

Abstracts from

Thus let me live, unseen, unknown;
Thus unlamented let me die;
Steal from the world, and not a stone
Tell where I lie.

Preventing loneliness and social isolation: interventions and outcomes: **By Karen Windle, Jennifer Francis and Caroline Coomber** SCIE paper 39 October 2011.

Key Messages

- Older people are particularly vulnerable to social isolation or loneliness owing to loss of friends and family, mobility or income.
- Social isolation and loneliness impact upon individuals' quality of life and wellbeing, adversely affecting health and increasing their use of health and social care services
- People who use befriending or Community Navigator services reported that they were less lonely and socially isolated following the intervention
- Users report high satisfaction with services, benefiting from such interventions by increasing their social interaction and community involvement, taking up or going back to hobbies and participating in wider community activities.

Prevention is broadly defined to include a wide range of services that:

- promote independence
- prevent or delay the deterioration of wellbeing resulting from ageing, illness or disability
- delay the need for more costly and intensive

Definitions

'Loneliness' was reported as being a subjective, negative feeling associated with loss (e.g. loss of a partner or children relocating), 'social isolation' was described as imposed isolation from normal social networks caused by loss of mobility or deteriorating health.

Those aged 60 and above currently account for approximately 20 per cent of the population and this proportion is expected to rise to 24 per cent by 2030.⁸ In the next 20 years, the population of those aged over 80 will treble and those over 90 will double.⁹ In exploring prevalence, it is estimated that across the present population aged 65 and over, between 5 and 16 per cent report loneliness,¹⁰ while 12 per cent feel socially isolated.⁹ In looking at the experiences of a nationally representative sample, Victor et al¹¹ found that 2 per cent of individuals reported that they were 'always lonely', 5 per cent that they were 'often lonely' and 31 per cent rated themselves as 'sometimes lonely'. Such figures are likely to expand with increasing family dispersal and growing numbers of older people and the 'older-old' – those aged 80 and over.¹²

A recent meta-analysis found that people with stronger social relationships had a 50 per cent increased likelihood of survival than those with weaker social relationships.

This would mean that by the time half of a hypothetical sample of 100 people had died, there would be five more people alive with stronger social relationships.¹⁹ As the authors argue, the influence of social relationships on the risk of death are *comparable with* well-established risk factors for mortality such as smoking and alcohol consumption and *exceed* the influence of physical activity and obesity.¹⁹

Impact Headings To be used for map

- mitigating loneliness will improve quality of life
- limiting dependence on more costly intensive services
- Reducing social isolation enables a possible 'harnessing' of potential contribution to the community through, for example volunteering²²⁻²⁴ and caring responsibilities.

Abstract from Building Community capacity; making an economic case M Knapp September 2010

Many potential benefits have been mooted, but our modelling to date has concentrated on the effects that befriending services can have on the mental well-being of older people, and hence on their use of health services. Drawing on information on a number of befriending schemes, a typical service would cost about £80 per older person, compared to savings of about £35 in the first year because of the reduced need for treatment and support for mental health needs. There could well be savings in future years too. If we then also look at quality of life improvements as a result of better mental health – using evidence from some of the POPPs pilots – their monetary value would be around £300 per person per year

Effects of befriending on depressive symptoms and distress: systematic review and meta-analysis
Nicola Mead, Helen Lester, Carolyn Chew-Graham, Linda Gask and Peter Bower

The British Journal of Psychiatry (2010) 196, 96–101. doi: 10.1192/bjp.bp.109.064089

Provision of emotional support through befriending in the National Health Service (NHS) could therefore have many advantages for individuals, mental health services and the wider health economy. It could, for example, extend patient choice within the lower levels of the recommended 'stepped care' model for depression⁵³ and provide a less medicalised approach to emotional distress.³ It could offer a preventive strategy for individuals at risk of developing mental health problems, in line with the major UK policy focus on health prevention throughout the NHS.⁵⁴ Less costly and onerous staff training requirements could improve both implementation and access to treatment, especially if combined with a telephone-based system such as those being developed in other mental health services.

How effective are befriending schemes for older people in the community?

Extract from page 14

The cost-effectiveness of befriending is dependent on several factors; Fitzsimons, (2010) stated that telephone befriending was more cost-effective than face to face interventions, estimating a cost of £140 to train a facilitator, and £50 per week for link up of eight befriendees. In a study by Knapp et al, (2011) it was estimated that the cost of befriending was £80 per older person per year, and resulted in a saving of £300 per older person per year. Windle et al (2009b) found that there was a high probability (86 per cent) of the Partnership for Older People Projects (POPP) schemes being cost-effective, and suggested that projects should be commissioned on this low economic risk basis. The POPP schemes were compared to paid social care and the results showed a 47 per cent reduction in overnight hospital stays, and a fall of 29 per cent in accident and emergency room attendances within the POPP initiatives. Though, because of the time limit of the POPP study, it was difficult to provide robust evidence of the cost-effectiveness of the schemes.

Extract from p 9

Marmot (2010) states that people who are socially isolated are between two and five times more likely to die prematurely than individuals who have strong social connections; and that social inclusion has a protective factor against cognitive decline and dementia.

Extract from page 17

Befrienders can help with sign-posting

It was recognised by many of the studies (Cattan et al, 2011; Charlesworth et al, 2007, 2011; Fitzsimons, 2010; Knapp et al, 2011; Knapp and Perkins, 2010; Lillyman and Land, 2007; Mulvill, 2011 and Windle, 2009b) that befrienders may be in an ideal position to act as sign-posters to further services, or to assist with a visit to a GP to identify a health need earlier or before a situation reaches a crisis. Mulvill (2011:183) postulated that befrienders may be helpful in discussions concerning whether or not to access 'already over-burdened and under-funded healthcare services'. Fitzsimons, (2010) outlined how befrienders had been used to inform older people of preventative services available, for example flu injections. Indeed, Cattan et al (2011) reported that befriendees, themselves, asked to be referred to other services via the befriender. Windle et al (2009b) observed that in the POPP study, over a quarter of older people were referred on to other services including voluntary organisations, health care providers or other POPP programmes.

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Though despite difficulty in providing robust evaluation for cost-effectiveness, Peardon et al (2010) endorsed the befriending model and recommended it to all National Health Service authorities in Scotland. Curry (2006) also stated that there was a lack of robust evidence of cost-effectiveness, and argued that cost-effects could only be seen over time. This raises a question of using volunteer befrienders rather than paid visitors, and according to Bradshaw (2011) financial cuts to local authorities may have an immediate effect on befriending older people. Austerity measures in local authorities may have repercussions in that paid social care is not as readily available which may make volunteer befriending a more attractive alternative to local authorities. Ideally, befrienders would be paid, but, owing to austerity measures, the resources may not currently be available to do this, though currently most befrienders do volunteer their time. -

Abstract from page 23

By asking the befriendees a more open, broad question about any effects gained from befriending, and if anyone else connected or related to the befriender feels the impact of these effects, it may be that greater insights are obtained, for example effects on hypertension, bereavement issues, dignity, or improvements in mobility; and improvement in carers' health. The research could examine results that could show if befriending has a preventative or curative effect. A starting base for research of the effectiveness of befriending could be the regular, comprehensive monitoring and evaluation of schemes by the agencies and third sector organisations providing the service,

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There are many ways that the effectiveness of befriending can be measured, including an aid to sign-posting and collaboration with other agencies; less social isolation for the befriender, their carer, other family members and the volunteer; a decrease in depression, stress and anxiety; community building; and financial savings to the local authority and health providers. Beneficiaries could include befriender, volunteer befriender, carers, communities, local and central government, Clinical Commissioning Groups and other health commissioners.

Befriending can be a portal by which a socially isolated person may re-enter their community, whilst retaining independence. In conducting this literature review, it was found that befriending had a positive effect on social inclusion and re-engagement; whichever way the Literature review

Abstract from page 25/26

Befriending can be a portal by which a socially isolated person may re-enter their community, whilst retaining independence. In conducting this literature review, it was found that befriending had a positive effect on social inclusion and re-engagement; whichever way the issue of promoting social isolation for older people is addressed, it is important to do something as social isolation has been shown to have a negative impact on the physical and psychological health of people. A report by Baron and Montserrat, (2009) found that people aged 50-64 who are severely excluded are 50 per cent less likely to experience good health, and are seven times more likely to

have depression as those who are not excluded. And that 80 per cent of this group have a long-term illness or disability, compared to 40 per cent of those who are not excluded at all. The work also reported higher rates of mobility problems and poor memory within the socially excluded 50-64 year-old group of people studied. The report also found that people aged over 75 years of age, in particular women; people living in rented accommodation and ethnic minorities, are more vulnerable to becoming socially excluded.

How befriending services can aid older people's well-being

Martin Knapp and Margaret Perkins look at the findings of research into the importance of preventive work with older people

Martin Knapp

Community Care Thursday 08 July 2010 14:47

- See more at: <http://www.communitycare.co.uk/articles/08/07/2010/114872/how-befriending-services-can-aid-older-peoples-well-being.htm#sthash.EsZKkPaY.dpuf>

PRACTICE IMPLICATIONS

Practitioners: When an older person is referred for assistance with social care and feels lonely and isolated, it may be worth considering whether befriending support would be beneficial. Qualitative research evidence shows that older people welcome such contact, feel less isolated and may be assisted to take part in other social activities, which helps them become more socially included. They can also be helped and encouraged to access other services earlier, which could prevent more serious difficulties occurring.

Commissioners: The importance of preventive measures to avert admission to hospital or residential care underpins much health and social care policy. The research shows that befriending schemes have potential for savings through preventing loneliness and, in some cases, depression. Investing in such schemes at the local level may delay the need for more costly health and social care service provision.

Directors of social services: Considering the pressures on frontline staff in older people's teams, - developing additional community-based support which may delay the need for professional input makes sense. Befriending schemes are usually run in the voluntary sector, often using volunteers, and so these activities can also help build local partnerships and promote community development.

Voluntary sector providers: The national POPPs project showed the importance of the voluntary sector in supporting older people and assisting them to remain living in the community. Evidence from that study and other research has shown that befriending schemes are rewarding for volunteers and the older people. They may also create possibilities for access to other services often provided by the voluntary sector, such as outings and shopping trips.

Social isolation: 'tis the season to be lonely

Researchers have shown that day-in, day-out, chronic isolation does real, physical damage²²

- [The Guardian](http://www.theguardian.com/commentisfree/2012/dec/27/social-isolation-christmas-loneliness#start-of-comments), Thursday 27 December 2012 20.02 GMT
(<http://www.theguardian.com/commentisfree/2012/dec/27/social-isolation-christmas-loneliness#start-of-comments>)

For many, this is a time to be spent with loved ones. Others have no such luck. Year after year, surveys indicate that half a million pensioners spend Christmas Day alone. Isolation is not only an

affliction for the elderly; last year, ChildLine dealt with 8,800 requests for counselling over the 12 days of Christmas – up 26% over 2010. The top two problems were "family relationships" and "depression".

Loneliness is not just for Christmas and it is certainly more than an emotional problem. Researchers have shown that day-in, day-out, chronic isolation does real, physical damage, leading to higher blood pressure, increased stress and less and lower-quality sleep. Indeed, those who perceive themselves to have few meaningful social connections are more likely to die earlier. A recent international study led by the American psychologist Julianne Holt-Lunstad found that [involuntary loneliness carries a higher mortality risk than air pollution or obesity](http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000316). (<http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000316>)

In some respects, the scientists are merely affirming what the poets have always known. At the age of 12, Alexander Pope wrote an ode pointing out how unchosen solitude is the most lethal kind: "[Thus let me live, unseen, unknown; / Thus unlamented let me die.](#)" But while research is still relatively recent, academics are also adding to our knowledge of this area. One of the subject's foremost researchers, neuroscientist John Cacioppo, has shown that loneliness is actually contagious. In a study of almost 5,000 Massachusetts residents he carried out over 10 years, Mr Cacioppo found that a friend of a lonely person was 52% more likely to develop feelings of social rejection – and in turn one of their friends was 25% more likely to feel lonely. And the chain went on: a friend of a friend of a friend of a lonely person was also at heightened risk of loneliness. View loneliness as a social disease, rather than an individual affliction and you see the limits of our current approach to the problem.

While charities such as the WRVS and Esther Rantzen's new Silver Line offer undoubtedly valuable help for older people, this is not just a problem for one demographic – even if, typically, poorer health makes social isolation of the elderly particularly difficult and dangerous. But the isolation of individuals is the inevitable result of a society that has less time for the people living in it. Researchers in China report that its 30-year boom has gone hand-in-hand with a weakening of the old Confucian social ties and rising alienation. This is the flipside of that other new science, of happiness, and both point to a fundamental flaw in societies that pay excess attention to economic growth above those of the community.

Social Interaction Study Highlights Loneliness and Isolation as Health Risks for Elders

Forbes 23/08/12

Other research targeting the social effects of loneliness and isolation have also shown dramatic health risks. A 2008 study from the University of Chicago found that chronic loneliness is a health risk factor comparable to smoking, obesity and lack of exercise, and contributes to a suppressed immune system, high blood pressure and increased levels of the stress hormone cortisol. A study out of Cornell in early 2012 concluded that loneliness can increase the risk of heart disease by producing changes in the body which mimic the aging process. ^[3]

Doctors asked to consider loneliness in senior health assessment

[More research is needed to define the link more clearly, but physicians should be mindful of patients' social support.](#)

By CAROLYNE KRUPA, amednews staff. Posted July 2, 2012.

Most people struggle with feelings of loneliness from time to time, but new research shows that those emotions can have negative health consequences for older people.

Loneliness is associated with declining health, decreasing mobility and death in people 60 and older, according to an *Archives of Internal Medicine* study published online June 18.

- **The health risks of loneliness** (<http://www.amednews.com/article/20120702/health/307029934/4/#s1>)

The study highlights the need for physicians to take the time to get to know their patients beyond their obvious physical health, said Carla M. Perissinotto, MD, lead study author.

“If we focus only on blood pressure, we really are missing a lot of what is going on in someone’s life,” she said.

Researchers evaluated six years of data on 1,604 people 60 and older and found that 43% were classified as lonely. Compared with other study participants, those individuals were more prone to have their mobility decline, lose upper body strength, have trouble climbing stairs and decrease their daily activities. Loneliness also was associated with an increased risk of death, the study said.

Primary care physicians who treat older adults should screen them for loneliness. If a patient is at risk, doctors should know where to refer them to get help, such as a social worker or a local organization that serves the elderly, Dr. Perissinotto said.

Reducing the risks for these patients is particularly important with the aging of the population and high costs associated with disability. The number of people 65 and older is projected to grow from 39.6 million in 2009 to 72.1 million by 2030, according to the Dept. of Health and Human Services’ Administration in Aging.

Measuring social support

A separate study of 8,594 adults 45 and older found that those between age 45 and 65 who live alone have significantly increased risk of mortality — and particularly cardiovascular-related death — than those who don’t live alone. That study also was published online June 18 in *Archives of Internal Medicine*.

In both cases, researchers explored the impact of social support on health. It’s a concept that has generated a lot of debate in the medical community, said an accompanying commentary by Emily M. Bucholz, MPH, and Harlan M. Krumholz, MD, both of Yale University School of Medicine in New Haven, Conn.

“The difficulty with using social support as an epidemiologic variable arises when trying to define it,” the commentary said. “Social support encompasses many concepts and can be defined several ways.”

However, loneliness is a negative feeling that is worth addressing with patients, even if it had no health implications, the commentary said.

Other studies have looked at many different social factors, such as whether a person’s religion affects their health, said Jim Pacala, MD, president of the American Geriatrics Society. While determining whether a person lives alone is easy to assess, loneliness is less concrete.

“Loneliness is less of a medical type of concept. I just think it doesn’t enter the medical mindset,” said Dr. Pacala, associate professor and associate head of the Dept. of Family Medicine and Community Health at the University of Minnesota Medical School.

Dr. Perissinotto, a geriatrician and assistant clinical professor at the University of California, San Francisco, emphasized that loneliness isn’t the same as depression or living alone. Just because a person is lonely doesn’t mean they are clinically depressed. Likewise, being alone and being lonely are two separate things. Someone can live alone but not feel lonely, while someone who is married may feel alone, she said.

Most individuals who felt alone in the loneliness study lived with someone, and most were not depressed.

“It’s not just the frail lady who lives by herself,” Dr. Perissinotto said. “It could be your neighbor who is married or your grandmother who you see every Christmas.”

Finding out whether a patient is lonely can be as simple as asking them. For the study, participants were asked if they felt left out, or isolated or lacked companionship. They were classified as lonely if they answered “some of the time” or “often” to any of those questions.

As a primary care physician, Dr. Perissinotto said she understands that it can be challenging to balance all the things a physician needs to discuss with a patient during a limited patient visit.

“It’s really quick; it doesn’t take much time,” she said. “I think some physicians are afraid to ask the question. When you ask these questions you are potentially opening up a can of worms.”

Dr. Pacala said more research is needed to clearly define the links between social factors and health, but such research helps physicians think beyond a patient’s physical health.

“It is a good reminder to health care providers that, particularly in older adults and frail older adults, that this is something that we need to be mindful of — is these social constructs and how they bear on overall health,” he said.

ADDITIONAL INFORMATION:

The health risks of loneliness

People who are lonely are at an increased risk of functional decline and death compared with those who aren’t lonely, a study says. Lonely individuals showed higher declines in a variety of areas:

Functional measure	Lonely	Not lonely
Activities of daily living	24.8%	12.5%
Upper extremities tasks	41.5%	28.3%
Mobility	38.1%	29.4%
Stair-climbing	40.8%	27.9%
Death	22.8%	14.2%

Source: “Loneliness in Older Persons, A Predictor of Functional Decline and Death,” *Archives of Internal Medicine*, published online June 18
(archinte.jamanetwork.com/article.aspx?doi=10.1001/archinternmed.2012.1993)

Abstract from **Loneliness harms Health** 09/09/2008 www.psychecentral.com

New studies show that a sense of rejection or isolation disrupts not only will power and perseverance, but also key cellular processes deep within the human body.

Chronic loneliness belongs among health risk factors such as smoking, obesity or lack of exercise

The findings suggest that chronic loneliness belongs among health risk factors such as smoking, obesity or lack of exercise, according to lead author John Cacioppo, the Tiffany & Margaret Blake Distinguished Service Professor in Psychology at the University

Loneliness leads to higher rises in morning levels of the stress hormone cortisol, altered gene expression in immune cells, poorer immune function, higher blood pressure and an increased level of depression.

Loneliness also is related to difficulty getting a deep sleep and a faster progression of Alzheimer's disease, said Cacioppo

"There are three core dimensions to feeling lonely—intimate isolation, which comes from not having anyone in your life you feel affirms who you are; relational isolation, which comes from not having face-to-face contacts that are rewarding; and collective isolation, which comes from not feeling that you're part of a group or collective beyond individual existence," he said.

It is not solitude or physical isolation itself, but rather the subjective sense of isolation that Cacioppo's work shows to be so profoundly disruptive. Yet, outward circumstances such as moving to a new community or losing an intimate partner can trigger loneliness. And as the authors make clear, today's culture is not always conducive to promoting strong social bonds

"Lonely people feel a hunger," Cacioppo added. "The key is to realize that the solution lies not in being fed, but in cooking for and enjoying a meal with others

Neuropsychiatry **Research paper**

Feelings of loneliness, but not social isolation, predict dementia onset: results from the Amsterdam Study of the Elderly (AMSTEL)

1. **Tjalling Jan Holwerda^{1, 2},**
2. **Dorly J H Deeg³,**
3. **Aartjan T F Beekman⁴,**
4. **Theo G van Tilburg⁵,**
5. **Max L Stek⁴,**
6. **Cees Jonker⁶,**
7. **Robert A Schoevers⁷**

Author Affiliations

¹Department of Psychiatry, ARKIN Mental Health Care, Amsterdam, The Netherlands

²Department of Psychiatry, VU University Medical Centre, Amsterdam, The Netherlands

³EMGO institute LASA, VU University Medical Centre & Longitudinal Ageing Study, Amsterdam, The Netherlands

⁴Department of Psychiatry, INGEEEST Mental Health Care & VU University Medical Centre, Amsterdam, The Netherlands

⁵Department of Sociology, Faculty of Social Sciences, VU University, Amsterdam, The Netherlands

⁶Department of Neurology, VU University Medical Centre, Amsterdam, The Netherlands

⁷Department of Psychiatry, University Medical Centre Groningen, University of Groningen, Groningen, The Netherlands

1. Tjalling Jan Holwerda, Department of Psychiatry, ARKIN Mental Health Care Amsterdam & Vrije Universiteit Medical Centre Amsterdam, AMSTEL/LASA, Van der Boechorststraat 7, PO Box 1081, BT Amsterdam, The Netherlands; tj.holwerda@vumc.nl

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Abstract

Background Known risk factors for Alzheimer's disease and other dementias include medical conditions, genetic vulnerability, depression, demographic factors and mild cognitive impairment. The role of feelings of loneliness and social isolation in dementia is less well understood, and prospective studies including these risk factors are scarce.

Methods

We tested the association between social isolation (living alone, unmarried, without social support), feelings of loneliness and incident dementia in a cohort study among 2173 non-demented community-living older persons. Participants were followed for 3 years when a diagnosis of dementia was assessed (Geriatric Mental State (GMS) Automated Geriatric Examination for Computer Assisted Taxonomy (AGECAT)). Logistic regression analysis was used to examine the association between social isolation and feelings of loneliness and the risk of dementia, controlling for sociodemographic factors, medical conditions, depression, cognitive functioning and functional status.

Results After adjustment for other risk factors, older persons with feelings of loneliness were more likely to develop dementia (OR 1.64, 95% CI 1.05 to 2.56) than people without such feelings. Social isolation was not associated with a higher dementia risk in multivariate analysis.

Conclusions Feeling lonely rather than being alone is associated with an increased risk of clinical dementia in later life and can be considered a major risk factor that, independently of vascular disease, depression and other confounding factors, deserves clinical attention. Feelings of loneliness may signal a prodromal stage of dementia. A better understanding of the background of feeling lonely may help us to identify vulnerable persons and develop interventions to improve outcome in older persons at risk of dementia.

Isolated Elderly Feel 'Trapped' in their Own Homes

May 16, 2012 The Fresh Outlook

Keith Arscott, chief executive of Contact the Elderly, said: "Research shows that loneliness and social isolation can lead to depression and anxiety. Some of the older people who are referred onto our tea parties do display signs of depression, as a result of being lonely and socially isolated, due to the loss of friends, family dispersal and reduced mobility. Our tea parties make a profound difference to the wellbeing of our older guests, with 86% feeling happier as a result of our service, 86% feeling less lonely and 22% stating they see their doctors less."

Seniors who are part of active social networks have better physical and mental health.

Social support is linked to a lower risk of overall deaths, heart disease, cancer death, functional decline and institutionalization. University of Michigan researchers found that

friendships are more important than family relationships in predicting good mental health of seniors 60 and older.

Seniors who are lonely are twice as likely to develop Alzheimer's disease. Independent research demonstrates a clear link between less social activity and a higher risk of dementia symptoms. Numerous other studies link loneliness with substance abuse, obesity, diabetes, and other health risks.

Overcoming social isolation in elderly



A University of Adelaide study, examining ways of reducing social isolation among the elderly,

Social isolation is equivalent to the health effects of smoking 15 cigarettes a day or consuming more than six alcoholic drinks daily,” Professor Beer told DPS eNews.

It is estimated 20% of older Australians are socially isolated, which results in insomnia, depression, a greater likelihood of developing dementia and elevated blood pressure, among other health problems.

“It is more harmful than not exercising and twice as harmful as obesity,” Professor Beer added.

Background

Targeting social isolation in older people is a growing public health concern. The proportion of older people in society has increased in recent decades, and it is estimated that approximately 25% of the population will be aged 60 or above within the next 20 to 40 years. Social isolation is prevalent amongst older people and evidence indicates the detrimental effect that it can have on health and wellbeing. The aim of this review was to assess the effectiveness of interventions designed to alleviate social isolation and loneliness in older people

Results

Thirty two studies were included in the review. There was evidence of substantial heterogeneity in the interventions delivered and the overall quality of included studies indicated a medium to high risk of bias. Across the three domains of social, mental and physical health, 79% of group-based interventions and 55% of one-to-one interventions reported at least one improved participant outcome. Over 80% of participatory interventions produced beneficial effects across the same domains, compared with 44% of those categorised as non-participatory. Of interventions categorised as having a theoretical basis, 87% reported beneficial effects across the three domains compared with 59% of interventions with no evident theoretical foundation. Regarding intervention type, 86% of those providing activities and 80% of those providing support resulted in improved participant outcomes, compared with 60% of home visiting and 25% of internet training interventions. Fifty eight percent of interventions that explicitly targeted socially isolated or lonely older people reported positive outcomes, compared with 80% of studies with no explicit targeting.

Interventions in which older people are active participants also appeared more likely to be effective. Future interventions incorporating all of these characteristics may therefore be more successful in targeting social isolation in older people

Definition

Two terms often used interchangeably in academic literature are 'social isolation' and 'loneliness'. Loneliness is a subjective concept resulting from a perceived absence or loss of companionship ^[6,13-15]. Social loneliness refers to negative feelings resulting from the absence of meaningful relationships and social integration, whereas emotional loneliness refers to the perceived lack of an attachment figure or confidant. ^[16] The two forms of loneliness differ in potential duration, as the former may be alleviated through gaining new acquaintances while the latter can only be resolved by the formation of an intimate bond, ^[17] which may take longer.

While social isolation concerns the lack of structural and functional social support, loneliness relates specifically to one's negative feelings about that situation. ^[18] Expanding the distinction further, while social isolation may be either voluntary or involuntary, loneliness is always involuntary. ^[6,19]

Notwithstanding this, the authors observed that the impact of social relationships on the risk of mortality is comparable with major, well-established risk factors such as smoking and alcohol consumption, and exceeds that of physical inactivity and obesity. Studies focusing specifically on the measurement of social isolation and health report similar relationships. For example, social isolation is associated with increased mortality ^[21], poor self-rated physical health ^[22] and increased susceptibility to dementia ^[23] in the general population of older people, and with the onset of disability among older males living alone. ^[24] In a recent study we found that social isolation was negatively associated with health status and health-related quality of life of older people. ^[25]

The prevalence of social isolation amongst older people is substantial, estimated to be 7 - 17% depending on the definition and outcome measure used. ^[14,27,29-31] The related, but distinct concept of loneliness is reported to be experienced by approximately 40% of this age group

There are indications that social isolation interventions may have wide-ranging benefits including structural social support, functional social support, loneliness, and mental and physical health. This study advances the evidence base of previous reviews, ^[5,40,41] by including studies published since 2002 and by considering a wider range of outcomes reflecting the multi-dimensional definition of social isolation.

Intervention effects according to intervention characteristics. Thus, group-based activities appear more effective across a wider range of outcome domains compared with those offered on a one-to-one basis.