

Living Alone, Socially Isolated or Lonely—What are We Measuring?

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Many older adults live alone. For example, in the United States, over 45 % of women over the age of 75 years live alone.¹ Much attention has been placed on older adults who are living alone, because of the recent studies that have shown that both loneliness and social isolation are associated with poor health outcomes.^{1–4} These studies have also suggested that living alone is not necessarily indicative of having poor social support or of feeling lonely. While it may be reasonable to believe that living alone is a good proxy for these types of social measures, there is increasing recognition that the measures of social well-being are complex concepts and go beyond simply describing the situational facts of a person's life. In actuality, social isolation and loneliness are complex self-perceptions that may not be fully captured by whether or not someone lives alone. This demands that as clinicians, we must dig deeper into a patient's personal perspective. For example, measures of loneliness go beyond just asking about whether a person has social contacts, but also ask about the subjective feeling of feeling left out, isolated or not belonging.⁵ Accordingly, this raises the question of whether we should consider living alone as a risk factor for poor health outcomes and if this risk is adequately measured by asking if a patient lives alone, or if we must concomitantly include composite measures of social isolation and loneliness.

In this issue of *JGIM*, Ennis et al.⁶ report on the association of living alone with hospitalization in community-dwelling elders. In this retrospective longitudinal cohort study, Ennis et al. followed 2,636 participants over 65 years of age from the Adults Changes in Thought (ACT) study for an average of 8.4 years. The main measures examined included hospitalization for all causes and for ambulatory care sensitive conditions (ACSCs). After adjusting for several factors, the authors concluded that living alone was associated with a lower risk for all-cause (OR=0.76; 95 % CI 0.61, 0.94), but not ACSC hospitalization. The authors also concluded that dementia did not modify any of their findings. Asking about living alone may be a useful starting point for understanding an individual's social support. However, when placed in the context of studies that have shown detrimental effects of social isolation

and loneliness, Ennis' findings imply that this question alone does not offer a complete picture of an individual's social milieu.

This study by Ennis et al. is one of several recent studies^{1–4} attempting to clarify the intricacies of social support—a term that may encompass some or all of the concepts of living alone, loneliness,^{5,7} and social isolation. While some studies approach the experience of social isolation as unidimensional and describe it as the lack of interaction with social contacts, others have developed composite measures⁴ that incorporate both the quality and quantity of social relationships. These inconsistencies in terminology and methodology can make it difficult to understand what is actually being measured and the significance of the conclusions reached. This challenge of understanding exactly what is being measured when older adults are described as living alone is apparent in this study. In addition to asking whether patients lived alone, the authors also used a composite measure of social support, (the Interpersonal Support Evaluation List or ISEL),⁸ which provides a global measure of perceived social support across four domains (belonging, self-esteem, appraisal, and tangible help). Since the ISEL measure includes the concepts of social isolation and loneliness together, it is difficult to determine whether these factors individually had an effect on the risk of hospitalization. The authors found that subjects who lived alone scored slightly lower on the social support measure than those living with others, but the absolute difference was strikingly small. Yet, it is clear that many persons who live alone have effective social support, while many who live with others have poor social support. In our research on the effects of loneliness on functional decline and death, we found a remarkably similar relationship between living alone and loneliness. While those who lived alone were more likely to report loneliness, many who live alone are not lonely and many who live with others still feel lonely.¹ Living alone by itself is clearly an insufficient measure of social well-being and connectivity. The significant limitations of living alone as a measure of social support is probably a major reason why Ennis et al. did not find that living alone was a risk factor for hospitalization.

Another difficulty in examining the association of living alone with health outcomes is the possibility of confounding by functional status. Older persons often choose to move in with family or others when they develop functional impairments that make independent living difficult. These

impairments include difficulty doing basic or instrumental activities of daily living, mobility impairments and the severity of cognitive impairment beyond what is captured by whether a person has a diagnosis of dementia. All of these impairments are risk factors for hospitalization. Simply knowing whether or not a person lives alone is not enough, as it does not tell us much about other health risks, including the risk for hospitalization. It may be necessary to dig much deeper into a more complete history of a patient's social and functional well-being.

When working with older adults, it is paramount to remember the interplay between social support and an individual's functioning. Asking older adults if they have difficulty with basic activities like bathing, dressing, and mobility can be as important as going through the traditional medical review of symptoms. Similarly, it is equally important to ask about instrumental activities such as taking medicines, handling finances, and accessing transportation. As noted previously, we cannot continue to assume that people living alone are lonely and lacking in social support, and similarly we cannot conclude based on the Ennis study that we should not be concerned about older adults who live alone, because we cannot assume that those living alone are doing well simply because they were not hospitalized. Similarly, those that are living with others may still be having adverse health consequences related to their loneliness even though they are not living alone. Instead, we must remember that for older adults, it is not solely their social support, but also their function, that is often a crucial predictor of mortality and prognosis rather than other traditional risk factors.^{9,10} Furthermore, if the clinician does not specifically ask about function and social support as a part of a general geriatric assessment, these potential problems will not be identified.

Despite the challenges of truly comprehending what we are measuring when we describe social support, isolation or loneliness, several studies have now demonstrated the strong effect that both social isolation and loneliness can have on health outcomes. This means that as clinicians and researchers, we should not shy away from studies that enhance our understanding of these complicated concepts. Instead, as Valtorta and Hanratty¹¹ suggest, we should refocus our research to better align our methodologies and ensure that we are measuring what we set out to measure. As clinicians and as public health advocates, results from studies evaluating loneliness and social isolation further remind us that their influence on health is great and cannot be ignored. To date, there are few studies looking at interventions that can reduce loneliness and social isolation,^{12,13} such that for the individual clinician it may be still too early to recommend specific interventions. Yet, we do know that social isolation and loneliness can have a significant impact on morbidity and mortality; ignoring a potentially modifiable risk factor could have a negative downstream effect both on an individual's health, and more globally, on the health of a population. This means that population strategies are essential for addressing social isolation and

loneliness and reducing the potentially costly results to society. Valtorta and Hanratty¹¹ propose a logical public health approach starting with the primary prevention of loneliness, which would involve identifying at-risk individuals sooner and helping individuals preserve social networks earlier on. Secondary prevention would involve identifying individuals who are lonely but healthy, and tertiary prevention would involve focusing on minimizing the progression to the adverse effects of loneliness on health.¹ Ultimately, despite methodological differences, the evidence base for the negative consequences of loneliness and social isolation continues to grow, and the challenge will be to how to incorporate this data into our everyday practice.

The negative findings in the Ennis study suggest that as clinicians, we must dig deeper when we learn that one of our patients lives alone. For example, asking our patients if they feel connected to other people, or if they have family or friends they could call for help if needed, will ultimately give us more valuable information. It will also enable us to connect patients to community programs that can help older persons stay at home independently and minimize their risk of hospitalization by preserving function and socialization—two factors critical to the health of older adults.

As clinicians and researchers, we need to be asking more specific and detailed questions to help reduce the morbidity and mortality associated with individuals' real and perceived social support. Ultimately, if we wish to identify which of our older patients are at highest risk for adverse health outcomes, asking solely about chronic diseases is not enough, and similarly asking about living alone is not enough. If we don't ask about individuals' actual and perceived social support, we will miss very important and independent risk factors for adverse outcomes. And if their effect on health is as large as some recent studies have suggested, by intervening, we may actually be able to prevent hospitalizations and other adverse outcomes.

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