

Loneliness and the COVID-19 pandemic: implications for practice

MAKEY, Laura, LEWIS, Robin, ASHMORE, Russell http://orcid.org/0000-0002-9456-7926 and WIGFIELD, Andrea

Available from Sheffield Hallam University Research Archive (SHURA) at: https://shura.shu.ac.uk/33191/

This document is the Accepted Version [AM]

Citation:

MAKEY, Laura, LEWIS, Robin, ASHMORE, Russell and WIGFIELD, Andrea (2024). Loneliness and the COVID-19 pandemic: implications for practice. British Journal of Nursing, 33 (3), 110-114. [Article]

Copyright and re-use policy

See http://shura.shu.ac.uk/information.html

British Journal of Nursing

Loneliness and the Covid-19 pandemic: implications for practice

--Manuscript Draft--

Manuscript Number: bjon.2022.0077R1

Full Title: Loneliness and the covid pandemic: implications for practice Short Title: Loneliness and the covid pandemic: implications for practice

Article Type: At a Glance

Keywords: loneliness, lonely, Covid-19, Coronavirus, pandemic

Corresponding Author: Laura Michelle Makey, Msc

Sheffield Hallam University College of Health Wellbeing and Life Sciences

Sheffield, UNITED KINGDOM Corresponding Author Secondary

Information:

Corresponding Author's Institution: Sheffield Hallam University College of Health

Wellbeing and Life Sciences

Corresponding Author's Secondary

Institution:

First Author: Laura Michelle Makey, Msc

First Author Secondary Information

Order of Authors: Laura Michelle Makey, Msc

Robin P Lewis, PhD Russell Ashmore, PhD Andrea Wigfield, Professor

Order of Authors Secondary Information:

Abstract: Loneliness is a complex universal human experience. A variety of evidence indicates prolonged loneliness can have a negative effect on an individual's long term physical and psychological outcomes. Empirical evidence and systematic reviews show strong links between loneliness and ill health, particularly cardiovascular disease and mental health. Loneliness is increasing in frequency and severity. The issue of loneliness has been part of the UK Government mandates since 2018 however evidence suggests, due to the pandemic the need to focus on the issue may be even more significant. Assessing for loneliness can be challenging and many people do not want to report their feelings of loneliness. Interventions should aim to be preventative and help people create meaningful interactions. Useful interventions include person-centred interventions, cognitive therapy and group intervention therapy. There is a need for more evidence-based loneliness interventions. A knowledge of local and voluntary sectors is vital so healthcare professionals can effectively support their patients.

Additional Information:
Question Response
Please enter the word count of your
manuscript excluding references and
tables
2939

Powered by Editorial Manager® and ProduXion Manager® from Aries Systems Corporation

At a glance/clinical

Loneliness and the Covid-19 pandemic: implications for practice Introduction

UK loneliness figures in the first wave of the Covid-19 pandemic; found 2.6 million adults were lonely (Rees and Large, 2020). Many people's welfare was influenced, and this issue was termed "lock down loneliness" (those people whose welfare was affected in the last 7 days due to the feelings of loneliness). Mostly, adults were of working age. People who were chronically lonely in lockdown periods were more likely to be people living with long term health conditions (Rees and Large, 2020). Loneliness is a subjective, unwelcome feeling of lack or loss of companionship unique to each person (Pearlman and Peplau 1981). For example, a person can live alone and may never feel lonely and someone who lives with many people may frequently feel lonely. A person can be situationally lonely, which means they are lonely due to a change in life circumstances such as recently bereaved or health issues (Young et al., 1982). Loneliness can range from short, unexpected periods or longer and more prominent periods over time. Some people may have persistent feelings of loneliness that can be pervasive and chronic for two or more years. Chronically lonely people are more likely to attend emergency departments and frequent General Practitioner's surgeries (The Health Foundation, 2018, Sirois and Owens, 2021). What is more, individuals may not want to disclose their loneliness feelings due to self-dislike and perceived stigma associated with loneliness (Ypsilanti, et al., 2020). Ways that healthcare practitioners can assess and manage degrees of loneliness can be challenging. This article explores the fundamental issues and seeks to help practitioners identify who may be at risk and how to manage the complex issue.

Key words: Loneliness, lonely, Covid-19, Coronavirus, pandemic

What is loneliness?

Loneliness is difficult to accurately outline. Existing theories and definitions have attempted to explain loneliness (Table 1). Early theorists describe loneliness as a universal human experience (Moustakas, 1961). Others describe loneliness as a negative emotion that creates a yearning or need. Weis suggested that humans need a series of relationships that are essential to prevent loneliness (Weiss, 1973). According to Weiss, loneliness is either 'intimate' due to a lack of family ties or partner OR 'social' due to a lack of friends or work colleagues. Hence, there are two distinct types of loneliness that measure loneliness degrees and types in adult populations (Di Tommaso and Spinner, Russell et al., 1978, Russell, 1996). An alternative theory defines loneliness as being created from a person's cognitive processes. In this theory, loneliness is a human thought pathway that evaluates the quality and quantity of relationships. Loneliness is the distress felt if there is a mismatch or perceived deficiency between actual and desired connections (Peplau and Perlman, 1981). These theories form the basis for measures of loneliness (De Jong-Gierveld, 1998). Other more contemporary theories suggest loneliness to have a behavioural function determined by the immune system and therefore have an evolutionary function (Cacioppo et al., 2013). In this theory, feelings of loneliness initiate physiological responses (like pain or hunger) to instruct a person to behave in a certain way for survival. Inflammatory markers produced in the body instruct the person to separate from others to protect the herd. Thus, people may feel various degrees of loneliness due to inherited differences and physiological responses. All the theories demonstrate the complexities to understanding why people experience loneliness.

Moustakas (1961)	A universal experience that lies		
	dormant within everyone and is a		
	time of great pain but also a time to		
	learn about human compassion.		

Weiss (1973)	Being without a definite set of		
	relationships such as friends OR		
	intimate partner/family.		
Peplau and Perlman (1981)	Distress felt when a person's		
	expectations of social connectedness		
	is not met quantitatively or		
	qualitatively.		
Ernst and Cacioppo (1999)	Chronic loneliness has links to learnt		
	experiences from childhood		
Cacioppo, et al., (2014)	Loneliness is linked to		
	pathophysiological functions and has		
	an evolutionary function for humans.		

Table 1. Loneliness theories

The health impacts of loneliness.

Empirical studies show prolonged loneliness to have a negative effect on psychological and physical health (Table 2). For example, data collected in the U.S. suggests that over a six-year period, lonely people aged fifty years or over have a higher risk of mortality and depression (Luo, et al., 2012). Adults without depression at their baseline and after five years follow up are more likely to be depressed when reporting loneliness (Beutel et al., 2017). People with long term mental illnesses and if feeling lonely for more than six months, are at greater risk of admission to inpatient care (Fortuna et al., 2020). There is much evidence to show an increased incidence of newly diagnosed hypertension, cardiovascular disease and stroke for lonely people aged over 50 years old (Valtorta et al., 2016). Furthermore, lonely women are at greater risk of death from cardiovascular disease (Novak et al., 2020). An

overview of systematic reviews of the loneliness and its public health consequences found comparable results noting the strong links with cardiovascular diseases and mental ill health (Leigh-Hunt et al., 2017). They point out that little is known about the effects of loneliness and acute illness. It is estimated loneliness costs United Kingdom employers £2.5 billion a year due to associated health outcomes of the lonely person or relative, their sickness and time off work (Michaelson et al., 2021). The strong link between health and loneliness has gained the attention of the United Kingdom Government and there is a 'loneliness strategy' (Gov.UK, 2021). General Practitioners have called for a directory of voluntary services to allow easier access and referral to local groups and voluntary sector schemes (Royal College General Practitioners, 2018). Good practice must be shared however, the ongoing publication and access to contemporary and local loneliness interventions is an ongoing challenge (GOV.UK, 2018).

Zeytinoglu, et al., (2021).	Lonely older people are at increased risk of falls			
Fortuna, (2020).	An increased risk of physical and psychological admissions for people who are lonely and living with serious mental illnesses.			
Hawkley, et al., (2010).	Loneliness predicts an increased risk to blood pressure over a five-year period.			
Valtorta, (2018).	A systematic review and meta-analysis of longitudinal studies found lonely people have an increased risk of cardiovascular disease and stroke.			
Leigh-Hunt, et al., (2017).	An overview of systematic reviews revealed increased risk of cardiovascular disease and all-cause mortality for people who are socially isolated or lonely. Also, poorer mental health outcomes.			
Beutel, (2017).	Lonely people have an increased risk of depression and anxiety.			

Table 2. Risk factors associated with loneliness.

Who is most at risk of loneliness?

There is a common misconception that loneliness is an older person experience (British Red Cross, 2016). Empirical evidence found the single most striking

emergence of loneliness frequency is among the under 25's and over 65's (Lasgaard et al., 2016; Luhmann and Hawkley, 2016; Victor and Yang, 2012). Therefore, age can be a factor when assessing for loneliness. Additionally, severe loneliness is linked to social factors such as receiving disability pension or benefits, being unemployed, living alone and receiving long term psychiatric care (Lasgaard et al.,2016, Victor and Yang, 2012, British Red Cross, 2016). More needs to be known and understood how social factors act as barriers to making meaningful connections (Wigfield et al. 2022).

When comparing loneliness across countries, loneliness data reveal insight into societal perceptions and expectations about human connections. A study in association with the BBC examined the links between society structures, culture, and loneliness. Preliminary results suggest individual societies (societies likened to the UK based around achievements and income) have more loneliness and this issue impacts most on younger men (Barreto et al., 2021). Moreover, studies of older adults in southern European countries, (often more family-based societies) recorded more loneliness and less resilience in comparison with northern and western European countries (Fokkema et al., 2012). Hence, the research suggests societal structures and expectations will help better understand modern day loneliness. There are substantial levels of loneliness among emerging European adult women living in deprived areas (Lasgaard et al., 2016). For women in the UK, loneliness tends to peak in the 30-50 age group (Victor and Yang, 2012) and equally for women in Germany at age ranges 40-80 years (Hawkley et al., 2010). Another group with high levels of loneliness are young adults however studies indicate young men and women differ in the causes and the way they react to feelings of loneliness (Liu et al., 2020). A meta-analysis suggests different genders experience distinct types of loneliness and this may be due to range of reasons such as differences in the way people assess their loneliness and differences in how people maintain friendships (Maes et al., 2017, Maes et al., 2019). For example, men (or people who identify as male) may have the same friendships that last throughout their lifetime whereas women (and people who identify as female) may make many and more context specific friendships e.g., meeting new mums at baby groups etc. People identifying as LGBTQ are significantly more likely to feel lonely as they get older, especially couples and individuals without children (Fish and Weis, 2019). There is emerging

evidence to support the view that transgender and non-binary people are experiencing intimate and social loneliness and more research is needed to greater understand their experiences (Anderssen et al., 2020). Owing to the potential differences in loneliness experiences; future research needs to be context and population specific. Only in this way are we able to fully understand the causes and solutions to tackling loneliness in modern Britain.

Barriers to identifying loneliness

The distinction between loneliness and social isolation is often misunderstood. Loneliness is seen as a subjective state and social isolation is an objective condition. It is important to note, not <u>all</u> socially isolated people are lonely (Holt-Lunstad et al, 2015). Loneliness research suggests the quality of connection is important. An older person living alone may feel lonely when visited by family members and this response is because the connection may feel more about duty and less about meaningful connection (Pinquart and Sorensen, 2001). Furthermore, variations in the expectations of both the quality and quantity of connections exist based on age. Older people (over 65 years) tend to value the quality of relationships however young adults (under 25 years) tend to value quantity (Victor and Yang, 2012). Assessing for loneliness can be challenging because there is a degree of underreporting. Research examining the frequency of loneliness across different genders has shown men are less likely to report loneliness when asked directly. However, when indirect methods of questioning were used similar levels of loneliness were revealed across genders (Richard et al., 2017).

Loneliness and the pandemic

During the pandemic, older adults had increased levels of anxiety and insomnia (Shan Wong et al., 2020). It was significant in people with four or more long term conditions. Reports also suggest older adults felt scared and lonely (Age UK, 2020). Consequently, people were known to lose interests in everyday activities, had a general apathy, increased muscle weakness and increased risk of cognitive decline. Younger people were at greater risk of experiencing mental illnesses such as severe depression (Loades et al., 2020). During the Covid-19 pandemic, enforced quarantine seemed to have the greatest impact on young adults. The weeks and months of lockdown were significantly associated with severe loneliness in young people who demonstrated avoidant coping strategies such as emotional

disengagement and denial (Sampogna, et al., 2021). Sociodemographic variables were significant in predicting loneliness during the pandemic. Research with 31,000 adults both before and during the pandemic discovered that the risk factors for loneliness remained nearly identical to the pre-pandemic period. This evidence suggests that feelings of loneliness were intensified in the young people who were already at risk (Bu et al., 2020). Furthermore, young adults studying at higher educational institutes were at an elevated risk of loneliness and associated mental illness outcomes. Other groups at risk were people discharged from psychiatric care facilities (Chang et al., 2020) and individuals living with cancer (Gallagher et al., 2020). They found people continued to shield long after the restrictions were lifted. The long-term impact of living with a shielding condition during and after the Covid-19 pandemic is less researched and understood (British Red Cross, 2022). Likewise, the long-term impact to young adults is yet to fully emerge and healthcare practitioners need to be vigilant to assess if loneliness has had a significant health impact. One report suggests the pandemic has increased loneliness and local resources should have capacity to ensure those most at risk of loneliness are able to access the emotional support they need (British Red Cross, 2022).

The stress and burden of increasing demands among healthcare practitioners cannot be ignored. The community health care professionals and volunteer organisations remain crucial in supporting patients with the emotional and physical burden of loneliness (Green 2020). Patient populations that were lonely and avoided hospitalisation have increased the number and demands of cases (Dury, 2021). All healthcare practitioners are at a greater risk of mental ill health concerns and associated loneliness due to increased unprecedented stress and due to making complex and difficult decisions (Royal College of Nursing 2021). Staff were risking their own health alongside providing effective and compassionate care. Meanwhile, they were dealing with personal and moral challenges such as managing childcare and worrying about bringing Covid-19 home to their families. Many healthcare professionals experienced trauma related stress and were forced to self-isolate resulting in reduced social support that further impacted sleep and acute stress reactions (Benfante et al., 2020). The impact and emotional burden are not fully reported, and the mental health of health practitioners should be an ongoing priority

for healthcare managers (While and Clark, 2021).

Interventions to help someone who may be lonely

The National Loneliness Strategy aims to support clinical commissioning groups and GP practices to identify, use and create an integrated community and asset-based services (Jopling and Howells, 2018). There are a range of recommendations and evidence-based interventions that take the form of preventative, restorative, or responsive interventions (British Red Cross, 2016). An increased awareness of risk factors and early interventions can help mitigate loneliness. For example, the early identification of life transitions (such as retirement or moving cities) and awareness of how people would benefit from preventative interventions. Likewise, an individual may exhibit chronic loneliness, and a responsive, person-centred intervention can greatly support the individual. For example, older men better engage with interventions that appeal to male roles such as those that have responsibility and provide for others (Ratcliffe et al., 2019). Psychological interventions based around 'changing cognitions' are viewed the most effective as they serve to help people understand their feelings of loneliness and to improve their confidence (Mann et al., 2017). Other effective interventions are services that assign welfare officers to provide support, advice and information to help make meaningful connections with others (Sander, 2005). There are many local charitable and third sector organisations that have specific interventions for older people such as 'befriending' groups or one-one interventions such as weekly phone calls (Age UK, 2023, Silver Line, 2023).

Other interventions include the use of social media. It was found among adolescents that social media was a coping strategy used during the Covid-19 pandemic. They reported it was effective in decreasing anxiety but less effective to tackling loneliness (Cauberghe et al.,2021). It is suggested there are a lack of experimental evidence and evaluations that comprehensively report high quality interventions (Cohen-Mansfield and Perach, 2015; Masi et al., 2011). The Lancet called for evidence-based interventions in schools to help support adolescence mental health and wellbeing (Siva, 2020). More research specific to ages, populations and contexts will greater aid understanding of the barriers and opportunities to meaningful connections and help tackle loneliness. With greater knowledge and more sharing of good practice, more person-centred interventions can be implemented (GOV.UK,

Conclusions

Loneliness is a complex human emotion that when chronic has strong associations with ill health (Fortuna et al., 2020; Luo et al., 2012; Beutel et al., 2017; Valtorta et al., 2016; Novak et al., 2020; Leigh-Hunt et al., 2017). Theories suggest loneliness is linked to the human need for intimate and social relationships (Weiss, 1973). Others suggest loneliness is a social perspective that shape expectations about quality and quantity of connections (Perlman and Peplau, 1981). There are instruments that are valid in measuring severity and types (Di Tommaso and Spinner, Russell, Peplau and Ferguson 1978, Russell, 1996; De Jong-Gierveld, 1998). The UK Government has a strategy for loneliness and healthcare practitioners are encouraged to prescribe interventions for lonely people and for those at risk of becoming lonely (GOV.UK, 2018). Therefore, it is important to know who is at risk of frequent loneliness and to recognise the risk of underreporting due to stigma (Ypsilanti, et al.,2020). Empirical evidence suggests loneliness frequency correlates to age (Lasgaard et al., 2016; Luhmann and Hawkley, 2016; Victor and Yang, 2012) and severity of loneliness linked to intersectional social factors such as disability (Lasgaard et al., 2016; Victor and Yang, 2012). Men, women, and transgender people may experience and respond to loneliness differently (Maes et al., 2017; Maes et al., 2019; Anderssen et al., 2020). During the Covid-19 pandemic, loneliness was significant in people with multiple long-term conditions (Rees and Large, 2020). Older people had general apathy and muscle weakness (Age UK, 2020). Younger people were at higher risk of depression, anxiety and mental illness (Bu et al., 2020). Health care workers are faced with an elevated risk of work-related demands due to caring for individuals experiencing chronic loneliness and following the implications following the Covid-19 pandemic (RCN, 2021). Managers and healthcare professionals need to be conscious of the ongoing burden to staff and colleagues following the aftermath of the Covid-19 pandemic. Current evidence-based interventions to combat loneliness are person centred interventions (Ratcliffe et al., 2019) one to one cognitive therapies (Mann et al., 2017) and well-being officers (Sander, 2005). There is a need for more evidence-based interventions, so we understand more about effective and person-centred interventions to combat loneliness.

Key points

Loneliness is a subjective experience that has strong links to physical and mental illnesses.

Those most affected by loneliness in the pandemic are older adults, young adults and people with multiple co-morbidities.

Healthcare workers were at risk of loneliness due to work demands, enforced isolation and difficult decision making. Healthcare practitioners may be experiencing long term stress related consequences.

There are differences in the experiences and reporting of loneliness between genders.

People may not report they are lonely due to the feelings of shame or stigma attached to loneliness.

We need to have more reported evidence based; person centred interventions to tackle loneliness.

Reflective questions

- -What are the health impacts of loneliness to health?
- -What are the different types of loneliness and how is it possible to identify a lonely person?
- -What are the barriers to assessing for loneliness?
- -What evidence-based interventions are there to help lonely people? Are there any local interventions in your area of practice?

References

Age UK. (2020). The impact of COVID-19 to date on older people's mental and physical health. https://www.ageuk.org.uk/latest-press/articles/2020/10/age-uk-research-into-the-effects-of-the-pandemic-on-the-older-populations-health/ [Accessed 13th September 2023].

Age UK. (2023). Age UK telephone friendship. Age UK.

https://www.ageuk.org.uk/services/befriending-services/sign-up-for-telephone-befriending/ [Accessed 30th April 2023].

Anderssen, N., Sivertsen, B., Lønning, K. J., and Malterud, K. (2020). Life satisfaction and mental health among transgender students in Norway. BMC Public Health, 20(1). https://doi.org/10.1186/s12889-020-8228-5

Barreto, M., Victor C, Hammond C, Eccles A, Richins M, Qualter P. (2021).

Loneliness around the world: Age, gender, and cultural differences in loneliness.

Personality and Individual Differences 169:110066.

Beutel, M., Klein, E., Brähler, E., Reiner, I., Jünger, C., Michal, M., Wiltink, J., Wild, P., Münzel, T., Lackner, K. and Tibubos, A., (2017). Loneliness in the general population: prevalence, determinants and relations to mental health. BMC Psychiatry, 17(1).

British Red Cross. (2016). Co-op trapped in a bubble report - The British Red Cross. redcross.org.uk. from https://www.redcross.org.uk/-/media/documents/about-us/research-publications/health-and-social-care/co-op-trapped-in-a-bubble-report.pdf

British Red Cross. (2022). Lonely and left behind. British Red Cross from https://www.redcross.org.uk/about-us/what-we-do/we-speak-up-for-change/lonely-and-left-behind [Accessed 14th September 2023].

Bu, F., Steptoe, A., Fancourt, D., (2020). Who is lonely in lockdown? Cross-cohort analyses of predictors of loneliness before and during the COVID-19 pandemic. Public Health 186:31-34.

Cacioppo J, Cacioppo S., Boomsma D. (2013). Evolutionary mechanisms for loneliness. Cognition and Emotion 28:3-21.

Cauberghe, V., Van Wesenbeeck, I., De Jans, S., Hudders, L., and Ponnet, K. (2021). How Adolescents Use Social Media to Cope with Feelings of Loneliness and Anxiety During COVID-19 Lockdown. *Cyberpsychology, behavior and social networking*, *24*(4), 250–257. https://doi.org/10.1089/cyber.2020.0478

Chang E, Tian W, Jiang X, Yi S, Liu J, Bai Y, Liu C, Luo X, Wang W, Chang O et al. (2020). Beyond the role of loneliness in psychological ill-being and well-being in females: Do social problem-solving processes still matter? Personality and Individual Differences 155:109729.

Cohen-Mansfield J, Perach R. (2015). Interventions for Alleviating Loneliness among Older Persons: A Critical Review. American Journal of Health Promotion 29: e109-e125.

De Jong-Gierveld J. (1998). A review of loneliness: concept and definitions, determinants and consequences. Reviews in Clinical Gerontology 8:73-80.

Di Tommaso E, Spinner B. 1997. Social and emotional loneliness: A re-examination of Weiss' typology of loneliness. Personality and Individual Differences 22:417-427.

Fish, J and Weis, C. (2019), "All the lonely people, where do they all belong? An interpretive synthesis of loneliness and social support in older lesbian, gay and bisexual communities", *Quality in Ageing and Older Adults*, Vol. 20 No. 3, pp. 130-142. https://doi.org/10.1108/QAOA-10-2018-0050

Fokkema T, De Jong Gierveld J, Dykstra P. (2012). Cross-National Differences in Older Adult Loneliness. The Journal of Psychology 146:201-228.

Fortuna K., Brusilovskiy E, Snethen G, Brooks J, Townley G, Salzer M. (2020).

Loneliness and its association with physical health conditions and psychiatric hospitalizations in people with serious mental illness. Social Work in Mental Health 18:571-585.

Gallagher S, Bennett K, Roper L. (2020). Loneliness and depression in patients with cancer during COVID-19. Journal of Psychosocial Oncology 39:445-451. [accessed 2021 Nov 14]

GOV.UK. (2018, October). *A connected society: A strategy for tackling loneliness*. GOV.UK., https://www.gov.uk/government/publications/a-connected-society-a-strategy-for-tackling-loneliness [Accessed July 4th, 2023].

Gov.UK, (2021, October). Social prescribing: applying All Our Health. [online] GOV.UK. Available at:<a href="https://www.gov.uk/government/publications/social-prescribing-applying-all-our-health/so

health#promoting-social-prescribing-in-your-professional-practice> [Accessed 25th November 2021].

Green J. (2020). COVID-19: a lasting impact on District and Community Nursing
Teams? |Royal College of Nursing. The Royal College of Nursing.

https://www.rcn.org.uk/news-and-events/blogs/covid-19-a-lasting-impact-on-district-and-community-nursing-teams [Accessed 18th November 2023].

Hawkley, L. C., Thisted, R. A., Masi, C. M. and Cacioppo, J. T. (2010). Loneliness Predicts Increased Blood Pressure: 5-Year Cross-Lagged Analyses in Middle-Aged and Older Adults. *Psychology and Aging*, *25*(1), 132–142. https://doi.org/10.1037/a0017805

Holt-Lunstad J, Smith T, Baker M, Harris T, Stephenson D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality. Perspectives on Psychological Science 10:227-237.

Jopling, K. and Howells, A. (2018, September). *Learning report - the British Red Cross*. Connecting communities to tackle loneliness and social isolation. https://www.redcross.org.uk/-/media/documents/about-us/research-publications/health-and-social-care/connecting-communities-learning-report.pdf [Accessed 13th September 2023].

Lasgaard M, Friis K, Shevlin M. (2016). Where are all the lonely people? A population-based study of high-risk groups across the life span. Social Psychiatry

and Psychiatric Epidemiology 51:1373-1384.

Leigh-Hunt N, Bagguley D, Bash K, Turner V, Turnbull S, Valtorta N, Caan W. (2017). An overview of systematic reviews on the public health consequences of social isolation and loneliness. Public Health 152:157-171.

Liu, H., Zhang, M., Yang, Q. and Yu, B. (2020). Gender differences in the influence of social isolation and loneliness on depressive symptoms in college students: a longitudinal study. *Social psychiatry and psychiatric epidemiology*, *55*(2), 251–257. https://doi.org/10.1007/s00127-019-01726-6

Loades M, Chatburn E, Higson-Sweeney N, Reynolds S, Shafran R, Brigden A, Linney C, McManus M, Borwick C, Crawley E. (2020). Rapid Systematic Review: The Impact of Social Isolation and Loneliness on the Mental Health of Children and Adolescents in the Context of COVID-19. Journal of the American Academy of Child and Adolescent Psychiatry 59:1218-1239.e3.

Luhmann M. and Hawkley L. (2016). Age differences in loneliness from late adolescence to oldest old age. Developmental Psychology 52:943-959.

Luo Y, Hawkley L, Waite L, Cacioppo J. (2012). Loneliness, health, and mortality in old age: A national longitudinal study. Social Science and Medicine 74:907-914.

Maes M, Vanhalst J, Van den Noortgate W, Goossens L. (2017). Intimate and Relational Loneliness in Adolescence. Journal of Child and Family Studies 26:2059-2069.

Maes M, Qualter P, Vanhalst J, Van den Noortgate W, Goossens L. (2019). Gender Differences in Loneliness across the Lifespan: A Meta Analysis. European Journal of Personality 33:642-654.

Masi C, Chen H, Hawkley L, Cacioppo J. (2010). A Meta-Analysis of Interventions to Reduce Loneliness. Personality and Social Psychology Review 15:219-266.

Michaelson J, Jeffrey K, Abdallah S. (2021). The cost of loneliness to UK employers. New Economics Foundation. https://neweconomics.org/2017/02/cost- loneliness-uk-employers/ [Accessed 10th October 2021].

Moustakas C. (1961). The Sense of Self. Journal of Humanistic Psychology 1:20-34.

Novak M, Waern M, Johansson L, Zettergren A, Ryden L, Wetterberg H,

Gudmundsson P,

Skoog I. (2020). Cardiovascular and all-cause mortality attributable to loneliness in older Swedish men and women. BMC Geriatrics 20.

Peplau L and Perlman D. (1982). Loneliness. New York: Wiley.

Pinquart M. and Sorensen S. (2001). Influences on Loneliness in Older Adults: A Meta-Analysis. Basic and Applied Social Psychology 23:245-266.

Ratcliffe, J., Wigfield, A. and Alden, S. (2019). 'A lonely old man': Empirical investigations of older men and loneliness, and the ramifications for policy and Practice. Ageing and Society, 41(4), 794–814. https://doi.org/10.1017/s0144686x19001387

Royal College Nursing (2021). SenseMaker: the lived experience of nursing in Northern Ireland during a pandemic 2020/2021 | Royal College of Nursing. The Royal College of Nursing. https://www.rcn.org.uk/professional-development/publications/sensemaker- nursing-in-northern-ireland-during-a-pandemic-2020-2021-uk-pub-009-870 [accessed 18th November 2021].

Rees, E. and Large, R. (2020, June 7). Coronavirus and Ioneliness, Great Britain: 3

April to 3 May 2020. Coronavirus and Ioneliness, Great Britain - Office for National

Statistics. from

https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/coronavirusandlonelinessgreatbritain/3aprilto3may2020 [Accessed 12th July, 2022].

Richard A, Rohrmann S, Vandeleur C, Schmid M, Barth J, Eichholzer M. (2017). Loneliness is adversely associated with physical and mental health and lifestyle factors: Results from a Swiss national survey. PLOS ONE 12: e0181442.

Royal College General Practitioners. (2018, May). *Tackling Loneliness - A Community Action Plan*. Royal College of General Practitioners,

https://www.rcgp.org.uk/getmedia/50c80a45-1a40-4973-a34a-13fddc7ca167/RCGP-loneliness-manifesto-england-2018.pdf [Accessed 15th July 2023].

Russell D. (1996). UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure. Journal of Personality Assessment 66:20-40.

Russell D, Peplau L, Ferguson M. (1978). Developing a Measure of Loneliness. Journal of Personality Assessment 42:290-294.

Sampogna G, Giallonardo V, Del Vecchio V, Luciano M, Albert U, Carmassi C, Carrà G, Cirulli F, Dell'Osso B, Menculini G, Belvederi Murri M, Pompili M, Sani G, Volpe U, Bianchini V, Fiorillo A. Loneliness in Young Adults During the First Wave of COVID-19 Lockdown: Results From the Multicentric COMET Study. Front Psychiatry. 2021 Dec 10;12:788139. doi: 10.3389/fpsyt.2021.788139. PMID: 34955932; PMCID: PMC8703162.

Sander, R. (2005). Preventing social isolation and loneliness among older people: A systematic review of Health Promotion Interventions. Nursing Older People, 17(1), 40–40. https://doi.org/10.7748/nop.17.1.40.s11

Sirois, F. M. and Owens, J. (2021). A meta-analysis of loneliness and use of primary health care. Health Psychology Review, 1–18.

https://doi.org/10.1080/17437199.2021.1986417

Siva N. (2020). Loneliness in children and young people in the UK. The Lancet Child and Adolescent Health 4:567-568.

The Silver Line. (2023). *Who we are.* The Silver Line. Helpline for older people. https://www.thesilverline.org.uk/who-we-are/ [Accessed 30th April 2023].

The Health Foundation. (2018, December). Older people living alone are 50% more likely to visit A and E than those who live with others. The Health Foundation., from https://www.health.org.uk/news-and-comment/news/older-people-living-alone-are-50-more-likely-to-visit-ae-than-those-who-live-with [Accessed 15th July, 2022].

Valtorta N, Kanaan M, Gilbody S, Ronzi S, Hanratty B. (2016). Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and meta-analysis of longitudinal observational studies. Heart 102:1009-1016.

Victor C and Yang K. (2012). The Prevalence of Loneliness Among Adults: A Case Study of the United Kingdom. The Journal of Psychology 146:85-104.

Weiss R. (1973). Loneliness. The experience of emotional and social isolation. London: MIT Press.

While A and Clark L. (2021). Management of work stress and burnout among community nurses arising from the COVID-19 pandemic. British Journal of

Community Nursing 26:384-389.

Wigfield, A., Turner, R., Alden, S., Green, M. and Karania, V. (2022). Developing a New Conceptual Framework of Meaningful Interaction for Understanding Social Isolation and Loneliness. Social Policy and Society, 21(2), 172-193. doi:10.1017/S147474642000055X

Wong S, Zhang D, Sit R, Yip B, Chung R, Wong C, Chan D, Sun W, Kwok K, Mercer S. (2020). Impact of COVID-19 on loneliness, mental health, and health service utilisation: a prospective cohort study of older adults with multimorbidity in primary care. British Journal of General Practice 70: e817-e824.

Young, J. A., Perlman, D. and Paplau, L. (1982). Loneliness, depression and cognitive therapy: Theory and application. In Loneliness: A sourcebook of current theory, research, and therapy (pp. 1–18). essay, Wiley.

Ypsilanti A, Robson A, Lazuras L, Powell P, Overton P. (2020). Self-disgust, loneliness and mental health outcomes in older adults: An eye-tracking study. Journal of Affective Disorders 266:646-6

Zeytinoglu, M., Wroblewski, K. E., Vokes, T. J., Huisingh-Scheetz, M., Hawkley, L. C. and Huang, E. S. (2021). Association of Loneliness With Falls: A Study of Older US Adults Using the National Social Life, Health, and Aging Project. *Gerontology and Geriatric Medicine*, 7. https://doi.org/10.1177/2333721421989217