Health and Wellbeing Board

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Title: Loneliness and social isolation Lead director: Ruth Tennant

Useful information

- Ward(s) affected: None
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1. Purpose

Provide information about the risks, impacts and interventions for loneliness and social isolation, highlight the position in Leicester and inform discussion about options for further work.

2. Key messages

- Social isolation is as a complex issue affecting individuals, but also influenced by local community and wider society. It is often considered and issue of older age, however people can experience social isolation at any age or stage of life.
- Reducing loneliness and social isolation at individual and community level across the City of Leicester will contribute to improving overall health and wellbeing.
- Risk factors of loneliness and isolation are often linked to deprivation therefore action on isolation will also help reduce health inequalities.
- Many interventions (including those not targeted at preventing loneliness and isolation) and Leicester City Council services may increase social connectivity and reduce isolation. However, there is often a lack of clear evaluation of these interventions in terms of their effect on isolation, poor health and health inequalities.
- A rapid evidence review of interventions has been completed and found evidence of effective group and individual interventions to tackle isolation and loneliness, however there is a lack of consensus about which interventions are best suited for cities like Leicester. Effective interventions tend to be adaptable, take a community based approach and encourage productive engagement of users.

3. Background

Loneliness and social isolation may be experienced together with one driving the other or they may act independently. Either issue may be experienced at any age and discrete periods of isolation or loneliness can be viewed as a normal part of life. However, many people experience long periods of loneliness throughout life, or periods of greater isolation after life events, such as retirement. This chronic loneliness or isolation can have lasting impacts on health and wellbeing. The following definitions have been taken from the wider literature and have been adopted by Public Health England. [1]

• Social isolation can be defined as multilevel issue: the inadequate quality and quantity of social relations with other people at the different levels where human interaction takes place (individual, group, community and the larger social environment).

• Loneliness has been defined as: an emotional perception that can be experienced by individuals regardless of the breadth of their social networks.

Many people working in the field find it useful to combine these two issues and see a more practical definition of problematic isolation and loneliness as 'being at the bottom of the well' – a situation in which others in society do not even know one's distressing and worsening predicament, much less move swiftly to redress it.

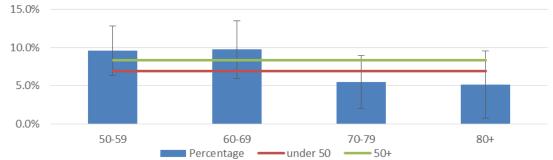
4. Size of the problem in Leicester

The 2015 Leicester Health and Wellbeing Survey asked how often people felt excluded, lonely or alone. Results show that 10% of people reported feeling this way often or all of the time, suggesting over 30,000 lonely people in Leicester and this was similar across age groups.

This result is similar to national findings with different studies suggesting 6-15% of the population are always or often lonely. It has been suggested that an approximate figure of 10% is representative of loneliness in the older population. Remarkably this national trend has been consistent over time with the extent of loneliness in older people being constant over the past 60 years. [2]

The Leicester Health and Wellbeing Survey also asked about isolation with 7% of respondents across Leicester report feeling isolated often or all of the time. Figure 1 highlights that residents in the 50-69 years age group had the highest reports of isolation. Differences between age groups were not statistically significant.





Whilst the older population of Leicester is not growing as quickly as some areas of the country the general increase in life expectancy suggests increasing numbers of older lonely people in the future.

The diverse population in Leicester may mean that national data is not fully applicable to the city. Levels of loneliness among ethnic minority elders who migrated to the UK are generally higher than for the rest of the population (15% report that they always or often feel lonely). It is also important to note that this varies by different ethnic group, for example older people from the Indian subcontinent report being less lonely than people born in the UK.[2]

These patterns are also likely to change over time as subsequent generations have different lived experiences from their parents. Younger people from ethnic minority groups, those in the 45–64 age group, report lower levels of loneliness than those aged

over 65.[2]

Two other key indicators are included in the Public Health Outcomes and Adult Social Care Outcomes Frameworks, both of which are taken from national survey data. Leicester has significantly worse indicators of isolation than the England, but they are similar to other cities in the East Midlands.

- The percentage of adult social care users who have as much social contact as they would like (36%)
- The percentage of adult carers who have as much social contact as they would like (32%)

5. What increases the risk of loneliness and isolation?

Loneliness and isolation occur throughout life and may increase at particular transition points, such as moving schools, leaving home, starting a family, migrating, or becoming a carer. In particular retirement has been highlighted as one of the most important life transitions in terms of loneliness and isolation risk. Other influences include ethnicity, gender, living alone, never being married, widowhood, support network type, poor health, cognitive impairment or poor mental health. [3–5] Lower socioeconomic status is associated with a higher incidence of loneliness, suggesting more deprived populations in Leicester may be at higher risk. [6]

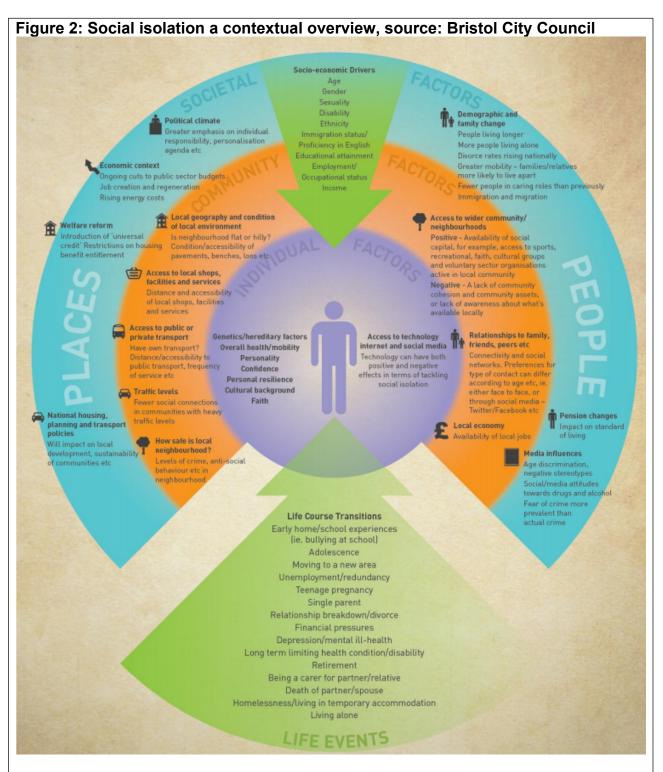
The effects of social isolation may accumulate over time with the risk of impacts on health and wellbeing increasing with age. Therefore, by tackling social isolation among residents aged 50+ it may be possible to prevent health effects experienced by people as they get older.

Isolation and loneliness are driven by a range of factors at different levels. Figure 2 provides a conceptual model of isolation showing how individual, community and social aspects combine and influence the risk of social isolation. Many of the factors in this model correlate with deprivation and highlight potential for loneliness and isolation to be highest in some of the most deprived communities. This highlights the need for this issue to be tackled as part of the agenda to reduce health and social inequalities across the life course.

This model may also be beneficial in understanding how current Council services, functions and policies could be better co-ordinated to tackle isolation and loneliness. In particular it is clear that different sections of the population, such as older people, people livening in deprived areas and ethnic minority groups are at higher risk.

6. Impact on health and wellbeing

The effect of social isolation and loneliness on physical health have been widely studied and there is a clear impact on physical and mental health.[7] A recent systematic review included 70 studies and found an increase in the odds of death of 30% compared to those who were not lonely. Counter intuitively middle-age adults were at greater risk of death than older adults when lonely or living alone. Several reasons where suggested for this including the transition from full-time employment to retirement, and it is plausible



that individuals who are alone or lonely before retirement age may be more likely to engage in risky health behaviours such as smoking, [8] both of which may be amenable to change though preventative interventions.[9] These findings are supported by other work which has also suggested loneliness_may a greater impact than other risk factors such as physical inactivity and obesity and be comparable to smoking 15 cigarettes per day. [10, 11]

Poor social relationships and isolation also increase the risk of illness.[12] Recent systematic reviews suggest individual conditions linked to loneliness and isolation include hypertension, CHD, heart failure, stroke, diabetes and chronic lung disease. [6]

These conditions may also act as risk factors with the risk of isolation increasing post stroke. This highlights the need for health and social care staff and carers of people with long term conditions to be aware of the risks of social isolation and be able to sign post to interventions to prevent or reduce isolation.[13]

There is recent evidence from a systematic review that sleep disturbance, depressive symptoms, and fatigue may all be increased in isolated or lonely older adults. Furthermore, loneliness in particular may have an impact on mental health.[14] There is limited evidence suggesting loneliness is associated with lower cognitive function such as general cognitive ability, processing speed, immediate, and delayed recall. However further research is needed in this area.[15] Social isolation may also have damaging effects resulting in depression, anxiety, fatigue and social stigma.[16] Recent work has suggested lonely people are over three times more likely to suffer depression and nearly twice as likely to develop dementia in the following 15 years.[17]

7. Impact on services

There is a lack of work looking at the impact of isolation and loneliness on services. A recent economic model built on the literature of health effects and suggested loneliness leads to increased service use with people:

- 1.8 times more likely to visit their GP;
- 1.6 times more likely to visit A&E;
- 1.3 times more likely to have emergency admissions; and
- 3.5 times more likely to enter local authority-funded residential care. Some indirect costs are a result of loneliness which causes ill-health. [17]

In turn it has been estimated that increased in demand for public services by lonely older adults could cost £12,000 per person over 15 years. By intervening to eliminate or reduce loneliness in older adults it could reduce these costs by between £770 and £2,040 over this period.

When these estimates are applied to the crude figure of 30,000 lonely or isolated people in Leicester it suggests costs of these services could be as high as £24 million per year and an effective intervention could potential save $\pounds 1.5 - \pounds 5.1$ million per year across health and social care services. [17] However it should be noted that these headline figures are based on a simple application of outputs from an economic model developed for Warwickshire and may not be fully representative of Leicester.

8. Interventions

Whilst loneliness and isolation is having an impact on people's health and wellbeing and has high personal and societal costs people can recover from loneliness. A range of interventions exist to tackle social isolation at individual, community and societal level.

A useful framework for these interventions has been suggested by the Campaign to End Loneliness. This suggests there are foundation services aiming to reach, understand and support lonely people, for example public sector workers, such as health staff, housing officers or the police. These services should be able to signpost or refer to direct services, such as group or individual interventions usually found in the literature and discussed below. The report also talked about gateway services such as technology or community transport and structural enablers. These can best be thought of as the community and societal factors detailed in Figure 2, where local and central government policy can have wide ranging impacts. Examples include planning an environment which encourages older people to get out of the house, and sufficient public or community transport. [18]

Unfortunately, there is a lack of robust evidence about direct interventions. Where evidence syntheses are available they tend to show mixed results with no overall consensus on what interventions are most effective. [19] However a recent wide ranging systematic review found the following factors which were associated with the most effective interventions. [20]

- Adaptability (eg. flexibility can also mean services and support can meet the individual needs of older people)
- Community approach (eg Interventions that involved users in the design and implementation were more successful)
- Productive engagement (eg. 'Doing' things accumulates more social contacts than watching or listening to things).

We searched for recent systematic reviews of interventions and other reports and identified the following categories of interventions.

8.1. Group interventions

Group interventions have been broadly supported in the wider literature, have historically had the strongest evidence of effectiveness, and have been supported by experts where group activities engage with peoples interests.[18]

Group interventions focused on leisure activities and/or skill development including gardening, voluntary work, holidays and sports programmes. However, there was a distinction between passive (eg. watching TV or listening to the radio) and active interventions which were more effective.[20] Specific examples of effective group interventions for older populations were indoor gardening [21] or use of technology in group settings, such as playing Nintendo Wii decreased loneliness. [22]

Group-based psychological therapies such as humour therapy, mindfulness and stress reduction, cognitive and social support interventions and group reminiscence therapy, were reported as successful on the whole in reducing loneliness and in some cases social isolation in older people. Although the evidence from other studies suggests the effectiveness of reminiscence therapy is mixed.[20, 23–25]

8.2. Individual interventions

Befriending interventions can be defined as a form of social facilitation with the aim of formulating new friendships. Both person-to-person and telephone befriending (such as Silver Line) have been found to be effective in reducing loneliness. However there can often be associated challenges such as volunteer recruitment.[20] Owning animals or other animal interventions have also been found to be effective. This includes use of robotic animals; however these were less effective than live pets. [20, 26]

Further individual interventions include volunteering which is associated with better health, lower mortality, better functioning, life satisfaction and decrease in depression.

The National Institute for Health and Care Excellence (NICE) guidance endorses community engagement as a strategy for health improvement. However whilst this is likely to reduce loneliness there is not a guarantee of reduced isolation for participants.[27]

8.3. Use of technology

The growth of the internet has altered how people communicate and may be linked with increased loneliness. However, information communication technology (ICT) may also reduce isolation where people have access to the internet. An AGE UK survey found that 28% of responders over 65 years who were lonely said that keeping in contact with family and friends via the internet helped reduce isolation.

The wider literature on ICT is limited with a recent systematic finding only four high quality studies. ICT had a mixed effect on loneliness but reduced isolation in the elderly through four mechanisms: connecting to the outside world, gaining social support, engaging in activities of interests, and boosting self-confidence. However the authors noted that not all elderly groups responded to technology in the same way and more evidence is needed to target appropriate interventions effectively.[26, 28]

8.4. Health and social care provision

These interventions involved health, allied health and/or social care professionals supporting older people and usually enrolment in a formal programme of care or support with most proving effective at reducing isolation and loneliness. [20] Other examples include social prescribing; where primary health care staff can direct lonely or isolated people to effective interventions.

8.5. Local work

A wide range of services and direct interventions exist in Leicester. A key example is the Lottery Funded Leicester Aging Together Group which is working to co-ordinate and evaluate 16 interventions to reduce isolation across three Wards in Leicester, with city wide delivery to older people with hearing loss, African Caribbean older people and older people who find it difficult to leave their homes. The evaluation is being conducted by The University of Nottingham; however results are not yet available. Initial findings from the first year of the five-year project suggest reaching isolated individuals can be challenging as many lack the confidence to engage with services.

In summary interventions that build community based social networks and promote shared values and trust within the community have been shown to benefit individuals, communities, and service providers. A recent Public Health England report highlighted the lack of a menu of effective interventions however it did make that point that successful interventions to tackle social isolation reduce the burden on health and social care services. As such they are typically cost-effective.[5]

9. Conclusions

Social isolation and loneliness both impact on the health and wellbeing of people livening in Leicester, increase health inequalities and drive service use. At least some of this burden is avoidable if it is recognised that loneliness and isolation are inter-related to broader questions about community and participation and building resilience in neighbourhoods.

Within the current context of limited resources work on social isolation and loneliness needs to be part of wider local authority efforts to build on existing social networks and

resilience within communities. This may be best achieved by targeting current policies and initiatives that may impact on areas highlighted in Figure 2 to address social isolation and loneliness. Helping to build a better environment, with active communities.

The delivery of direct interventions could also be altered to adopt a new structure where council staff and other public, private and voluntary sector works who are public facing aim to reach, understand and support lonely people, especially those who appear lonely or isolated and lack confidence to engage services. These workers could then be encouraged to refer people to a menu of services available in the public and voluntary sectors within Leicester.

10. References

- 1. Zavaleta, D., Samuel, K., and Mills C (2014) Social Isolation: A conceptual and measurement proposal | OPHI. OPHI Work. Pap. 67
- 2. Bowling Vanessa Burholt Mima Cattan John Cacioppo Julianne Holt-Lunstad Jenny de Jong Gierveld Tom Scharf Alan Walker A Loneliness the state we're in.
- 3. Local Government Association, Campaign to End Loneliness. Combating loneliness: a guide for local authorities.
- 4. Marmot M (2010) Fair society, healthy lives: the Marmot review; strategic review of health inequalities in England post-2010. The Marmot Review
- 5. Local action on health inequalities Reducing social isolation across the lifecourse.
- 6. Petitte T, Mallow J, Barnes E, Petrone A, Barr T, Theeke L (2015) A Systematic Review of Loneliness and Common Chronic Physical Conditions in Adults. open Psychol J 8:113–132
- 7. Uchino BN, Cacioppo JT, Kiecolt-Glaser JK (1996) The relationship between social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health. Psychol Bull 119:488–531
- 8. Dyal SR, Valente TW (2015) A Systematic Review of Loneliness and Smoking: Small Effects, Big Implications. Subst Use Misuse 50:1697–716
- Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D (2015) Loneliness and social isolation as risk factors for mortality: a meta-analytic review. Perspect Psychol Sci 10:227– 37
- 10. Shor E, Roelfs DJ (2015) Social contact frequency and all-cause mortality: A meta-analysis and meta-regression. Soc Sci Med 128:76–86
- 11. Holt-Lunstad J, Smith TB, Layton JB (2010) Social Relationships and Mortality Risk: A Metaanalytic Review. PLoS Med 7:e1000316
- 12. Umberson D, Montez JK (2010) Social relationships and health: a flashpoint for health policy. J Health Soc Behav 51 Suppl:S54-66
- Lou S, Carstensen K, Jørgensen CR, Nielsen CP (2016) Stroke patients' and informal carers' experiences with life after stroke: an overview of qualitative systematic reviews. Disabil Rehabil 1–13
- 14. Choi H, Irwin MR, Cho HJ (2015) Impact of social isolation on behavioral health in elderly: Systematic review. World J psychiatry 5:432–8
- 15. Boss L, Kang D-H, Branson S (2015) Loneliness and cognitive function in the older adult: a systematic review. Int Psychogeriatr 27:541–53
- 16. Umberson D, Montez JK (2010) Social relationships and health: a flashpoint for health policy. J Health Soc Behav 51 Suppl:S54-66
- 17. Centre for Social Action Innovation Fund (2015) Social Impact Bonds: Investing to Tackle

Loneliness.

- 18. AGE UK, Campaign to End Loneliness (2015) Promising approaches to reducing loneliness and isolation in later life.
- 19. Hagan R, Manktelow R, Taylor BJ, Mallett J (2014) Reducing loneliness amongst older people: a systematic search and narrative review. Aging Ment Health 18:683–93
- 20. Gardiner C, Geldenhuys G, Gott M (2016) Interventions to reduce social isolation and loneliness among older people: an integrative review. Health Soc Care Community. doi: 10.1111/hsc.12367
- 21. Tse M (2010) Therapeutic effects of an indoor gardening programme for older people living in nursing homes. J. Clin. Nurs.
- 22. Kahlbaugh P, Sperandio A, Carlson A (2011) Effects of playing Wii on well-being in the elderly: Physical activity, loneliness, and mood. Act. Adapt.
- 23. Chiang K, Chu H, Chang H (2010) The effects of reminiscence therapy on psychological well-being, depression, and loneliness among the institutionalized aged. J. Geriatr. ...
- 24. Franck L, Molyneux N, Parkinson L (2016) Systematic review of interventions addressing social isolation and depression in aged care clients. Qual Life Res 25:1395–1407
- 25. Syed Elias SM, Neville C, Scott T (2015) The effectiveness of group reminiscence therapy for loneliness, anxiety and depression in older adults in long-term care: A systematic review. Geriatr Nurs (Minneap) 36:372–380
- 26. Khosravi P, Ghapanchi AH (2016) Investigating the effectiveness of technologies applied to assist seniors: A systematic literature review. Int J Med Inform 85:17–26
- 27. Brice A, Connolly AM, Davies C, et al (2015) A guide to community-centred approaches for health and wellbeing Full report.
- 28. Chen Y-RR, Schulz PJ (2016) The effect of information communication technology interventions on reducing social isolation in the elderly: A systematic review. J Med Internet Res 18:e18

5. Financial, legal and other implications

5.1 Financial implications

For information only – no financial implications

5.2 Legal implications

For information only – no legal implications

5.3 Climate Change and Carbon Reduction implications

For information only – no climate change implications

5.4 Equalities Implications

As detailed above loneliness and isolation impact different sections of the population to different extents. Reducing the health and wellbeing impact of loneliness and isolation will reduce health inequalities and improve equality in the population.

5.5 Other Implications (You will need to have considered other implications in preparing this report. Please indicate which ones apply?)

No other implications

Appendix: Search Methods

The search strategy aimed to identify high quality recent systematic reviews with or without meta-analyses of interventions aimed at reducing loneliness or isolation. The Cochrane Library and PubMed data bases were searched on 26th October 2016.

Both free text and controlled vocabulary searches were conducted using terms for loneliness and social isolation. Search terms were adapted for each database and a non-systematic grey literature search was also conducted. An example search string is provided below:

(social AND (isolate[Title/Abstract] OR isolation[Title/Abstract] OR isolated[Title/Abstract])) OR lonely[Title/Abstract] OR loneliness[Title/Abstract] OR "Loneliness"[Mesh] OR "Social Isolation"[Mesh]

Inclusion criteria included:

- Studies publish in previous five years
- Studies in English
- Systematic reviews or evidence reviews, health needs assessments and organisational reports (grey literature).
- Studies looking at interventions effective at reducing isolation or loneliness