personality and Social Psychology*, 97, 977-991

Callan S (2013) *When I get off the phone I feel like a member of the human race: Evaluation of the Silver Line helpline pilots*, London: Centre for Social Justice http://www.thesilverline.org.uk/wp-content/uploads/2013/11/Evaluation-of-The-Silver-Line-Helpline-pilot-When-I-get-off-the-phone-I-feel-like-I-belong-to-the-human-race_.pdf

Campaign to End Loneliness (2012) *Loneliness and isolation, a toolkit for health and wellbeing boards*. Available at <http://campaigntoendloneliness.org/toolkit/>

Cann P and Jopling K (2011) *The challenge. Safeguarding the convoy: A call to action from the Campaign to End Loneliness*, Oxfordshire: Age UK <http://campaigntoendloneliness.org.uk/wp-content/uploads/downloads/2011/07/safeguarding-the-convoy-a-call-to-action-from-the-campaign-to-end-loneliness.pdf>

Cattan M, Kime N and Bagnall A-M (2011) The use of telephone befriending in low level support for socially isolated older people – an evaluation, *Health & Social Care in the Community*, 19 (2), 198-206

Cattan M, White M, Bond J, et al (2005) Preventing social isolation and loneliness among older people: A systematic review of health promotion activities, *Ageing and Society*, 25, 41-67

Christie C (2011) *Commission on the future delivery of public services*, Edinburgh: Scottish Government <http://www.scotland.gov.uk/publications/2011/06/27154527/18>

Coote A (2012) *The wisdom of prevention: long-term planning, upstream investment and early action to prevent harm*, London: New Economics Foundation http://s.bsd.net/nefoundation/default/page/file/b8278023a5b025649f_5zm6i2btg.pdf

Database of Abstracts of Reviews of Effects (DARE) (2006) *Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions*, York: Centre for Reviews and Dissemination http://www.crd.york.ac.uk/CRDWeb/ShowRecord.asp?View=Full&ID=12005008193#.Ut-sp_bFKNc

Dickens AP, Richards SH, Greaves CJ, et al (2011a) Interventions targeting social isolation in older people: A systematic review, *BMC Public Health*, 11, 647 <http://www.biomedcentral.com/1471-2458/11/647/>

Dickens AP, Richards SH, Hawton A, et al (2011b) An evaluation of the effectiveness of a community mentoring service for socially isolated older people: A controlled trial, *BMC Public Health*, 11, 218 <http://www.biomedcentral.com/1471-2458/11/218/>

Donnelley RR (2008) *The framework for continuous learning in social services*, Dundee: SSSC

Findlay A (2003) Interventions to reduce social isolation in older people: Where is the evidence? *Ageing and society*, 23, 647-658 http://www.iscet.pt/sites/default/files/obsolidao/interventions_reduce_social_isolation_among_older_people_evidence.pdf

Fratiglioni L, Wang HX, Ericsson K, et al (2000) Influence of social network on occurrence of dementia: A community-based longitudinal study, *Lancet*, 355, 1315-1319

Golden J, Conroy RM, Bruce I, et al (2009) Loneliness, social supports, mood and wellbeing in community-dwelling elderly, *International Journal of Geriatric Psychiatry*, 24, 694-700

Greaves CJ and Farbus L (2006) Effects of creative and social activity on the health and wellbeing of socially isolated older people: Outcomes from a multi-method observational study, *The Journal of the Royal Society for the Promotion of Health*, 126(3), 133-142

Griffin J (2010) *The lonely society?* London: Mental Health Foundation http://s.bsd.net/nefoundation/default/page/file/b8278023a5b025649f_5zm6i2btg.pdf

Holt-Lunstad J, Smith TB and Layton JB (2010) Social Relationships and Mortality Risk: A Meta-analytic Review. *PLoS Med* 7(7) e000316 <http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000316>

Lee M (2006) *Promoting mental health and wellbeing in later life*, London: Age Concern and the Mental Health Foundation

Losada A, Marquez-Gonzales M, Garcia-Otez L, et al (2012) Loneliness and mental health in a representative sample of community-dwelling Spanish older adults, *The Journal of Psychology: Interdisciplinary and Applied*, 146(3), 277-292

Lunaigh C and Lawlor BA (2008) Loneliness and the health of older people, *International Journal of Geriatric Psychiatry*, 23, 1213-1221

Masi CM, Chen H-Y, Hawkey LC, et al (2011) A meta-analysis of interventions to reduce loneliness, *Personality and Social Psychology Review*, 15(3), 219-266 <http://psychology.uchicago.edu/people/faculty/cacioppo/2011-mchc.pdf>

Pitkala KH, Routasalo P, Kautiainen H, et al (2009) Effects of psychosocial group rehabilitation on health, use of health care services, and mortality of older persons suffering from loneliness: A randomized controlled trial. *Journal of Gerontology: Series A*, 64(7), 792-800

Robbins T and Allen S (2013) *The Loneliness Resource Pack*, York: Joseph Rowntree Foundation <http://www.jrf.org.uk/publications/loneliness-resource-pack>

Schnittger RIB, Wherton J, Prendergast D, et al (2012) Risk factors and mediating pathways of loneliness and social support in community-dwelling older adults, *Ageing and Mental Health*, 16(3), 335-346

Shankar A, McMunn A, Banks J, et al (2011) Loneliness, social isolation, and behavioural and biological health indicators in older adults, *Health Psychology*, 30(4), 377-385

Stepoe A, Shankar A, Demakakos P, et al (2013) Social isolation, loneliness and all-cause mortality in older men and women, *PNAS*, 10(15), 5797-5801 <http://www.pnas.org/content/early/2013/03/19/1219686110.full.pdf+html>

Valtorta N and Hanratty B (2012) Loneliness, isolation and the health of older adults: Do we need a research agenda? *Journal of the Royal Society of Medicine*, 105, 518-522

Victor C (2011) *Loneliness in old age: the UK perspective. Safeguarding the convoy: a call to action from the Campaign to End Loneliness*. Oxfordshire: Age UK

Victor CD, Scrambler SJ, Bowling A, et al (2005) The prevalence of and risk factors for loneliness in later life: A survey of older people in Great Britain, *Ageing and Society*, 25, 357-375

Weiss RS (1973) *Loneliness: The experience of emotional and social isolation*, Cambridge, MA: MIT Press

Wilson RS, Krueger KR, Arnold SE, et al (2007) Loneliness and risk of Alzheimer Disease, *Archives of General Psychiatry*, 64, 234-240

Windle K, Francis J and Coomber C (2011) *Research Briefing 39: Preventing loneliness and social isolation: Interventions and outcomes*, London: SCIE <http://www.scie.org.uk/publications/briefings/briefing39/>

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