

# A public health approach to social isolation in the elderly

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The recent pandemic has highlighted the impact of social isolation on health. District and community nurses are in daily contact with vulnerable, elderly clients for whom the norm is a world with little social contact. This compounds the health inequalities affecting this population. District and community nurses require support to meet the psychological and social needs of these clients. In order to improve the health of older people with long-term conditions, joint action between agencies, voluntary groups and charities is imperative. Inclusive and creative evidence-based interventions could be the public health solution to the emerging crisis in the psychological health of elderly clients with chronic conditions.

## KEYWORDS:

■ Social isolation ■ The elderly ■ Loneliness ■ Digital technology

The coronavirus (Covid-19) pandemic has meant many of us have experienced social isolation and constraints on how we can live our lives. The effect on health was immediate. After two weeks of lockdown, a survey of 500 respondents reported that 60% of people were exercising less, a third eating less healthily, and 20% said they were drinking more alcohol (Bevan et al, 2020). Almost two-thirds (64%) of the 500 survey respondents said that they were sleeping less due to worry. A third (32%) felt not cheerful or in good spirits, 40% not calm or relaxed, and 20% lonely and isolated (Bevan et al,

*'... old trees just grow stronger, and old rivers grow wilder everyday... but old people just grow lonesome, waiting for someone to say hello in there, hello.'*

**(John Prine; American Folk singer, b. October 1946, d. April 2020 (Covid-19))**

2020). Older people with long-term conditions are likely to experience similar negative effects on their emotional and physical wellbeing.

Another survey of 500 people over the age of 70 was conducted by live-in care specialists, Elder, during the last two weeks of April (Elder, 2020). Its findings add to concerns of a loneliness epidemic growing during the lockdown, with one in three elderly people feeling more isolated. Indeed, findings from this survey revealed that one in five of respondents over 70 have spoken to family and friends less than every fortnight, and nearly 40% have not left their home at any time during the lockdown.

For most of us the impact of isolation will be temporary, but for older people, particularly those experiencing this regularly, the harm may be significant. While the pandemic is the greatest public health crisis in recent decades, social isolation is a growing issue of major concern for many older people. A public health response and the mobilisation of communities and volunteers to improve health in this hidden, neglected and marginalised population is needed.

Social isolation and loneliness are linked, but it is possible to be isolated without feeling lonely. Isolation is associated with lack of structural and functional support (Dickens et al, 2011). Loneliness is subjective and about a person's perception of their social situation. Loneliness is a 'universal phenomenon' and has a profound impact on health and quality of life (Karnick, 2005). It is defined as a painful feeling of lack or loss of companionship. It happens when there is a mismatch between the quantity and quality of social relationships that we have, and those that we want (Perlman and Peplau, 1981).

## SCALE AND IMPACT OF LONELINESS ON THE ELDERLY

Loneliness is seen as an inevitable result of ageing and has been described as an epidemic (Wood, 2013). Statistics show the scale of the issue, with 1.2 million chronically lonely older people in the UK (Age UK, 2016). Half a million older people go at least five or six days a week without seeing or speaking to anyone at all (Age UK, 2016). Nearly half of older people (49% of 65+ in the UK) say that television or pets are their main form of

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company (Karnick, 2005). Nine percent of older people feel trapped in their own home. There are over 2.3 million people aged 75 and over living alone in Great Britain, an increase of almost a quarter (24%) over the past 20 years (Office of National Statistics [ONS], 2019).

Social isolation results in premature mortality. It is as great a risk to health as obesity or smoking (Holt-Lunstad et al, 2015). It is linked with negative quality of life outcomes, including poor physical and mental health (Luo et al, 2012). Blood pressure is higher in lonely people than their peers (Hawkey et al, 2010). Lack of social relationships is linked with increased risk of developing heart disease (Xia and Li, 2018). Loneliness in the elderly has also been associated with depression and functional decline (Perissinoto et al, 2012). Depression, in turn, can lead to damaging health behaviour, such as unhealthy eating, smoking and increased alcohol intake (Lillyman and Lillyman, 2007). Furthermore, loneliness has been associated with a 40% increased risk of dementia (Sutin et al, 2018).

District nurses are in daily contact with older housebound clients, with community services undertaking approximately 100 million contacts each year (Addicott et al, 2015). About four million older adults in the UK (36% of people aged 65–74, and 47% of those aged 75+) have a limiting long-term condition (Horsfield, 2017). This is equal to 40% of all people aged 65+ (Horsfield, 2017). Over half (54%) of older people have at least two chronic conditions (Kingston et al, 2018). The proportion of people with multimorbidities among those aged 65–74 is 46% (Kingston et al, 2018). This increases to 69% among those aged 85+ (Kingston et al, 2018). Multimorbidity increases the likelihood of hospital admission, length of stay and likelihood of readmission, diminishes quality of life, and causes dependency, polypharmacy and mortality (Kingston et al, 2018). This population makes up the caseloads of district nurses, and

the risk of poor outcomes is greatly compounded by the effects of social isolation and loneliness.

The shift from hospital to community-based care has created a growing gap between capacity and demand, with a ratio of only one district nurse for every 14,000 people, compared with one GP for every 1,600 people (Fanning, 2019). While district nurses traditionally focused on caring for ill patients at home, they also 'had a very prominent public health role in considering the psychosocial impacts that affected the health of their patients' (Fanning, 2019: 7). However, the delivery of high quality, patient-centred care has become increasingly complex with caseloads reflecting high levels of clinical need (McCrorry, 2019). This, coupled with a significant decline in the number of qualified district nurses, has resulted in a more 'task-focused' approach (Maybin et al, 2016) and reduced capacity to exercise a public health role (Fanning, 2019). Issues such as social isolation and loneliness cannot be the sole responsibility of district nurses. Support for district nurses is needed within communities to help towards older people meeting the World Health Organization's (WHO, 1946) definition of health, which includes: 'physical, mental and social well being, rather than merely the absence of disease or infirmity'.

Public health is defined as, 'the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society' (Acheson, 1988). Adopting a public health approach to social isolation in elderly vulnerable clients could greatly improve quality of life. Public health involves targeting resources to those who need them the most and have the most to gain (Health Development Agency [HDA], 2005). It is about tackling the complex multilayered influencing factors which impact on health, such as poverty, ethnicity, gender, age discrimination and lack of community cohesion (Dahlgren and Whitehead, 1991).

To reduce health inequalities, action needs to take place within

all the layers. This includes social and community networks, which contribute to inclusion and a sense of belonging. While (2019) suggests current services focus on deficits, or the identification of problems and needs, and argues for a 'health creation' or asset-based approach. This relates to different individual assets, such as self-esteem, sense of purpose and resilience, as well as community assets, such as support networks, family and other relationships, inter-generational and community cohesion, religious tolerance and social harmony (Hopkins and Rippon, 2015). In view of demographic changes and growth in long-term conditions, While (2019: 458) suggests health creation is urgently needed to 'avert the inevitable consequences for both the individual and society as a whole'.

The coronavirus pandemic has shown the extent to which communities can be mobilised. A call for NHS volunteers to support 1.5 million vulnerable people resulted in over 750,000 people signing up in just four days (Johnson and Penna, 2020). A lasting impact of this crisis may be that this voluntary activity could be directed towards addressing the social isolation of marginalised, hidden and neglected populations who make up district nurse caseloads.

People are living longer, but have a higher incidence of health conditions, frailty, and/or dementia, with an average 2.4–3 years spent with 'substantial' care needs (Kingston et al, 2017). Research into life satisfaction of older people with limited self-care capacity is sparse (Borg et al, 2006). While deterioration of physical health is important, lack of social support also seriously impacts on life outcomes (McCamish-Svensson et al, 1999). A systematic review of older people's perceptions reinforced that while their physical health impacted on their quality of life, there were numerous interconnected themes, including; 'autonomy, role and activity, health perception, relationships, attitude and adaptation, emotional

comfort, spirituality, home and neighbourhood' (van Leeuwen et al, 2019).

Social contacts have been seen as essential to quality of life, as they help to avoid loneliness, while close relationships or family have been highlighted as particularly valuable (van Leeuwen et al, 2019). In a Swedish study, life satisfaction was linked to emotional wellness, as well as ability to cope with the physical environment. Lower feelings of loneliness and feeling worried enhanced quality of life (Borg et al, 2006). Home visits have been shown to prevent nursing home admission, decline in function and reduce mortality (Elkan et al, 2001). Fanning (2019: 21) reports that in the view of general practitioners, the district nursing service 'averts crises and provides excellence in social prescribing and in recognising conditions such as social isolation'.

## TACKLING THE PROBLEM

For the elderly, district nurses can be the first, or only contact, so there is potential to be alert to factors indicative of loneliness, such as hearing or eyesight loss, lack of visitors, changes in hygiene, activity or mood, or bereavement. Getting to 'know' people and their preferences makes it more likely that nurses can help guide them towards appropriate interventions or services, which Skingley (2013: 89) suggests is important since 'interventions will only be effective if they appeal to the participants involved'.

### Health visitors

The coordination of this multi-agency work is required not only to meet clinical need, but also address psychological wellbeing. To ensure the effectiveness of this approach, emphasis on health promotion and prevention of ill health is required. Health visitors are well placed to be involved in this care. Although health visitors have provided services to mothers and young children rather than older people, the potential of the health visitor in meeting the needs of older people in the community has long been recognised (Brocklehurst, 1982).

Historically, health visitors played a key role in working with clients from across the life span, offering a wider 'family-centred approach', providing support in the home for older people around significant public health needs, including grief, bereavement, loneliness, isolation, caring responsibilities, and cardiac and stroke rehabilitation.

Many areas, including Derbyshire, have chosen to develop the role of specialist health visitors for older people with caseloads of clients aged over 65 years. Despite this, today's health visitor works only with 0–5-year-old children and their families (<https://ihv.org.uk/families/what-is-a-hv/>). Yet, health visitors have the knowledge and skills to work across the lifespan, where a broader concept of 'family' could encompass assessment of the needs of grandparents/older family members, who might not be otherwise accessing services and remain under the radar.

Health visitors do home visits and offer advice and support to clients in order to improve health. They also run groups with a focus on health promotion and wellbeing. Health visitors work with communities to facilitate health improvement at a population level (Hendriksen et al, 1984; Vetter et al, 1984). This supports the premise that it would be beneficial for health visitors to return to the role identified in the Jameson report (1956), as providing services from the cradle to the grave.

Health visitors have been shown to be successful in bridging the gap between health and social care services, as demonstrated in a project commissioned by local GPs in Croyden. For over 20 years, the health visiting for older people service has provided services to those with minimal family and friend support by undertaking holistic assessments, and coordinating services and support to reduce social isolation, loneliness and hospital admission (Spanswick, 2016). Health visitors are skilled in therapeutic communication skills and interventions, such as

motivational interviewing and cognitive behaviour therapy (CBT), which could have a significant impact on outcomes for this increasingly vulnerable and isolated population (Day et al, 2019).

### Potential interventions

Skingley (2013) categorises a number of potential interventions as one-to-one, group or community. Examples of individual interventions include befriending, mentoring, home visiting, telephone support, or gatekeeping (such as care navigators), or community linkers such as wardens.

Befriending has been shown to improve emotional well-being, build resilience and support independence (Mulvihill, 2011). Recent developments include telephone befriending services. A national pilot programme, the 'Call in Time Programme' has been evaluated. This consisted of eight telephone support projects in different locations across England and Scotland, managed by voluntary or charitable organisations, each with its own operational structure. This approach has been shown to help older people to gain confidence, re-engage with the community and become socially active again (Cattan et al, 2010). In the authors' opinion, further networking with other services could strengthen this intervention, and it could be part of a national public health approach to tackling social isolation.

Intergenerational programmes have also been shown to be beneficial to the elderly across a wide range of health outcomes (Teater, 2016). Mixing age groups enables the elderly to connect with the community and feel supported. This has a positive impact on physical and mental health. The 'Time after Time' project involved creative activities for children and the elderly in the community (Teater, 2016). The older participants felt an increased sense of importance and worth which enhanced emotional wellbeing. Long-term interventions, such as co-location of nursing homes and nursery schools, have also been evaluated



and show improvement in quality of life measures, such as enhanced mood, self-esteem and activity levels (Doll and Bolender, 2010). Intergenerational programmes could be considered within the remit of social prescribing, which could be a key public health strategy to tackle social exclusion.

Group interventions can be aimed at specific needs (for example, counselling, diabetes or chronic wounds), have an educational angle, or be social activity-based groups (e.g. day centres, community cafes, lunch clubs) (Skingley, 2013). As older people are more likely to have chronic wound care needs, 'leg clubs' are a familiar example for district nurses. This approach to a physical condition emphasises the importance of wellbeing, social interaction, health promotion and education, delivering treatment in a non-clinical setting. Lindsay (2016) reports how the Leg Club model is flexible (based on local participants), with partnership working between clinicians and volunteers to embed 'social prescribing by introducing activities from walking and photographic activities, chair aerobics to knitting groups and social Leg Club outings'.

Examples of community engagement include strategic frameworks within which localities can integrate combating loneliness for older people, programmes to support individuals to increase participation in existing activities (e.g. libraries, gardens), or outreach programmes and volunteer schemes (e.g. professionally-led choirs, etc) (Skingley, 2013).

While (2020) discusses the benefits of both gardens and arts in improving the quality of life for older people or those with ill-health. An evidence review by the WHO (Fancourt and Finn, 2019:21) showed how 'arts engagement can enhance multidimensional subjective well-being, including affective well-being (positive emotions in our daily lives), evaluative well-being (our life satisfaction) and eudemonic well-being (our sense of meaning, control, autonomy and purpose in our lives)'.

In addition to the social benefits of group activities, such as choirs or dance, even just listening to music improves sleep, helps stroke recovery, and can have an impact on dementia (While, 2020). Gardening has also been shown to have a multi-faceted impact on well-being. For example, Buck and Gregory (2013) reported a notable association between exposure to green spaces and wide-ranging health benefits, including physical and mental health outcomes, such as longer lives, reduced obesity levels, high self-rated physical and mental health and less income-related inequality. Although the research is inconclusive due to different activities associated with gardens, there is a suggestion that being in a garden has helped spinal patients (Buck, 2016) and people with dementia (Whear et al, 2014).

### USE OF DIGITAL TECHNOLOGY

A strategic framework could help address digital technology, which is underused in this area of practice. Twelve percent of the population has no access to the internet and no plans to use it (Coulter and Mearns, 2016). Older people with chronic health conditions are most likely to be excluded (Honeyman et al, 2016). Many lack digital skills and the self-efficacy to overcome barriers to the use of technology (Milne et al, 2014). Education in digital technology could be beneficial for this group. It could help with daily activities such as shopping and banking, social networking and health information. Financial support and digital education could add to the quality of life of disadvantaged populations. Exposure and practice can increase computer skills and enable greater access to the outside world (O'Neil, 2019).

The potential reach of technology has been tested by the coronavirus pandemic. New ways of delivering services have been implemented, which are likely to change the face of health care. Telephone and online consultations have become the norm. For some populations, such as those with motor-neurone disease (MND), technological solutions are

recognised as crucial to health and embedded in national guidance. The National Institute for Health and Care Excellence (NICE, 2019) states that, 'augmentative and alternative communication (AAC) equipment that meets the needs of the person should be provided without delay to maximise participation in activities of daily living and maintain quality of life'.

For people who are housebound and socially isolated, access to equipment and video calling tools (such as Skype or Zoom) could help support them and provide contact with the outside world. Face-to-face communication is shown to promote social engagement through body language and facial expression (Porges, 2003). Older people want to use video calls. 'I don't have anyone to talk to... I have family that visit once in a while... I'm here now... I feel alone... I have family I would like to see.... Yes I think it's a great idea this' (Zamir et al, 2018). Indeed, video calls to reduce loneliness and videophones have enhanced communication in care homes between residents, including clients with dementia and their families (Boman et al, 2014).

### CONCLUSION

Coordinated public health interventions could mean improved quality of life for neglected and marginalised elderly clients with chronic health conditions. District nurses cannot be expected to meet the wide spectrum of need. Multi-agency and community action are required to respond to the growing concerns caused by social isolation. District nurses can be the hub for this activity, but the spokes need to come from social and collective initiatives which embrace innovation, creativity and inclusion.

### REFERENCES

- Acheson D (1988) *Acheson Report: Independent Inquiry into Inequalities in Health Report*. Stationery Office, London
- Addicott R, Maguire D, Honeyman M, Jabbar J (2015) *Workforce Planning*

- in the NHS. King's Fund, London.  
Available online: [www.kingsfund.org.uk/publications/workforce-planning-nhs](http://www.kingsfund.org.uk/publications/workforce-planning-nhs)
- Age UK (2016) *No-one should have no one*. Available online: [www.ageuk.org.uk/Documents/EN-GB/No-one\\_Should\\_Have\\_No-one\\_Working\\_to\\_end\\_loneliness.pdf?dtrk=true](http://www.ageuk.org.uk/Documents/EN-GB/No-one_Should_Have_No-one_Working_to_end_loneliness.pdf?dtrk=true)
- Bevan S, Mason B, Bajorak Z (2020) *Homeworker wellbeing survey*. Institute for Employment Studies. Available online: [www.employment-studies.co.uk/sites/default/files/resources/summarypdfs/IES%20Homeworker%20Wellbeing%20Survey%20Headlines%20-%20Interim%20Findings.pdf](http://www.employment-studies.co.uk/sites/default/files/resources/summarypdfs/IES%20Homeworker%20Wellbeing%20Survey%20Headlines%20-%20Interim%20Findings.pdf)
- Boman I, Lundberg S, Starkhammar S, Nygard L (2014) Exploring the usability of a videophone mockup for persons with dementia and their significant others *BMC Geriatr* 14: 49
- Borg C, Hallberg I, Blomqvist K (2006) Life satisfaction among older people (65+) with reduced self-care capacity: the relationship to social, health and emotional aspects. *J Clin Nurs* 15(5): 607–18
- Brocklehurst J (1982) Health visiting and the elderly—a geriatrician's view. *Health Visitor* 55: 356–7
- Buck D, Gregory S (2013) *Improving the public's health: a resource for local authorities*. King's Fund, London. Available online: [www.kingsfund.org.uk/sites/default/files/field/field\\_publication\\_file/improving-the-publics-health-kingsfund-dec13.pdf](http://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/improving-the-publics-health-kingsfund-dec13.pdf)
- Buck D (2016) *Gardens and health: implications for policy and practice*. King's Fund, London. Available online: [www.kingsfund.org.uk/publications/gardens-and-health](http://www.kingsfund.org.uk/publications/gardens-and-health)
- Cattan M, Kime N, Bagnall A (2010) The use of telephone befriending in low level support for socially isolated older people — an evaluation. *Health and Social Care in the Community* 19(2): 198–206
- Coulter A, Mearns B (2016) *Developing care for a changing population: patient engagement and health information technology*. Nuffield Trust, London
- Dahlgren G, Whitehead M (1991) *Influences on health in Acheson D (1998) Independent inquiry into inequalities in health*. Stationery Office, London
- Day P, Peckover S, Hazelby G, Chaudhry H, Kirkham L, McAleavy J (2019) Putting new therapeutic skills into public health nursing practice; the student experience. *Br J School Nurs* 13(8) doi.org/10.12968/bjns.2018.13.8.386
- Dickens A, Richards S, Greaves C, Campbell J (2011) Interventions targeting social isolation in older people: a systematic review. *BMC Public Health* 11, 647
- Doll G, Bolender B (2010) Research: age to age: resident outcomes from a kindergarten classroom in the nursing home. *J Intergenerational Relationships* 8: 327–37
- Elderly (2020) *The untold epidemic: 1 in 3 elderly people more lonely in wake of Covid-19*. Available online: [elder.org](http://elder.org).
- Elkan R, Kendrick D, Dewey M, et al (2001) Effectiveness of home based support for older people: systematic review and meta-analysis. *Br Med J* 323: 719–25
- Fancourt D, Finn S (2019) *What is the evidence on the role of the arts in improving health and wellbeing? A scoping review*. WHO, Geneva. Available online: [www.euro.who.int/en/publications/abstracts/what-is-the-evidence-on-the-role-of-the-arts-in-improving-health-and-well-being-a-scoping-review-2019](http://www.euro.who.int/en/publications/abstracts/what-is-the-evidence-on-the-role-of-the-arts-in-improving-health-and-well-being-a-scoping-review-2019)
- Fanning A (2019) *Outstanding models of district nursing: a joint project identifying what makes an outstanding district nursing service*. RCN/QNI. Available online: [www.qni.org.uk/resources/outstanding-models-of-district-nursing-report/](http://www.qni.org.uk/resources/outstanding-models-of-district-nursing-report/)
- Hawkley L, Thisted R, Masi C, Cacioppo JT (2010) Loneliness predicts increased blood pressure: 5-year cross-lagged analyses in middle-aged and older adults. *Psychol Aging* 25(1): 132–41
- Health Development Agency (2005) *Health needs assessment*. Available online: [https://ihub.scot/media/1841/health\\_needs\\_assessment\\_a\\_practical\\_guide.pdf](https://ihub.scot/media/1841/health_needs_assessment_a_practical_guide.pdf)
- Hendriksen C, Lund E, Stromgard E (1984) Consequences of assessment and intervention among elderly people: a three year randomised controlled trial. *Br Med J* 289: 1522–.
- Holt-Lunstad J, Smith T, Baker M, Harris T, Stephenson D (2015) Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspect Psychol Sci* 10(2): 227–37
- Honeyman M, Dunn P, McKenna H (2016) *A digital NHS? An introduction to the digital agenda and plans for implementation*. King's Fund, London
- Hopkins T, Rippon S (2015) *Head, hands and heart: asset-based approaches in health care*. The Health Foundation, London
- Horsfield J (2017) *Later Life in the United Kingdom – Too old to care?* Age UK, London
- Jameson Report (1956) *Report of the Working Party on the Field, Training and Recruitment of Health Visitors*. DH, London
- Johnson J, Penna D (2020) How can I join the NHS coronavirus volunteer army, and what can I do? *The Telegraph*. Available online: [www.telegraph.co.uk/news/2020/03/30/nhs-volunteering-jobs-coronavirus/](http://www.telegraph.co.uk/news/2020/03/30/nhs-volunteering-jobs-coronavirus/)
- Karnick P (2005) Feeling lonely: theoretical perspectives. *Nurs Sci Q* 18: 7–12
- Kingston A, Wohland P, Wittenberg R, et al (2017) Is late life dependency increasing or not? A comparison of the Cognitive Function and Ageing Studies (CFAS). *Lancet* 390(10103): 1676–84
- Kingston A, Comas-Herrera A, Jagger C (2018) Forecasting the care needs of the older population in England over the next 20 years: estimates from the

## Revalidation Alert

Having read this article, reflect on:

- How social isolation can impact on elderly patients
- Potential interventions to tackle the problem of social isolation
- The value of adopting a health creation or asset-based approach
- Why it is important to get to know your patient population.

Then, upload the article to the free JCN revalidation e-portfolio as evidence of your continued learning: [www.jcn.co.uk/revalidation](http://www.jcn.co.uk/revalidation)

## KEY POINTS

- The coronavirus (Covid-19) pandemic has meant many of us have experienced social isolation and constraints on how we can live our lives.
- While the pandemic is the greatest public health crisis in recent decades, social isolation is a growing issue of major concern for many older people.
- A public health response and the mobilisation of communities and volunteers to improve health in this hidden, neglected and marginalised population is needed.
- For the elderly, district nurses can be the first, or only contact, so there is potential to be alert to factors indicative of loneliness, such as hearing or eyesight loss, lack of visitors, changes in hygiene, activity or mood, or bereavement.
- Health visitors have the knowledge and skills to work across the lifespan, where a broader concept of 'family' could encompass assessment of the needs of grandparents/older family members, who might not be otherwise accessing services and remain under the radar.
- Multi-agency and community action are required to respond to the growing concerns caused by social isolation.

online: [www.independentnurse.co.uk/professional-article/loneliness-a-silent-epidemic/63696/](http://www.independentnurse.co.uk/professional-article/loneliness-a-silent-epidemic/63696/)

World Health Organization (1946) *The preamble of the constitution of the World Health Organization*. WHO, Geneva

Xia N, Li H (2018) Loneliness, social isolation, and cardiovascular health. *Antioxidants Redox Signaling* 28(9): 837–51

Zamir S, Hennessey C, Taylor A, Jones R (2018) Social isolation within care environments for older people: an implementation study using collaborative action research. *BMC Geriatr* 18(1): 62

- Population Ageing and Care Simulation (PACSim) modelling study. *Lancet* 3(9): e447–e455
- Lillyman S, Lillyman L (2007) Fear of social isolation: results of a survey of older adults in Gloucester. *Nursing Older People* 19(10): 26–8
- Lindsay E (2016) Social prescribing: Leg Clubs — a collaborative example. *Br J Community Nurs* 21 Suppl 9: S40–1
- Luo Y, Hawkey L, Waite L, Cacippio J (2012) Loneliness, health and mortality in old age: a longitudinal study. *Soc Sci Med* 74(6): 907–14
- Maybin J, Charles A, Honeyman H (2016) *Understanding quality in district nursing services; learning from patients, carers and staff*. King's Fund, London. Available online: [www.kingsfund.org.uk/publications/quality-district-nursing](http://www.kingsfund.org.uk/publications/quality-district-nursing)
- McCamish-Svensson C, Samuelsson G, Hagberg B, Svensson T, Dehlin O (1999) Social relationships and health as predictors of life satisfaction in advanced old age: results from a Swedish longitudinal study. *Int J Age Hum Dev* 48: 301–24
- McCrorry V (2019) Caseload management: a district nursing challenge. *Br J Community Nurs* 24(4): 186–90
- Milne R, Puts M, Papadakos J, et al (2014) Predictors of high eHealth literacy in primary lung cancer survivors. *J Cancer Educ* 30: 685–92
- Mulvihill J (2011) Personalised befriending support for older people. *Quality in Ageing and Older Adults* 12(3): 180–3
- National Institute for Health and Care Excellence (2019) *Motor neurone disease: assessment and management. NICE guideline [NG42]*. NICE, London. Available online: [www.nice.org.uk/guidance/ng42](http://www.nice.org.uk/guidance/ng42)
- O'Neil I (2019) *Digital health promotion*. Polity, Cambridge
- Office of National Statistics (2019) *People living alone aged 65 years or over by specific age group and sex UK 1996 to 2019*. Available online: [www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/](http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/)
- Perlman D, Peplau LA (1981) Toward a social psychology of loneliness. In: Gilmour R, Duck S, eds (1983) *Personal Relationships: 3. Relationships in Disorder*. Academic Press, London: 31–56
- Perissinoto C, Cenzer I, Covinsky K (2012) Loneliness in older persons. *Arch Internal Med* 172: 1078–84
- Phillips S (1988) Health visitors and the priority of the elderly. *Health Visit* 61(11): 341–2
- Porges S (2003) Social engagement and attachment: a phylogenetic perspective. *Ann NY Acad Sci* 1008: 31–47
- Skingley A (2013) Older people, isolation and loneliness: implications for community nursing. *Br J Community Nurs* 18(2): 84–90
- Spanswick E (2016) *Health visitor services for older people reducing hospital admissions and 'changing lives'*. Available online: [www.homecare.co.uk/news/article.cfm/id/1578977/health-visitor-service-for-older-people-helping-to-reduce-hospital-and-care-admissions](http://www.homecare.co.uk/news/article.cfm/id/1578977/health-visitor-service-for-older-people-helping-to-reduce-hospital-and-care-admissions)
- Sutin A, Stephan Y, Luchetti M, Terracciano A (2018) Loneliness and risk of dementia. *J Gerontol B Psychol Sci Soc Sci* Oct 26. doi: 10.1093/geronb/gby112. [Epub ahead of print]
- Teater B (2016) Intergenerational programs to promote active aging: the experiences and perspectives of older adults. *Activities, Adaptation and Aging* 40(1): 1–19
- van Leeuwen KM, van Loon MS, van Nes FA, et al (2019) What does quality of life mean to older adults? A thematic synthesis. *PloS one* 14(3): e0213263
- Vetter N, Jones D, Victor C (1984) Effect of health visitors working with elderly patients in general practice: a randomised controlled trial. *Br Med J* 288: 369–72
- Whear R, Coon JT, Bethel A, Abbott R, Stein K, Garside R (2014) What is the impact of using outdoor spaces such as gardens on the physical and mental wellbeing on those with dementia? A systematic review of quantitative and qualitative evidence. *J Am Med Dir Assoc* 15(10): 697–705
- While A (2019) Reset for health creation. *Br J Community Nurs* 24(9). Published online: 7 Sep 2019
- While A (2020) Life is for living: the contribution of the arts and gardens. *Br J Community Nurs* 25(3). Published online: 11 March 2020
- Wood C (2013) Loneliness: a silent epidemic. *Independent Nurse*. Available