

Loneliness: Factors that Clinicians Need to Know

Introduction

Loneliness is especially common among older adults and has gained much attention most recently during the pandemic.¹ Approximately 50% of individuals aged over 60 are at risk of social isolation and one-third will experience some degree of loneliness later in life.¹ Loneliness has many factors that clinicians should understand in order to properly treat. To name a few, it is related to inadequate social interaction, gender, lower socioeconomic status, cognitive decline and increased mortality risk.¹ It is especially prevalent in nursing home residents and those diagnosed with cancer and other chronic illnesses such as heart failure.²

Furthermore, loneliness is associated with cognitive decline and hopelessness and has been identified as a risk factor for depression.³ Research has shown that integration of social support can reduce the prevalence of depression. Depressive symptoms are the most common psychological problem in older persons. Additionally, those who reside in a nursing home are 3 to 4 times more likely to suffer psychological problems than those living at home due to the lack of freedom and family support.^{2,3} Older persons with depression may experience greater loss of functionality. Clinicians who care for older adults need to understand these factors in order to better identify, address and mitigate loneliness. This chapter will summarize loneliness including common theories, age-related concerns, demographics, clinical issues and potential interventions.

Background -Theories

Though now a well-recognized term, the word "loneliness" was not used regularly in the English language until around 1800.⁴ Prior to that time, the closest word was "loneliness", which described the literal physical state of being alone. In the English Dictionary published in 1676, loneliness was defined as "solitude" or "wandering alone". These definitions did not carry associated negative emotional implications with the meaning. Over time loneliness has evolved into a term describing a multifaceted emotion. Alberti describes loneliness as a complex state or "emotion cluster" which includes anger, grief, fear, anxiety, sadness, and shame. MC Whirter⁵ defines loneliness as "an enduring condition of emotional distress that arises when a person feels estranged from, misunderstood, or rejected by others, and/or lacks appropriate social partners for desired activities, particularly for activities that provide a sense of social integration and opportunities for emotional intimacy."⁵

Theories surrounding the causes of loneliness have shifted over time. Peplau and Perlman ⁶ developed the first core book on loneliness in 1982 summarizing the research and multiple theories of loneliness up to that time. Eight different theoretical approaches emerged.

Theory	Author
Cognitive	Peplau & Perlman, 1982
Existential	Moustakas, 1961
Interactionistic	Weiss, 1973
Phenomenological	Rogers, 1961
Privacy	Derlega & Margulis, 1982
Psychodynamic	Fromm-Reichmann, 1959
Systems	Flanders, 1982
Sociological	Riesman, 1961

Perlman and Peplau summarized loneliness into three components. First, it is a result of a deficiency in someone's social relations. Second, it is subjective. Someone who is alone or isolated may not necessarily be lonely. Also, someone surrounded by others can perceive themselves to be emotionally isolated. Third, it is associated with a negative or distressing sensation. ⁶

A person's cognitive process can have a moderating effect on the experience of loneliness.⁷ Existential loneliness identifies loneliness as part of the human condition. ⁸ There is sense of loss that results from an awareness that others do not all experience the world in the same way. Even though individuals have a desire for connectedness, there is a sense of being separated in the universe. ⁹

In 1989, the core book by Hojat & Crandall ¹³narrowed the theories into two main ideas. The first was based in the social needs approach and psychodynamic theory. This identifies an affective component, which encompasses the negative emotional experiences of loneliness. The second was based from the cognitive approach which encompasses the discrepancy between achieved and desired social relationships. ¹⁴⁻
¹⁶The cognitive approach is based on the perception and evaluation of social relationships and emphasizes the discrepancy between actual and desired social relationships. ^{13,17} Narrowing down loneliness as either a cognitive or affective concept has succeeded in getting closer to a unified framework within loneliness research. ¹⁵

Clearly cultural and structural shifts in society historically have impacted the understanding and view of loneliness and will continue to do so in the future. Prior to industrialization in the western world the traditional roles and way of life focused on community and being bonded to others. ¹⁵ Before the twentieth century about five percent of all households (1% of total world population) consisted of just one person.

However, over time individuals less commonly relied on immediate family or community for guidance. Rather than close communities/villages, it has become a more individualistic society with new forms of social networks and relations.

By 1950 the number of single person households had increased to 9%. The number rose even more steeply in the 1960's as divorce rates increased, birth rates fell, and lifespans increased. Now it is estimated that 1 in 7 adults live alone.¹⁸ In industrialized countries loneliness is thought to affect 1/3 of the population.¹⁹ Loneliness does not seem to be affected by income, education, sex, or ethnicity. It does however seem to have a relation to age.¹⁹ It decreases between the ages of 50 and 74, but increases again after age 75.¹¹ In society today loneliness is thought to cause negative impacts to an individual's health, productivity, happiness, and wellbeing. And as the population is aging, loneliness is becoming a public health issue.¹⁹

This is of increasing importance in this new age of pandemics and social isolation, whether self-motivated or government/health agency imposed. Loneliness is now becoming an epidemic of its own and is afflicting young and old alike. More than ever, people are alone and lonely, deprived of companionship of others, of touch and human connection, and with human intimacy. This is especially true for our older population in nursing facilities, where most facilities are now restricting all visitors in this time of Covid-19. It is also affecting the older population who are self-isolating in their homes. Many concerns are being raised about the mental and physical health implications of this isolation. COVID-19 has exacerbated a loneliness problem that already existed, just as it highlights the socioeconomic divide. And with or without a pandemic there is no one-size-fits-all solution.²⁰

Aging and Loneliness

Aging is more than a passing of time or gaining of experience. Aging represents a physiological change, a breaking down, of the human body over time. It represents a fulminant alteration in the physical state of being, which is often irreversible. These changes will occur at different rates with different individuals, and are often impacted by other physical, emotional and social conditions, as well as genetics, leading to the inability to completely generalize aging and the importance of individualization of a person's condition and care. However, these changes, which are highly variable in rate and onset, are major contributors to an individual's ability to engage in and with their environment. The degree of impact of aging on a person's physical condition makes that individual increasingly vulnerable to environmental stressors and will often result in varying degrees of social isolation and loneliness, with loss of purpose often accompanying loss of function. Examples of how physiological changes impact function and isolation are discussed below.

Frailty is defined as the state when physiological reserves are reduced to the point at which susceptibility to disease is increased.²¹ Frailty is not a disability in and of itself: it is the clinical manifestation of the later stages of homeostenosis (the impaired ability to compensate for physiological changes),²² leading to intolerance of changes in condition. It is an independent risk factor for mortality and morbidity (complications resulting from illness or injury). 10% of community dwelling persons >65 years old have a diagnosis of frailty, and 45% of those >85 years old meet criteria.²³ Frailty puts people at increased risk of dependency and is a major contributor to social isolation.

Changes in gait, with loss of balance and falls, often leads to decline in physical function, with likely increased social isolation and decreased participation in events and activities. There is a decline in vibratory sensation and proprioception, as well as vestibular changes, as one ages. Add to this the sarcopenia (muscle loss) and subsequent weakness that is part of the aging process, and the result is falls.²² These falls often lead to fear of future falling and mistrust of unfamiliar environments, which will often result in people staying in their homes, being unwilling to travel, and isolation. These changes also increase dependency on external supports, such as walkers, for mobility. This leads to increase in effort with attempts to leave the home, as these devices cannot be left behind when a person leaves the house. Also, many physical spaces are not fully equipped for persons who rely on devices for their mobility, which can increase embarrassment and inconvenience. It often just becomes “easier” to stay inside, with increased isolation as the result.

Weight loss is a major contributor to frailty and functional loss as well. Constipation, due to decreased colon contractions and decreased thirst drive, dysphagia, decreased saliva production and poor dentition that often accompanies aging are all major contributors. Infiltration of fat into muscle fibers (an aspect of sarcopenia) leads to weakness and increased fatigue. Oral intake is often dependent on community, for food access, meal preparation and consumption. Shopping can take a lot of physical and cognitive effort. People eat more in groups, and social isolation is an independent risk factor for poor oral intake and weight loss, which can exacerbate frailty and decline in a vicious cycle.

There are a variety of other physiological changes of aging that lead to decline in physical function. Myocardial perfusion declines with age, and an increase in systolic BP due to loss of vascular elasticity can lead to impairment of brain perfusion autoregulation and subsequent dizziness. In the pulmonary system, an increase in residual volume, a decrease in vital capacity, and an increase in tendency to hypoxemia due to loss of elasticity of lung parenchyma can result in increased shortness of breath and decreased activity tolerance. These changes lead to fatigue and decreased exercise tolerance and eventually, activity and function in general.²²

Urinary incontinence can be a contributor to isolation as well. Fear of odor or embarrassment of “accidents” often leads people to not wanting to leave their house or even have visitors. Reduced tissue integrity in females, or increased prostate size in males, often leads to incomplete bladder emptying and increased post void residuals. Not only is this a socially impactful condition due to perceived embarrassment, but there is also increased risk for infections and mortality.²²

Sensory changes that occur with age increase the risk of social isolation with decreased ability to participate in social interactions. Vision changes that occur with age include impaired dark adaptation with decreased ability to see at night or in places that are not well lit. Decreased contrast sensitivity makes it difficult to detect changes in flooring, steps, or curbs outside, which increases risk of trips and falls. Hearing loss is also prevalent with age, specifically regarding a loss of high frequency tones. There is a slowing of central processing of sound and increased difficulty discriminating and targeting source of sound, leading to increased effort in processing conversation and general environmental cues that make total and fulfilling engagement more challenging.²²

Cognition also declines with age. Over time, there is a loss of neurons and synapses within the brain, with decline in central processing of information. There are increased tangles and plaques with dramatic increase in the development of Alzheimer’s dementia, the sixth leading cause of death in the US. 33% of Americans will die with some component of Alzheimer’s dementia, with greater than 50% of people >85 years old having Alzheimer’s dementia.^{24,25} Other central neurological changes also occur with aging. There is a decline in neurotransmitter function with increased risk of depression, microvascular white matter changes with increased cerebrovascular disease, stroke and TIAs, and slowed central processing and reaction times, which can impair the ability to drive. A thinner blood brain barrier leads to increased susceptibility of toxins, such as alcohol and other medications that can impact cognition. Cognitive changes are a critical contributor in self-neglect and social isolation, whether due to apathy and depression as a primary symptom of cognitive impairment, embarrassment, increased sleep patterns with this condition, safety, or the significant effort it takes to process the external environment.²²

The process of aging comes with a dramatic change in a person’s baseline physical condition, independent of disease state. However, disease and injury will produce stress, which results in greater impact to the individual. This is not because of differences in the disease, but because of differences in substrate. How this impacts one’s ability to participate in their social environment can be as variable as the individual themselves, but will almost certainly lead to increased risk and impact of social isolation over time.²²

Demographics, Psychosocial Aspects of Long Term Care

With an aging population in the United States and around the world, it is more common for people to develop chronic and debilitating conditions that may render them dependent on others for one or more activities of daily living. As dependence on others grows it often becomes difficult to stay in their homes, often due to their escalating care needs and lack of in-home nursing support. As these care needs increase, individuals may enter long term care communities to obtain more care that would otherwise not be available to them as readily at home.

According to the National Center for Health Statistics, long term care services include a broad range of supportive services that help meet the needs of frail, older adults who may have lost the capacity for self-care, or whose self-care is limited due to chronic illness, injury, physical or cognitive impairment.²⁶ Long term care communities include a broad spectrum of living arrangements from independent living to long term nursing home care. The proportion of the elderly residing in nursing homes or institutional residences has declined in the past 20 years, however there has been a rise in the proportion of older adults living in assisted living facilities.²⁷ Independent living communities encompasses a wide range of housing arrangements that can include individual apartment style communities to housing co-ops. Residents traditionally living independently but have available to them common areas to gather with other members of the community. Residents typically do not require help with activities of daily living and may wish to be part of larger community.

According to the National Center for Assisted Living, there are approximately 28,000 assisted living communities in the United States today, and more than 8000,000 residents.²⁸ About 71% of residents are women, and most residents are over the age of 75, with 30% of residents between the ages of 75-84 years old and 52% over the age of 85 years old.²⁸ Residents of assisted living communities often need help with only a few activities of daily living and do not require 24 hour skilled nursing care. The most common activity of daily living that residents of assisted living require help with is bathing, followed then by walking. Four out of ten residents are living with some form of dementia, and over fifty percent have underlying hypertension.²⁸ The average length of stay in assisted living is about 22 months and roughly 60% of residents will transition to skilled nursing centers.²⁸

Skilled nursing centers or long-term care nursing homes are institutions that people enter who need skilled nursing care or around-the-clock care and help with more activities of daily living. The 2004 National Nursing Home Survey found that 1.5 million older adults aged 65 and older have spent time in a nursing home and 51% of nursing home residents require assistance with all activities of daily living.²⁹ The most common chronic conditions of nursing home residents include cognitive and mental disorders or

disease of the circulatory system.²⁹ According to the National Center for Health Statistics, in 2015 there were approximately 1.3 million people living in nursing homes and the majority of long-term care service users were 65 years and older (Harris-Kojetin) According to the National Center for Health Statistics, the majority of long-term care service users are 65 years and older.²⁶ In 2014, the Centers for Medicare and Medicaid Services reported that 7.8% of nursing home residents were 95 years of age or older, 33.8% were 85-84 years old, 26.5% were 75-84 years old, and 16.5% were 65-74 years old.²⁶ CMS reports that over 65% of the nursing home population are women and nearly 78% of residents are non-Hispanic Caucasian.²⁶

The care that residents of nursing homes receive are traditionally focused on medical needs and activities of daily living. However, it is important to consider that overall well-being at any stage in life is more than just basic personal care or nursing care. Psychosocial needs of individuals are strongly correlated to mental health and overall well-being. Residents in care facilities are often in a new environment, away from those who are familiar, they can experience loss of relationships, loss of identity and loss of personal control. People enter the different forms of nursing homes at a time in life when they are less independent and more dependent on others. There is an element of isolation for most residents as they become more dependent on others for their care needs. Additionally, as they are away from their home, they may not see those they were previously close to as often, increasing the loneliness they experience. The adjustments required to transition to nursing facility can be difficult on residents and without an emphasis on addressing their psychosocial needs, most will have difficulty thriving in their new environment

The Centers for Medicare and Medicaid Services' Nursing Home Quality Initiative, created quality reports that include addressing the psychosocial wellbeing of residents in nursing homes as an important metric.³⁰ Addressing the psychosocial needs of residents in nursing homes requires facilities to take steps to mitigate the social isolation many residents experience, as well as promote an environment of consistency, collaboration, and incorporation of care beyond just the physical needs of the residents.

Interventions

It is crucial to be aware of interventions that can mitigate loneliness. An important individual trait to foster is resilience. Resilience is a protective mechanism that can lessen negative emotions and help maintain improved well-being among older individuals. Social support can foster one's resilience while reducing depression.^{3,31} Social support provides emotional comfort and involves being caring and promoting empathy, love and trust. Effective interventions have been those that offer social activity and/or support within a group format. Interventions where older people have been active participants are more likely to be effective.³¹

Clinically, it is challenging to know the association between interventions such as contact with friends and families, social support and loneliness among nursing home residents and other older adults. Some studies appear to support the importance of visitation by significant others and loved ones in reducing loneliness. Unfortunately, one third of nursing home residents were found to seldom have visitors which is a challenge for clinicians attempting to tackle loneliness.^{1,3} Of course, these studies were prior to the pandemic so additional research is needed to comprehensively understand the entire impact upon ceasing visitation for older adults living in these facilities. Group reminiscence therapy can be an effective approach lowering loneliness, anxiety and depression in older adults.¹

One creative approach may be videoconferencing. Videoconferencing is recognized as a feasible way to promote social interaction and reduce depressive symptoms.³¹ With technological advancements in mobile phones and tablets that are more elder friendly, it is feasible to have these devices readily accessible at facilities and in the community for older adults.

Another promising strategy to promote social support is animal assisted therapy.³² Once a week animal assisted therapy has been shown to reduce loneliness in nursing home residents. It is the interaction between the cat or dog (whether living or robotic) not the increased socialization among the other residents that accounts for lessening loneliness. Thus, one on one visits are more effective than group visits. Some studies have shown that there is no difference in reducing loneliness between the use of a living dog versus a robotic dog.³² Robotic cats and dogs should be considered when the needs of living animals cannot be met.

Interventions to reduce loneliness and/or social isolation are complex as they have several interacting components (e.g. goals, personnel, activities, resources and delivery mode). There is no one-size-fits-all approach and it is recommended that the assessment of individual needs be conducted to determine if group, individual or a combination of activities should be undertaken.³¹

Clinicians need to be aware of these findings and work towards fostering more social interactions in their daily practice. Developing interactive programs between older adults and their loved ones can promote social interaction while minimizing loneliness. Clinicians should strive to be open to interventions such as robotic animal assisted therapy and encourage residents to participate in these interventions. More attention should be paid to older adults diagnosed with cancer and other chronic illnesses to implement loneliness screening plans. Physical environment should be evaluated to promote social interaction among residents in facilities. Home health agencies and services should integrate loneliness screening into their routine assessments when caring for older adults who live alone. The first step in mitigating loneliness is

recognition of the problem and a willingness to discuss strategies with staff, colleagues and older patients and their loved ones.

Case Study

A 92-year-old white widowed female, Mrs. A, recently admitted to a local long-term care facility due to a failure to thrive, was seen by a geriatric psychiatrist to rule out a depressive disorder. Nursing was concerned that she was oftentimes teary and staying withdrawn while she was polite and cooperative with her activity of daily living (ADL) care. The geriatric psychiatrist's report stated that she had been born, raised, and lived in Texas until her husband died of "old age" 4 years ago. Subsequently, she moved to this area to live with her daughter. Unfortunately, her medical condition became worse and she voluntarily decided to move to a facility to alleviate her daughter's burden. Mrs. A's husband was "a good provider and loving person. I had a good marriage." She was a home maker and raised one son and two daughters. Unfortunately, her son was killed in an automobile collision in his late 20's. Her younger daughter, a traveling nurse, lives in Texas. She enjoyed being a choir member in her Methodist church and had a dog and a cat when she lived in Texas. Mrs. A's medical history reveals that she suffers from end-stage renal disease, hypertension, type 2 diabetes mellitus, neuropathy, transient ischemic accident, osteoarthritis and generalized weakness. She sleeps 6 to 7 hours at night and maintains a fair appetite. She has kept her body weight about the same since she moved into the facility. She is wheelchair bound and requires renal dialysis 3 times a week. Mrs. A has no prior history of psychiatric conditions. She reports that she was not feeling depressed but not happy either. She has no death wish or suicidal ideation. She denied any psychotic symptoms. Mrs. A scored 21/30 in Montreal Cognitive Assessment and 6/15 in Geriatric Depression Scale. She was given a diagnosis of adjustment disorder, not otherwise specified (NOS) and referred to a recreational therapist and a counselor. Both therapists identified loneliness as contributing to her overall wellbeing. Mrs. A began attending a singing group at the facility, and her counselor provided a short-term therapy based on acceptance and commitment method. Also, her recreational therapist recommended a trial of a robotic cat and a robotic dog. On a follow-up visit with the geriatric psychiatrist after 3 months, Mrs. A was found to be far less withdrawn with no recent crying spells. She even attended Sunday morning services on a regular basis. The geriatric psychiatrist determined that she was psychiatrically stable and was not in need of a pharmacotherapeutic intervention.

Future Implications

Future research should explore relationships between videoconferencing and characteristics of nursing home resident's family members, factors influencing its use, effects of it on the health of the residents and families and the cost effectiveness as well

as differences between community dwelling older adults and facility based. Additionally, future studies should include the impact of serious illness diagnoses and loneliness. Scant research has been dedicated to studying loneliness in nursing home residents to explore if loneliness in nursing homes is different. Little is known about the prognostic significance of loneliness in nursing homes or how to tailor interventions to better care for this diverse population. Furthermore, research is needed to focus on the impact of the pandemic upon older adults who are at higher risk for contracting these viruses and having more serious complications.

Conclusions

Loneliness is a common condition among the older population and may contribute to poorer physical and mental health. It is often overlooked by physicians and other healthcare professional who are focused on more serious diagnoses. To better care for our older adult patients, it is critical to identify loneliness, understand it's the impact upon older adults and implement strategies to mitigate it.

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