The Languages of Loneliness: Developing a Vocabulary for Researching Social Health

Christina R. Victor

The context for this paper is the concept of social health. In 1948 The World Health Organisation defined health in terms of physical, mental and social well-being. The definition was framed in the positive, and is more expansive than simply the absence of illness, disease or disability. Whilst there is a recognition of the importance of wellbeing, we suggest that the concept of social health has been neglected relative to the physical and mental components of the definition. Furthermore, researchers continue to focus on deficit models of health in terms of focussing on disease and illness rather than what stops people and populations becoming unhealthy. We see the same emphasis in research focused on social health which predominantly focuses on loneliness and/or isolation. Within the context of developing a research agenda for social health we examine three domains of the contemporary research landscape focused on loneliness in later life. We first consider how loneliness is defined and differentiated from other distinct but related concepts such as isolation, aloneness and solitude. We then focus on issues of how loneliness is measured. Finally, we examine the transformation of how loneliness in later life is framed. Initially conceptualised as a social problem of old age, then as a contemporary public health problem and ultimately as a modern moral panic. We conclude by considering a reframing of the loneliness research agenda into one that emphasises social health rather than social ill-health.

Terminological inexactitude: What are we talking about when we talk about loneliness?

Loneliness is a term used frequently and in many different contexts. It is used to describe individuals – 'He is a lonely person'; stages of life – 'She had a lonely old age'; times of day or year – 'He spent many lonely nights'; places – 'It is a lonely stretch of road'; communities – 'Big cities are such lonely places'; and entire nations, with Britain being described as the loneliest country in Europe. But what are we talking about when we use the word loneliness? The research literature, policy and practice are redolent with debates about concepts and terminology. Is an examination of the vocabulary used when taking about loneliness an academic indulgence or a prerequisite of an informed debate about contemporary society or the experience of ageing and later life? We argue that precision of the definition and use of concepts is important in conducting empirical research across disciplines and is essential for informing policy and practice. There are two key attributes to the accepted definition of loneliness. First, there is a broad consensus that loneliness is an experience that is identified by individuals themselves and is not something that can identified or observed by others. Second, loneliness is characterised by both having unpleasant/negative consequences for the individual and is not a state chosen by the individual. Solitude can be described as 'positive loneliness'. It is actively sought by an individual and usually has positive and restorative benefits to the experience. Illustrative of this are those who seek solitude for creative, spiritual and personal growth.[1]

Loneliness is an evaluative concept. It articulates the unwanted gap between an individual's desired quantity and/or quality of

social relationships and the relationships they have. Thus, we have the paradox that individuals may have a wide circle of family and friends but experience loneliness because these relationships do not fulfil an individual's expectations for the quality of their relationships. Conversely, an individual may have a small number of social relationships but not experience loneliness because of their quality. To date, loneliness has been anchored in the evaluation of the quantity/quality dimensions of relationships. A potentially emergent dimension of loneliness relates to the modality of social relations: in-person, by telephone or via a range of platforms such as Zoom, Skype, Facetime or WhatsApp. Has physical distancing and the conduct of social relationships remotely or virtually during COVID-19 creating loneliness by virtue of not being able to be with those people? Can loneliness be generated by the desire for in person contact with, for example grandchildren, when contacts are via Zoom? Does seeing but not being able to touch or hold those dearest to us generate loneliness? These are just some of the emerging research questions that have been developing over the last decade, but which have gained increased attention and importance during COVID-19.

It cannot be over-emphasised that loneliness is an evaluation by individuals of their social relationships and, as such, cannot be assigned to them by others. Within the broad 'cognitive gap' approach to loneliness there are three key conceptual types: social, emotional and existential loneliness. Social loneliness was the focus of 103 out of 144 papers included in the 2019 conceptual review by Mansfield et al.[2] Emotional loneliness was the focus of 24 studies and existential loneliness in 17. Drawing on the work of Sullivan et al,[3] we can illustrate these three types of loneliness. Social loneliness is well described by the following comments: 'I was on the phone

to a friend for an hour… and she never asked about how I was.' Emotional loneliness following bereavement was described as 'loneliness of the heart. And that's it. I mean everything I touch, everything I do she's there.' Potentially, emotional loneliness could be the outcome of other types of losses or transitions such as loss of identity upon retirement or onset of chronic illness. Existential loneliness articulates not just the lack of meaningful relationships but as a visceral feeling of separation from the world and others summarised as 'on your own, with on one to talk to, nobody to care, and nobody to care for.'

Loneliness is distinct from, but related to, the concepts of solitude, aloneness, living alone and social isolation.[4]Aloneness refers to the amount of time individuals spend alone, which maybe voluntary or involuntary. Voluntary time alone links to solitude or positive loneliness.

Involuntary time alone is where this is not the choice of the individual. For example, older people living in households where all the other members are out at work, school or other occupations for large amounts of the day. Although this was a factor included in early studies looking at loneliness,[5] it seems to have fallen out of favour and replaced by living alone. However, recent work by Victor et al. suggest that time spent alone is an important predictor of loneliness.[6] Living alone is simply a classification of household size. Although it is frequently used as a proxy measure for aloneness or loneliness, it does not imply a deficit in social relationships.

Social isolation is a broad term which describes the lack of social contacts/engagement with family, friends and neighbours. A basic measure of social isolation, as used by Townsend in *The Family Life of Old People* from 1957,[7] is a simple count of daily/weekly contacts. This can then be extended to include enumerating

social networks and/or details of support received from network members. Rarely do such measures ask about support given, thereby not fully recognising the reciprocity of support between network members. Empirically, loneliness and isolation, the two concepts most often used interchangeably in academic, policy, practice and lay discourses, are distinct concepts as demonstrated by Victor et al.[8] For a sample of 999 people aged 65+ living in the community in Britain, they show that 6% were lonely, 22% were isolated, 5% were both lonely and isolated and the majority, 67% were neither. Thus, both empirically and conceptually these are distinct concepts representing different dimensions of social health and are not interchangeable terms.

The language of loneliness measurement

When did you last feel lonely? Was this a mild feeling in response to something you heard or saw or an intense response thinking about the loss of a parent, partner or friend? Does loneliness occur frequently or is it a rare occurrence? When you experience loneliness how long does it last? Is it a fleeting experience or one of protracted duration? Despite this complexity, empirically loneliness is presented as an unproblematic concept that is universally understood and experienced homogeneously. People are either lonely or not lonely; and everyone explicitly understands when s/he is or is not lonely. We also assume a homogeneity of understanding across gender, generation, culture and setting despite the heterogeneity exhibited by these dimensions for other social science constructs.

Loneliness measures largely focus upon establishing the frequency of the experiences, asking questions such as do you

experience loneliness never, seldom, often or always. Rarely do studies include the duration of the loneliness experience or its intensity. Yet these may be important but neglected elements of trying to understand loneliness and its potential impact on individuals.[9] The complexity of looking at the intersections of these domains may reveal the heterogeneity of loneliness as an experience. It may also have implications for policy and practice. Currently our evidence presumes more frequent loneliness generates worse outcomes. However, we do not know how this links with duration and intensity. Is a frequent, low intensity and short duration loneliness worse than less frequent but higher intensity and longer duration? How do these components interact across different population sub-groups and across the lifecourse? For example, do younger adults experience loneliness in terms of the intensity of the experience and older adults of frequency? These questions remain largely unanswered and there is clearly scope for more detailed and in-depth thinking about how individuals experience the different dimensions and types of loneliness.

How to 'best' empirically measure loneliness is the subject of considerable debate. Of course, given the evaluative nature of loneliness, there is no gold standard against which to validate scales. Two key areas of debate are: (a) the merits of single item questions as compared with scales, and (b) the advantages/ disadvantages of asking directly about loneliness as compared with 'indirect' questions. Sheldon undertook a survey of older adults living in Wolverhampton in the UK in the immediate post-war period. Included in his 1948 book *The Social Medicine of Old Age* are data about the prevalence of loneliness based upon responses to a question which asked: *are you… very lonely, lonely at times or never lonely*?[10] There are now numerous versions of this question, which

vary in terms of response options which can range from 2 to 7 and sometimes include a reference (e.g. in the last year, last week). A critique of the single item question is the use of the word *loneliness*. It is argued that these types of questions will not establish the 'true' prevalence of loneliness as not all participants will want to characterise themselves as lonely, especially if asked in a direct interview.

The single item measures may have limitations in terms of theoretical underpinning of the question, establishing the most efficient set of response categories and how well these measures identify changes in loneliness. However, there is no true 'gold standard' prevalence of loneliness – it is the personal evaluation of participants. One critique argues that these questions underestimate prevalence because participants may not answer 'honestly' given the potentially stigmatising nature of admitting to being lonely. This fundamentally misunderstands the nature of loneliness. If I don't think I am lonely, who are you to disagree and tell me that I really am? The single item questions generally show high levels of acceptability to older people. In large scale population surveys, using different methods of data collection- face-to-face, online, telephone and postal surveys very few participants decline to answer the question.[11] The more relevant critiques of the single item questions are their limited psychometric properties and the lack of a robust theoretical foundation. It seems likely that where responses consist of either two or three options, sensitivity to change is going to be limited, which may be problematic in evaluation studies.

There are a range of scales used to measure loneliness which do not include the word *loneliness* directly in any of the questions. Two of the most used are the University of California at Los

Angeles (UCLA) Loneliness Scale[12] and the de Jong-Gierveld (DJG) Loneliness Scale.[13] The UCLA scale, which has a variety of versions from 40 to 3 questions, considers loneliness as unidimensional, and that it arises from 'social deficits' in close relationships. The DJG scale conceptualises loneliness as a multi-dimensional concept based upon the distinction between social and emotional loneliness developed by Weiss and is available in 6 and 11 item versions.[14] For both scales higher scores indicate higher levels of loneliness. Sensitivity to detect change is unclear as also, perhaps more importantly, is what change 'means' to the life of an older person and their social health. We might see a reduction (or increase) of, for example, 2 points on the 11 item DJG scale as a result of an intervention, but how does that manifest itself in terms of the daily life of an individual? Of course, as statistical significance, but so too is the 'real world' impact of changed scores. Typically, results are reported as mean scores. For both the UCLA 3 item scale and the two versions of the DJG scale, threshold scores can be used to classify populations into groups of typically no/low loneliness; moderate loneliness and severe loneliness. However, whilst these scales do not use the word *loneliness*, they can ask some potentially stigmatising or upsetting questions. To illustrate this point, two items from the 11 item DJG scale ask 'I experience a general sense of emptiness' and 'I often feel rejected'.

The language of loneliness problematisation

In his 2012 book *Loneliness in Philosophy, Psychology and Literature*, Mijuskovic argues that loneliness is simply a part of being human, but contemporary perspectives demonstrated a 'problem focused' approach.[15] The current language of loneliness has problematised

loneliness. This is continually reinforced in research, policy and practice where different disciplines seek to define and measure loneliness, determine risk factors, and argue it can be easily alleviated with the right intervention. The underlying assumptions are that there is a universal understanding of what loneliness is, that it is a homogeneous, static and/or linear experience, and that it is quantitatively accessible. In terms of how loneliness is presented in the UK, it has changed over the last 10 years from a social problem of old age to a moral panic than threatens the very existence of the welfare state, especially the National Health Service.

Loneliness as a problem of old age: Initially, loneliness was characterised as a problem of 'old age'. In a 1947 survey Rowntree stated that 'A distressing feature of old age is loneliness. All who have done welfare work among the old have found it the most common, if at the same time the most imponderable, of the ills from which the aged suffer, and its frequency was amply confirmed by our study.'[16] Loneliness is seen as a problem of later life rather than other age groups and, perhaps to overstate the case, part of the ageing process. We expect to become lonely when we grow old lonely.[17] This stereotype is illustrated in advertisements from age-related charities which portray loneliness as a specific issue for older people, as exemplified by the Christmas holiday period, although there is no evidence that levels of loneliness for older adults are highest at Christmas.[18] Recent research, stimulated in part by the redefinition of loneliness as a public health problem, has reported that loneliness is not unique to older people but is experienced by adults of all ages. UK data from the Office for National Statistics show that the prevalence of loneliness is highest amongst young adults with 10% of those aged 16-24 reporting they are often/always lonely, compared with 3% of those aged 75+.[19] From this

it could be argued that the framing of loneliness as a problem of old age constrained how we thought about the subject and limited our research horizons and consequently developments in terms of policy and practice.

Loneliness as a public health problem: The portrayal of loneliness in the UK has changed over the last decade from a social problem of old age to a public health problem, but still rooted in the focus on older people. Illustrative of this perspective is the 2017 publication from the Mental Health Foundation Scotland entitled *Loneliness – The Public Health Challenge of our Time.*[20] In a similar vein, in 2010 the Royal College of Nursing described loneliness as one of the greatest public health challenges of our time.[21] Izzi Seccombe, Local Government Association spokeswoman for public health, said in 2016: 'Loneliness is a significant and growing concern for many older people and is something that is now being identified as a major public health issue.'[22] It is not clear what drove this redefinition of loneliness but two factors in the UK are involved in this reprofiling: the link between loneliness and health outcomes, the notion of the loneliness epidemic and the role during the early to late 2010s of the UK's Health Secretary Jeremy Hunt.

Since the systematic review published in 1988 by House et al,[23] there had been evidence linking social relationships with health outcomes. House reported a link between low quantity of social relationships in both human and animal studies, i.e. social isolation, and increased risk of death. This work was much more cautious about the influence of loneliness as defined by quality of relationships on health outcomes. The publication in 2010 and 2015 by Holt Lunstad and colleagues of a series of systematic reviews on mortality and social relationships re-invigorated the debate started by House and colleagues.[24] Particularly important

was the comparisons drawn by these researchers in their reviews between the excess risk of death attributed to poor social health, about 30%, comparable with those attributed to smoking and obesity.[25] This observation has been transformed into statements such as that from Duncan Selbie, Head of Public Health England in April 2013 that 'Being isolated and living alone shortens life and increases disability'. It is equivalent to 15 cigarettes a day. How many in your community are over 65 and living alone?'[26] Similar comments were made in North America: 'Loneliness is Harmful to Our Nation's Health: Research underscores the role of social isolation in disease and mortality.'[27] This headline nicely illustrates the terminological inexactitude noted earlier, with loneliness and social isolation used interchangeably.

The other key narrative driving the reconceptualisation of loneliness as a public health problem is the concept of an epidemic of loneliness. Illustrative of this is another article in *The Guardian* from 2013 which states: 'Britain's loneliness epidemic: People in Britain are living longer, and increasingly, spending their last years alone. Now more of us than ever before describe ourselves as lonely.'[28] Again, this headline demonstrates the terminological inexactitude seen in much commentary on this area. Versions of this argument are also evident in other countries.[29] An epidemic, broadly defined, is a public health term used to describe time limited increases in infectious diseases from a background level in defined locations. A looser definition is where the term is used to described increases in, for example, health related risk factors such as obesity or, in our case loneliness. What is the evidence to suggest that there has been an increase in loneliness? We have some limited evidence from older adults in the UK, where we can compare loneliness prevalence across surveys conducted at different points

in time using the single item question. For the period 1948 to 2005, Victor et al. reported the prevalence of severe loneliness, defined as those reporting they were often/always lonely, as broadly stable at 8-10%.[30] More recent data from for 2018 from the Office for National Statistics reports loneliness prevalence of about 3-5% for those aged 65+.[31] Clearly there are more lonely adults in the UK in 2018 than 1948 because there are more people in this age group. However, in relative terms the prevalence has not increased, suggesting that there is not a loneliness epidemic. In evaluating loneliness reporting in terms of the number of people experiencing this, we need to have both absolute numbers and the relative proportions.

This links nicely to the influential 2013 speech by Jeremy Hunt, the UK's then Secretary of State for Health. He observed that the lonely constituted a 'forgotten million who live amongst us – ignored to our national shame.' He also stated that 'according to the Campaign to End Loneliness, there are 800,000 people in England who are chronically lonely.'[32] This is an example of a common phenomenon in many contexts, that of specifying the number of people who have a specific problem or experience but not providing us with the population at risk – What is the total number of people who could have this? It is interesting to speculate as to why Jeremy Hunt choose to highlight loneliness at this period when there were many other pressing health related issues in the UK. One factor may have been the creation in 2011 of a charity focused exclusively on loneliness in later life, the Campaign to End Loneliness.[33]

How do we define a public health problem and how well does loneliness fulfil these criteria? The criteria are flexible but generally include: (a) the issue poses a significant burden of ill-health on

individuals, populations or health systems; (b) the problem is increasing; (c) there is a test that we can use to identify the problem; and (d) a proven intervention to reduce or eliminate the health burden. In terms of loneliness in the UK, two key criteria seem to have driven this agenda. The first is the perceived consequences in terms of health outcomes. If loneliness is as bad for population health as smoking, then we should implement policies to reduce loneliness. We would argue that the evidence for this is not as compelling as the reviews suggest because of variability in terms of how the exposure (loneliness) and outcomes (health status) are defined and measured and the dominance of cross sectional study designs which make disentangling cause and consequence problematic. If we observed a relationship between loneliness and dementia, is loneliness a cause or consequence of dementia? We have already noted that there is no evidence to support the proposition of a loneliness epidemic (at least for older adults).

Two further criteria need to be fulfilled for loneliness to be considered a public health problem: an effective 'test' to identify loneliness and effective interventions to prevent or ameliorate loneliness. We need to be able to identify our 'target' populations, using a 'biological/clinical' test or screening tool, and then provide effective interventions. A screening tool/test needs to be able to correctly differentiate, in our case, those who are lonely (true positives termed sensitivity), from those who are not (true negatives termed specificity). This is problematic in that there is no 'gold standard' biological, clinical or social 'diagnosis' of loneliness. Using data from Victor et al from 2005, with the single item question as our gold standard and the 11 item DJG scale as our test, there is a sensitivity of 79% and a specificity of 68%.[34] This means that our hypothetical intervention would not be given

to 31% of those in need but not identified by the test, and instead given to 32% of those who did not need it: overall, a very poorly performing test.

In terms of interventions, these could focus upon either (a) preventing loneliness in those who might be vulnerable or (b) reducing loneliness among those already lonely (or both). There are a plethora of interventions that focus on loneliness and these vary in terms of the mode of the intervention (group or individual; in person or on-line); the goal of the activity (preventing or reducing loneliness), the type of loneliness being addressed (chronic or temporary, emotional, social or existential). In 2018, Victor et al. reviewed 14 existing reviews of loneliness reporting 40 different intervention studies.[35] Most studies focused on social loneliness (n=36). There was a lack of clarity as to the intervention purpose and referral pathways were variable, as was the duration and intensity of the intervention. The review concluded that as a result of small sample sizes (mean sample size=116), the variety and adaptation of loneliness (outcome) measures used, the short follow up (only 6 studies reported post intervention follow up, of which only 1 was 12 months) evidence for the effectiveness of interventions could not be detected. No studies looked at preventing loneliness.

Loneliness as a 'moral panic': The most recent and, perhaps, most pernicious representation of loneliness in later life is as a 'moral panic', although I am stretching this concept somewhat. This conceptualisation links to statements that excess health service use by older adults will bring about the downfall of the health service in the UK. Lonely older people are characterised as using services simply because of their poor social health and not for 'legitimate' health reasons. In February 2016 Professor Keith Willett, Director for Acute Care for NHS England stated*:*

'The consequences [of loneliness and isolation among older people] are increasing, unremitting demand on healthcare which will ultimately cripple the NHS.'[36]Again, this suggests that the relationship between loneliness and health outcomes is linear and unidirectional: loneliness is the cause (exposure) and excess service use is the consequence or outcome.

The empirical evidence to support this perspective is very limited. In 2018, Valtorta et al. undertook a systematic review of social relationships and health use by older adults.[37] They concluded that current evidence did not support the proposition that those with low levels of social support placed greater demands on health care independently of health status. In this approach we also see the terminological inconsistency that is so prevalent in discussions of loneliness. For example, a study published in 2018 reported that older people who lived alone were 50% more likely to visit the A&E department and visited their GP monthly.[38] This is then reported as 'Older people living alone visit GP every month due to loneliness'.[39] Similarly, a survey reported in the medical professionals' magazine *Pulse* that one in 10 GPs 'regularly' see lonely patients who are 'not unwell'.[40] However, this survey, like the one conducted by the Campaign to End Loneliness,[41] had not asked the older adults why they are consulting or if they are lonely. Rather, it is the GPs who determining that (a) the older person is lonely and (b) that is their reason for the consultation.

Developing a new language for social health research

We argue that it is important to research the third component of health, social health, identified in the WHO definition with the diligence and resources given to physical and mental wellbeing.

However, we should not simply focus on a deficit model – looking at loneliness and isolation – but also seek to identify what supports good social health. In developing a research agenda in social health, it is important to recognise that current perspectives engender a 'problem focused' approach to the study of loneliness, as illustrated earlier. There is an extensive body of work where single disciplines have problematised loneliness in order to define and measure it, determine risk factors, identify negative health outcomes and argue that it can be easily alleviated by appropriate intervention. Loneliness is being increasingly defined as a pathological state within the domain of the medical profession rather than a part of being human. This medicalisation of 'the problem' of loneliness constrains our thinking, excluding possibilities such as the existence (or otherwise) of positive experiences of loneliness.

Our focus on loneliness as a problem of old age has resulted in the neglect of compromised social health in other populations (e.g. young adults). Simple prevalence estimates are useful for estimating the size of a problem but, in terms of loneliness, mask the different types of groups encompassed. Within, for example, a 5% prevalence rate we have those who are the 'long-term' lonely and those whose loneliness is less established. Studies focused on prevalence are important, but we have largely neglected looking at loneliness across the life span (prevalence by age group) or life course – are those who are lonely in old age lonely when they were young? New work from Victor et al suggests that up to 70% of older adults have experienced loneliness at earlier phases of their life.[42] Developing a life course approach may offer insights into effective interventions. Intergenerational work bringing together young and older adults may combat the fears or anxieties the young may have about loneliness. We also need to consider how

(or if) the nature of loneliness in terms of intensity, duration and frequency, varies across different age groups (and other axes of social differentiation such as ethnicity or gender). We also need to consider if the different types of loneliness – social, emotional and existential – vary across different age groups and the life course.

Victor and Pikhartova[43] note that there are a plethora of individual 'risk factors' such as age, gender, widowhood etc., many of which are not easily manipulated to reduce loneliness, but that less interest has been shown in meso (neighbourhood or community level) or macro society levels risk factors. Few have risen to the challenge of Victor and Sullivan to incorporate these three levels of analysis-micro, meso and macro into our models of understanding social health.[44] Perhaps the most radical shift would be to move away from a deficit model of studying social health and change the questions being asked. Rather than focus on loneliness or isolation, why not explore the reasons most adults are in these categories and learn from the factors that promote good social health? Such an approach will serve to focus research on healthy social relationships and seek the factors that promote these across the life course, rather than focussing on the negative, minority experience of single age groups.

Notes

1. David Vincent, *A History of Solitude* (Cambridge: Polity Press, 2020).
2. Louise Mansfield, Norma Daykin, Catherine Meads, Alan Tomlinson, Karen Gray, Jack Lane and Christina Victor, *A Conceptual Review of Loneliness Across the Adult Life Course (16+ years): Synthesis of qualitative studies*. What Works Wellbeing, July 2019: https://whatworkswellbeing.org/wp-content/uploads/2020/02/V3-FINAL-Loneliness-conceptual-review.pdf (accessed 19.10.2010).
3. Mary Pat Sullivan, Christina Victor and Michael Thomas, "Understanding and alleviating loneliness in later life: Perspectives of older people", *Quality in Ageing and Older Age*, vol. 17, iss. 3, 2016, 168-178.

4. See Christina Victor and Mary Pat Sullivan "Loneliness and isolation", in J. Twigg and W. Martin (eds.), *Handbook of Cultural Gerontology* (Abingdon: Routledge, 2015), 261-268. Christina Victor, Sasha Scambler, Ann Bowling and John Bond, "Being alone in later life: loneliness, isolation and living alone in later life", *Reviews in Clinical Gerontology*, Vol. 10, iss.3, 2000, 407–417.
5. J. Bond and V. Carstairs, *The Elderly in Clackmannan*. Scottish Health Services Studies 42 (Edinburgh: Scottish Home and Health Department, 1982).
6. Christina Victor, Alice Eccles, Matthew Ritchens, Claudia Hammond, Manuela Barreto and Pamela Qualter, "Loneliness across the lifecourse", *Journal of Life Course Studies*, 2020 (under review).
7. Peter Townsend, *The Family Life of Old People: An Investigation in East London* (London: Allen Lane, 1957).
8. See Victor et al., 2000. See also Christina Victor, Sasha Scambler, and John Bond, *The Social World of Older People* (Maidenhead: Open University Press, 2008).
9. Manuela Barreto, Christina Victor, Alice Eccles, Matthew Ritchens, Claudia Hammond and Pamela Qualter, "Loneliness around the world: Age, gender, and cultural differences in loneliness", *Personality and Individual Differences*, 2020; 20:110066.
10. Joseph Sheldon, *The Social Medicine of Old Age* (Oxford: Oxford University Press, 1948).
11. Christina Victor, Linda Grenade and Duncan Boldy, "Measuring loneliness in later life: A comparison of differing measures", *Reviews in Clinical Gerontology*, 15(1), 2005, 63-70.
12. D.W Russell, UCLA loneliness scale (version 3): reliability, validity and factorstructure", *Journal of Personality Assessment*, 1996, 66 (1), 20–40.
13. J. de Jong-Gierveld, "Developing and testing a model of loneliness." *Journal of Personal and Social Psychology*, 1987, 53, 119–28.
14. Robert Stuart Weiss, *Loneliness: The Experience of Emotional and Social Isolation* (Cambridge, MA: MIT Press, 1973).
15. Ben Mijuskovic, *Loneliness in Philosophy, Psychology, and Literature* (Bloomington, IN: iUniverse, 2012).
16. B. Seebohm Rowntree, *Old People: Report of a survey committee on the problems of ageing and the care of old people* (London: The Nuffield Foundation, 1947), 52.
17. Jitka Pikhartova, Ann Bowling and Christina Victor, "Is loneliness in later life a self-fulfilling prophecy?", *Aging & Mental Health*, 2015 20(5), 543-549: https://doi.org/10.1080/13607863.2015.1023767 (accessed 19.10.2020).
18. Christina Victor, Mary P. Sullivan, Rachel Woodbridge and Michael Thomas, "Dancing with Loneliness in Later Life: A Pilot Study Mapping Seasonal Variations", The Open Psychology Journal, 2015, 8: 97-104: https://benthamopen.com/contents/pdf/TOPSYJ/TOPSYJ-8-97.pdf (accessed 19.10.2020).
19. Office for National Statistics, "What characteristics and circumstances are associated with feeling lonely?" April 10, 2018: https://www.gov.uk/government/statistics/loneliness-what-characteristics-and-circumstances-are-associated-with-feeling-lonely (accessed 05.09.2020).
20. Mental Health Foundation Scotland, "Loneliness – The public health challenge of our time", December 2017: https://www.mentalhealth.org.uk/sites/default/files/Loneliness%20and%20Mental%20Health.pdf (accessed 5.9.2020).
21. Royal College of Nursing, "Recognising loneliness", 2020: https://www.rcn.org.uk/clinical-topics/public-health/inclusion-health-care/loneliness/recognising-loneliness (accessed 5.9.2020).
22. AGE UK, "Loneliness a major public health concern", January 28, 2016: https://www.ageuk.org.uk/latest-news/archive/loneliness-a-major-public-health-concern/ (accessed 5.9.2020).
23. J.S. House, K.R. Landis, and D. Umberson, "Social relationships and health", *Science*, 29 Jul 1988, Vol. 241, iss. 4865, 540-545.
24. Julienne Holt-Lunstad, Timothy Smith and J. Bradley Layton, "Social Relationships and Mortality Risk: A Meta-analytic Review", *PLoS Med*, 7(7) 2010. Julienne Holt-Lunstad, Timothy Smith, Mark Baker, Taylor Harris and David Stephenson, "Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review", *Perspectives on Psychological Science*, 2015;10(2): 227-237.
25. NHS, "Loneliness increases the risk of premature death", March 13, 2015: https://www.nhs.uk/news/mental-health/loneliness-increases-risk-of-premature-death/ (accessed 5.9.2020).
26. *The Guardian*, "Duncan Selbie: Being isolated is equivalent to fifteen cigarettes a day", March 12, 2013: https://www.theguardian.com/society/2013/mar/12/duncan-selbie-isolated-bad-health (accessed 5.9.2020).
27. *Scientific American*, "Loneliness is harmful to our nation's heath",

March 20, 2019: https://blogs.scientificamerican.com/observations/loneliness-is-harmful-to-our-nations-health/ (accessed 5.9.2020).
28. *The Guardian*, "Britain's loneliness epidemic", January 22, 2013: https://www.theguardian.com/society/2013/jan/22/the-loneliness-epidemic (accessed 5.9.2020).
29. HRSA, "The loneliness epidemic", January 2019: https://www.hrsa.gov/enews/past-issues/2019/january-17/loneliness-epidemic (accessed 5.9.2020).
30. Victor et al., "Being alone in later life", op. cit.
31. Office for National Statistics, "What characteristics and circumstances are associated with feeling lonely?" April 10, 2018: https://www.gov.uk/government/statistics/loneliness-what-characteristics-and-circumstances-are-associated-with-feeling-lonely (accessed 5.9.2020).
32. Jeremy Hunt, "The forgotten million", October 18, 2013: https://www.gov.uk/government/speeches/the-forgotten-million (accessed 15.9.2020).
33. Campaign to End Loneliness, November 15, 2013: https://www.campaigntoendloneliness.org/blog/lonely-visits-to-the-gp/(accessed 5.9.2020).
34. Christina Victor, Linda Grenade and Duncan Boldy, "Measuring loneliness in later life: A comparison of differing measures", *Reviews in Clinical Gerontology*, 15(1), 2005b, 63-70.
35. Christina Victor, Louise Mansfield, Tess Kay, Norma Daykin, Jack Lane, Lily Grigsby Duffy, Alan Tomlinson and Catherine Meads, "An overview of reviews: the effectiveness of interventions to address loneliness at all stages of the life-course", What Works Wellbeing, October 2018: https://whatworkswellbeing.org/wp-content/uploads/2020/01/Full-report-Tackling-loneliness-Oct-2018_0151580300.pdf (accessed 19.10.2020).
36. *The Guardian*, "Loneliness 'forces older people into hospitals' and strains services say senior doctors", February 1, 2016: https://www.theguardian.com/society/2016/feb/01/loneliness-forces-older-people-into-hospitals-and-strains-services-say-senior-doctors?CMP=share_btn_tw (accessed 5.9.2020).
37. Nicole K. Valtorta, Danielle Collingridge Moore, Lynn Barron, Daniel Stow, and Barbara Hanratty, "Older Adults' Social Relationships and Health Care Utilization: A Systematic Review", *American Journal of Public Health*, 108, 2018.

38. Kathryn Dreyer, Adam Steventon, Rebecca Fisher and Sarah R. Deeny, "The association between living alone and health care utilisation in older adults: A retrospective cohort study of electronic health records from a London general practice", *BMC Geriatrics,* 18, 269, 2018: https://doi.org/10.1186/s12877-018-0939-4 (accessed 5.9.2020).
39. Practice Business, "Older people living alone visit GP every month due to loneliness", December 14, 2018: https://practicebusiness.co.uk/older-people-living-alone-visit-gp-every-month-due-to-loneliness (accessed 5.9.2020).
40. *Pulse,* "Four in 10 GPs regularly see lonely patients who are not unwell", December 19, 2019: http://www.pulsetoday.co.uk/news/four-in-10-gps-regularly-see-lonely-patients-who-are-not-unwell/20039868.article (accessed 5.9.2020).
41. Campaign to End Loneliness. op. cit.
42. Victor et al., "Loneliness across the lifecourse", op. cit.
43. Christina Victor and Jitka Pikhartova, "Lonely places or lonely people? Investigating the relationship between loneliness and place of residence", *BMC Public Health*, 20, 778, 2010.
44. Victor and Sullivan, "Loneliness and isolation", op. cit.