

# Health and Loneliness

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Why Should We Think of Loneliness in Terms of Democracy?: An Interview With Dr Vivek H. Murthy



# **AMA Journal of Ethics®**

November 2023, Volume 25, Number 11: E793-794

# FROM THE EDITOR

# **Why Loneliness Deserves Attention From Health Care**

Erika Strickler, MD

Loneliness, in modern times, has evaded formal definition. Interrogation of loneliness in academic literature demonstrates a lack of consensus on what, exactly, it actually is. Is it an evolutionary vestigial state of neural hypervigilance, a literal experience of being too far from other people, a state of mind resulting from perceived deficits in social interaction, or something else? Despite this range of possible definitions, recent data suggest that loneliness is a shared experience, as 61% of Americans reported being lonely in 2020, compared to 54% in 2018. Associations of loneliness in aging populations with increased mortality and functional decline, for together with increasing loneliness in younger people. That potentially contributes to anxiety and depression in children and adolescents, should prompt our health care system to grapple with loneliness proactively as a key health determinant.

In this issue of the *AMA Journal of Ethics*, contributors not only make the case for viewing loneliness through multiple lenses by identifying how technology, culture, health care, and public policy influence experiences of loneliness, but also suggest possible interventions. The articles discuss implementing cultural brokering practices in the primary care setting for immigrant populations; consider how our built environment contributes to social isolation by prioritizing short-term financial benefit; and reflect on how artificial intelligence and the internet could both ameliorate and exacerbate loneliness in a society undergoing rapid technological change. The issue also calls attention to climate change as an unprecedented, powerful contributor to loneliness. Finally, the issue examines how health professions training can perpetuate loneliness by recognizing that trainees' capacity to effectively consider effects of loneliness on their patients' health requires that they acknowledge it in their own experience, too.

It is our hope that this issue will encourage conversations on experiences of loneliness that seem to be commonly and universally felt but infrequently explicitly acknowledged or discussed. These discussions might, perhaps, make us feel a little less lonely.

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# **AMA Journal of Ethics®**

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# **CASE AND COMMENTARY: PEER-REVIEWED ARTICLE**

What Are "Social Prescriptions" and How Should They Be Integrated Into Care Plans?

Katrina Hough, Ashwin A. Kotwal, MD, MS, Cynthia Boyd, MD, MPH, Soe Han Tha, and Carla Perissinotto, MD, MHS

#### Abstract

Health consequences of social isolation and loneliness include worsened morbidity and mortality. Despite wide recognition of this fact, little is understood about how to intervene successfully. "Social prescribing" is one approach by which clinicians can intervene on social determinants of health, which include social isolation and loneliness. This commentary on a case defines social prescribing and suggests how to integrate it into practice.

#### Case

Dr J is a family medicine physician who has become aware of greater frequency and severity of physical and psychological symptoms (eg, depression, anxiety, treatment resistance, poor sleep, abnormal blood pressure) in patients who are socially isolated. Dr J notices that these symptoms occur in a wide range of patients, including aging patients in residential care facilities, adolescents struggling to find friends, single parents, and recent immigrants. During encounters with patients, Dr J observes that some symptoms improve when patients interact more with fellow community members. But Dr J struggles to help enhance patients' social connectedness via actionable care plans that have measurable health outcomes. Dr J wonders how to proceed in a clinically rigorous way.

#### Commentary

The phenomenon described in this case is commonly encountered by clinicians and increasingly identified as social isolation and loneliness, which can occur throughout a patient's lifespan. <sup>1,2</sup> Social isolation and loneliness are related but distinct: *social isolation* is an objective measure defined as a complete or near-complete lack of contact with society<sup>3</sup> and *loneliness* is a subjective feeling of being alone, which can be experienced even when an individual is surrounded by others. <sup>4</sup> In one study, 43% of Americans over age 60 reported feeling lonely (defined as reporting one of the loneliness items at least some of the time) and 18% reported feeling socially isolated at least some of the time. <sup>5</sup> Loneliness and social isolation can co-occur, but each is typically measured separately.

Both loneliness and social isolation can have adverse health effects. Loneliness is associated with cardiovascular disease,<sup>6</sup> functional decline, worse sleep and health behaviors,<sup>7,8,9</sup> and increased risk of death.<sup>5</sup> Similarly, social isolation is associated with coronary heart disease,<sup>10</sup> cognitive impairment,<sup>11</sup> functional decline,<sup>12</sup> and poorly controlled diabetes.<sup>13</sup> Moreover, the strength of the association between social isolation and mortality is comparable to that between cigarette smoking or obesity–2 risk factors widely recognized as health threats in public health campaigns—and mortality.<sup>14</sup> We suggest that "social prescribing" to mitigate negative downstream effects of loneliness should be a clinical and public health priority. Ultimately, "treating" social isolation and loneliness could improve patients' overall health and quality of life.<sup>2</sup>

Yet clinicians like Dr J have not traditionally had a framework by which to assess their patients' social connectedness. More commonly, physicians rely on social workers (when available) to refer patients to known or available social programs. We suggest, however, that there is a need for a structured framework that physicians can use to assess patients' social needs as a basis for reliably and routinely responding with what we describe as "social prescribing."

## Social Prescribing

Social prescribing is a systematic approach to addressing patients' social needs by referring them to or implementing community-based interventions and facilitating social connection based on individual need. 15 One goal of social prescribing is to address the social determinants of an individual patient's loneliness, given their available resources. Social prescribing can be initiated by any member of the patient's care team and need not be done exclusively by physicians. Ultimately, social prescribing is most successful when clinicians consider a patient's individual needs and incorporate them in shared decision making with that patient about a prescription's costs and benefits. For example, an individualized approach to a social prescription for a new immigrant might incorporate interventions that account for language barriers and cultural needs specific to forging social connection within their particular community. Alternatively, an older adult with limited mobility might need home-based virtual activities (popularized during the pandemic) and telephone-based companionship programs, in addition to needing a clinician who could help identify opportunities to improve mobility. 16 In both examples, clinicians' awareness of local community programs and resources available to each patient, as well as local demographics, is key to successful social prescribing. We encourage clinicians to involve all team members when considering what it means for a patient to achieve a "best fit" for a social intervention.17

# Social Prescribing Framework

Here, we propose a 4-step framework to help clinicians with social prescribing.

Distinctions and drivers. Clinicians must first identify whether and to what extent the patient experiences loneliness, social isolation, or both and then evaluate those experiences' severity, frequency, and potential contributing factors. Just as clinicians use Patient Health Questionnaires-9 to assess depression, 18 so they might use tools to assess loneliness. One such tool is the UCLA-3-Item Loneliness Scale, which is highly reliable and correlates with other measures of loneliness and of health and well-being. 19 The scale produces a score from 3 to 9 points, with at least 4 points representing occasional loneliness and at least 6 points representing frequent loneliness. 5 Although there is no consensus on which measure to use for social isolation, commonly used scales in the United States include the Berkman-Syme Social Network Index and the Duke Social Support Index. 2

After assessing a patient with an established tool, a clinician should engage in more indepth questioning to determine how to tailor an intervention based on specific factors contributing to an individual's social needs. These include structural features (eg, marital status or social network size) and functional features (eg, emotional or informational support) of social relationships, as well as the perceived quality of social relationships. 14 For example, a clinician might start by asking the patient about recent loss (structural) or experiences of loneliness (functional). Awareness of demographic and clinical subgroups at risk for loneliness and isolation might inform more targeted assessments. Lack of instrumental support following partner loss, for instance, is related to increased loneliness. 20

Goals. Focusing on known risk factors for loneliness (eg, living arrangements, social support<sup>14</sup>) aids prevention, and regular reassessment of patients already experiencing loneliness (using the tools listed above) aids intervention and management.<sup>21</sup> We suggest offering social interventions to all who are lonely, regardless of loneliness severity. Dr J, for example, has patients expressing feelings of loneliness, so social prescribing should aim to treat loneliness, and assessment and monitoring should be routine follow-up.

Collaboration. Critical steps in social prescribing are identifying available and effective interventions, whether the patient wants help, and how to share decision making with a patient about an intervention type. Addressing social isolation or loneliness does not always require a referral to a community-based social program; it might involve creative engagement with family or considering how patients might enhance their participation in social activities.<sup>22</sup> Some patients might just want to share their experience of loneliness and might not want clinical intervention. For other patients, community partners, counselors, health navigators, link-workers (coordinators between health care organizations and community programs), nurse practitioners, occupational therapists, physician assistants, psychologists, social workers, and kindred colleagues might be recruited to help investigate the drivers of loneliness or social isolation. In some cases, interprofessional collaboration is critical<sup>23,24,25</sup> and can reduce the burden on physicians.<sup>26</sup> For example, interprofessional clinic staff might integrate assessment for social connection into previsit screens with patients, provide supportive counseling, and help address patients' coexisting psychosocial needs.

Funding social prescribing. Unlike in single-payer health care systems or in countries with robust social initiatives, social prescribing is largely excluded from payment models in the United States.<sup>27</sup> Some for-profit programs are fee based and inaccessible to patients with low incomes, who are at higher risk of social isolation and loneliness<sup>28</sup> and their negative health outcomes.

#### Interventions and Evidence

Because there might be ceiling effects of current assessment and measurement tools, a patient's score on a standard tool might not change, despite the patient reporting feeling more social connection. If, on a more holistic assessment, social prescribing is indicated, clinicians should use evidence-based interventions whenever possible. Evidence of the efficacy of social prescribing is largely derived from single-payer health care systems in which social prescribing protocols are already in place.<sup>27</sup> Just because an intervention lacks evidential support should not be taken to mean that clinicians should do nothing if a patient expresses a desire to feel more connected. Clinicians might work to improve a patient's social connectedness through peer mentorship, which

has been shown to reduce loneliness and decrease barriers to socializing.<sup>22</sup> In addition, there is promising evidence of the efficacy of interventions such as befriending or peer mentoring,<sup>22</sup> phone-based support,<sup>29</sup> cognitive-behavioral therapy,<sup>30</sup> animal-based therapy,<sup>21</sup> and leisure or hobby-based interventions.<sup>31</sup> Some social prescribing programs not only improve patients' anxiety and depressive symptoms,<sup>32</sup> but also reduce the number of general practitioner consultations.<sup>33</sup> In addition, social prescribing has been found to be effective in reducing social isolation in the short-term,<sup>34,35</sup> increasing self-confidence, and improving management of long-term conditions, self-reported physical health, and perceptions of resilience.<sup>35</sup> Patients<sup>33</sup> and clinicians<sup>36</sup> tend to have positive feelings about and value social prescribing, even when consistent engagement in programs is challenging.<sup>37</sup>

#### Conclusion

There is a need to grow the evidence base for social prescribing in the United States and to improve understanding of how social prescribing can be integrated into clinical workflows. More research is needed on utilization and health outcomes of social prescribing. Evidence of effective social interventions in the United States is limited to older adults, but some evidence suggests that social interventions might be effective in decreasing loneliness in people aged 25 and younger. With regard to workflows, the role of link workers is essential for successful implementation of social programs, since link workers bridge health care organizations by implementing community programs, supporting patients, and helping maintain patient participation after finding a best-fit program. Advantage of the social program.

When clinicians prescribe a new medication for a patient, they must consider a wide variety of factors that might affect the patient, including side effects, cost, efficacy, and others. Social prescribing requires a similar approach that can range from a clinician simply listening and acknowledging that social isolation and loneliness are real to involvement of a broad interdisciplinary team. The intervention chosen, however, should be tailored to the needs and available resources of each individual.<sup>23</sup> A prescription will be most successful if clinicians like Dr J use a systematic approach that can be replicated and used with all patients.

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#### Editor's Note

The case to which this commentary is a response was developed by the editorial staff

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The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental. The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.

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# CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

How Should Organizations and Clinicians Help Marginalized Patients Manage Loneliness as a Harm of Climate Change?

Lisa Fuller, PhD

#### Abstract

This commentary on a case outlines 4 interventions that would help to prevent or mitigate illness and attendant loneliness affecting vulnerable patients during extreme weather events. It suggests that an individualistic approach to the collective problem of climate change is inadequate and that health professionals and health organizations should (1) transition from reactive climate change strategies to integrating disaster preparedness into daily operations and (2) advocate for changes in society that address harms and begin to mitigate the negative effects of climate change, especially on marginalized people.

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#### Case

Dr L is an internist at a hospital in an area that has experienced increasingly frequent and intense heat waves in recent years. During last summer's heat wave, Dr L and her team saw a tremendous increase in hospitalization among various populations, including the elderly, those with underlying cardiac and pulmonary conditions, and overweight individuals.

In late spring, it was forecasted that the upcoming summer would be one of the hottest on record. Hospital administration calls an interdepartmental meeting to plan for both preventative and therapeutic intervention. At the meeting, Dr C—a psychiatrist—notes that one of her patients, MM, was hospitalized during last year's heat wave. MM was diagnosed with schizophrenia 2 years ago and takes aripiprazole; however, he has no other underlying health conditions and takes no other medications. In her review of the literature, Dr C has found a series of case reports documenting that antipsychotic drugs are associated with nonpyrogenic hyperthermia.¹ Of note, after falling ill, MM became paralyzed with worry about "getting sick from heatstroke" and did not leave his apartment for the remainder of the summer.

Dr C discusses her concerns about the effects of loneliness on patients like MM with colleagues. Dr L realizes that, as summers only become hotter, her patients will likely be

affected by loneliness as they attempt to protect themselves from the heat. Dr L wonders what she and the hospital can do to prepare.

#### Commentary

This case is an example of how the costs of climate change are imposed on those least able to absorb them. I will focus my comments here on the consequences of extreme heat events since these are now commonplace in North America and Europe, although storms, flooding, and wildfires are also becoming increasingly common.<sup>2</sup> The patient, MM, is described as "paralyzed with worry" about heatstroke, consistent with the finding that heat stress is associated with anxiety.<sup>3</sup> Since patients with schizophrenia generally have low incomes,<sup>4</sup> and Dr C's concern for MM's loneliness suggests that he does not have much social support, we can infer that his resources are limited. As such, he seems to be controlling his environment in one of the few ways he can in order to lower his risk of heatstroke.

However, these short-term, individualized coping strategies may well cause MM to become both more socially isolated and lonelier. Someone is socially isolated who is objectively disconnected from social networks and lacks engagement with others.<sup>5</sup> By contrast, someone is lonely who is distressed by the discrepancy between the kinds of relationships they want and the ones they have because the latter are insufficient in number, of poor quality, or both.<sup>4</sup> Social isolation can therefore beget loneliness, and increased loneliness may cause deterioration of physical and mental health,<sup>6</sup> as in MM's case. He may experience significant additional harms since loneliness has been shown to exacerbate certain illnesses, such as metabolic syndrome, cardiovascular disease, cognitive impairment, and depression, as well as to contribute to early mortality.<sup>6</sup>

#### Why Individualist Approaches Fail

An initial response to Dr L's question regarding "what she and the hospital can do to prepare" for the health consequences of extreme heat might be to initiate screening for both loneliness and physical vulnerability to heat events as part of routine history taking in order to identify individuals at risk of harm from their negative consequences. Once patients have been identified as at risk, health care clinicians could (1) make them aware of community resources, such as cooling centers; (2) put them in touch with social services, such as meal delivery or home care, which decrease social isolation by introducing third parties who can monitor their well-being<sup>5</sup>; (3) schedule more frequent follow-ups by phone or in person; and (4) educate them early and often about preventive measures and the circumstances under which they should seek help at a hospital. The hope is that these interventions would help patients mitigate or avoid the adverse health outcomes of both extreme heat events and attendant loneliness that may result from them.

However, this initial response is unsatisfactory, for several reasons. First, this response takes climate vulnerability and loneliness to be individual health problems, when clearly MM's situation is also an issue of health equity. To be sure, everyone is affected by "ecological determinants of health," 7,8 including "oxygen, water, food, materials for shelter, energy, and a stable climate capable of sustaining life." These ecological necessities are being devastated by climate change, which is having negative effects on the health of people everywhere. However, "the impacts of climate change have a disproportionate effect on women, Black, Indigenous, and low-income communities." This type of differential vulnerability can be characterized as a product of compounding risks (eg, conflicts, natural disasters, pandemics) and intersecting axes of social

differences (eg, gender, racial, and socioeconomic inequalities), which coexist and aggravate one another. <sup>10</sup> Neither the harms of individual health problems nor their unequal distribution in society can be prevented by simply treating the most vulnerable patients when they present for treatment. At that point, the damage has already been done. As Lantz et al argue, focusing on this one-on-one interaction confuses "upstream socioeconomic structural drivers of population health levels and patterns with individual patient social circumstances and needs." <sup>11</sup>

Second, this approach places unfair burdens on already struggling patients, requiring them to manage their situation mainly on their own. At-risk patients attempting to access needed resources may experience obstacles, such as lack of transportation, immobility, limited English proficiency, stigma, and financial constraints. In short, patients may not have the energy or coping capacity to execute the recommendations. As a result, they may not be able to mitigate the effects of extreme heat events on their quality of life, which amounts to them paying unfair costs for the consequences of climate change. In essence, vulnerable patients are being forced to use their limited resources to unjustly pay the costs of climate change so that others can continue to reap the benefits flowing from industries and consumption levels that damage the planet.

Third, cases such as this one only arise because action has not been taken at the collective level, where large-scale problems can be addressed through policies, institutions, and infrastructure. As Panagiota and Anguelovski point out, climate-related risk and adaptation are "deeply political questions." When the choice is made to defer collective action, the downstream effect is to put patients and health care professionals in situations in which their choices are limited and the options open to them cannot address the underlying causes of ill health.

Although individualistic approaches to systemic problems routinely fail or have, at best, limited effectiveness, 11 they persist. For instance, our basic utilities are not currently managed in a way that addresses the challenges of climate change. This failure is demonstrated by recent events in California, where temperatures reached their highest ever in September 2022.12 The primary institutional response to this heat wave was to ask individual users to reduce electricity usage during peak times or travel to cooling centers. 13 This response came over 2 years after the rolling blackouts California experienced in August 2020,14 when it was clear that energy supply was inadequate and that the loss of power posed a threat to the well-being of residents. At that time, it was the responsibility of the Public Utilities Commission, the state Energy Commission, and the Independent System Operator to take action to increase capacity in ways that would comprehensively protect the grid, but they did not.<sup>14</sup> In addition, provision of reliable electricity in California is not expected to improve until at least 2027, since these governing bodies are unable to improve infrastructure quickly.<sup>14</sup> Yet, at the same time that people were suffering from the effects of inadequate access to electricity, the Pacific Gas and Electric Company (one of California's major electricity suppliers) reported core earnings of \$475 million in the first quarter of 2022, compared with \$120 million the previous year. 15 Energy corporations have effectively externalized the cost of improving infrastructure and, in the process, have shifted the responsibility for maintaining access to electricity to individual users. The discomfort, illness, and death that extreme heat creates are costs paid by vulnerable individuals so that corporations can continue to profit. This example demonstrates how the destructive logic of latestage capitalism drives climate change and worsens population health.

In the United States, we have consistently permitted collective concerns to be treated as individual problems to be solved by individual behavior changes or with private resources. It is hardly surprising, then, that these political choices have exacerbated health and other inequalities. Our climate policies to date have been entirely "productivity and consumption focused" and have taken virtually no account of the long-term health and well-being of citizens.9

#### Physicians Must Advocate for a Collective Approach

It is not plausible to manage MM's risk of heatstroke and loneliness by deploying more individual health care interventions. The interventions listed above—creating awareness of and connecting to social services, follow-ups, and patient education—are suboptimal because even if they succeed, MM's quality of life will probably still be reduced by the effects of extreme heat events. Nevertheless, these interventions are at least within the control of Dr L and her hospital administration, so they may be worth pursuing alongside other measures.

A better strategy for hospitals and health care systems is to shift from a reactive to a proactive strategy for disaster preparedness. The shortages of medicines, medical equipment, and personal protective equipment experienced throughout the pandemic have demonstrated that we cannot respond successfully to disasters by redeploying the human and economic resources ordinarily available in health care systems.<sup>2</sup> Depending on the nature of the emergency, more and different human resources, medicines, and equipment are needed for an adequate response. For instance, the primary health effects of floods are orthopedic injuries, lacerations, and hypothermia, with a subsequent surge in waterborne infectious diseases.<sup>16</sup> The health effects of extreme heat are heatstroke, heat exhaustion, severe dehydration, and acute cerebrovascular accidents.<sup>16</sup> Extreme heat can also exacerbate chronic pulmonary conditions, cardiac conditions, kidney disorders, and psychiatric illness.<sup>17</sup> Clearly, the expertise, staff, equipment, and medicines required to handle each type of disaster will be very different, and additional resources will be needed over and above those typically available.

In order to manage the varied effects of climate events, we must integrate disaster preparedness into the fabric of health care institutions. To do so will require admitting that disasters are now the norm rather than the exception. Climate events are now an ongoing concern that require certain material conditions for health care professionals to perform their function. One reason that health care systems must take disaster preparedness and climate adaptation seriously is to protect patients like MM, who may not be in a position to protect themselves.

What should be avoided is the overmedicalization of the harmful consequences of climate change events. For instance, it is not enough to improve treatment and prevention of loneliness, heatstroke, and other conditions that are prevalent in disasters. Treating climate events simply as sources of health problems puts too much responsibility on only one system and ignores the fact that multiple social and institutional systems require massive transformation in order to keep people well. The energy shortage in California discussed earlier is one such example. Another is that lower crop yields due to extreme heat, droughts, and fire damage to agricultural land is threatening the global food supply.<sup>2</sup> A third example is the scarcity of potable water and the destruction of sewerage systems caused by floods in western Europe in 2021.<sup>2</sup> Strategies for climate adaptation require a reimagining of vital systems in a way that

takes account of their interdependence rather than putting the onus on health care institutions to be responsible for the well-being of society.

However, the necessary changes to health care institutions and society more generally will not happen on their own. The health care professions must use their collective voice and influence to advocate for them. It has long been recognized that physicians have a responsibility to serve the public good. <sup>18</sup> For instance, the American Medical Association states that physicians have an ethical obligation to "advocate for social, economic, educational, and political changes that ameliorate suffering and contribute to human well-being" and to "educate the public and polity about present and future threats to the health of humanity." <sup>19</sup> In the case of climate change, it is urgent that these commitments be put into practice.

How then, might these obligations be fulfilled? Earnest et al define advocacy as "action taken by a physician to promote those social, economic, educational, and political changes that ameliorate the suffering and threats to human health and well-being that he or she identifies through his or her professional work and expertise."20 By virtue of their social status, expertise, and hands-on experience with suffering patients, physicians often have access to policy makers, local and national leaders, and concerned citizen groups.<sup>20</sup> In addition, physicians operating within health care systems can influence how they are managed. Physicians should use their influence to speak in favor of societal changes that would address harms and begin to mitigate the negative effects of climate change, especially on marginalized people. They should emphasize that, without broader social changes designed to protect people from the harms of extreme climate events, the long-term viability of the health care system as a whole is in jeopardy. They should also make clear that these changes must include support for forms of care and connectedness outside of health care systems. Care work is valuable and necessary for a functioning society, and policies designed to protect people from loneliness and isolation should reflect its value and aim at equalizing its distribution.9

Closer to home, physicians have a responsibility to act as change agents within their institutions to plan and allocate resources such that they can practice effectively during extreme climate events. They also have a responsibility to push back against the narrative that all social problems relating to health are properly handled by professionals situated within health care delivery systems. Individualistic strategies only reinforce that narrative, when what is needed are preventive social and public health interventions aimed at fair, effective adaptation for all.

Dr L and her hospital can undertake individual interventions that might somewhat help marginalized patients at risk for climate-related illness and increased loneliness, but they must also advocate for caregiving, connection, and large-scale strategic adaptation to be incorporated in society as a whole for patients such as MM to be adequately protected.

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The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental. The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.

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What Should Students Learn About the Importance of Cultural Brokering in Immigrant Communities?

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#### Abstract

Cultural brokers can help clinicians meet needs of immigrant patients. This article considers loneliness as an endemic experience of immigrants in the United States and discusses how cultural brokerage practices can reduce the ill health effects of loneliness by helping clinicians contextualize their interactions with immigrant patients and by helping immigrants navigate the health care system and build social connections.

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# **Immigrant Health**

More immigrants live in the United States (US) than any other country in the world,¹ and an estimated 1 million immigrants arrive in the US each year.² While the country's growing immigrant population is highly diverse in its origins and experiences, after arriving in the US, many immigrants face challenges navigating health care and social systems. Immigrants may be particularly susceptible to unfavorable conditions for achieving good health, as factors such as legal status, socioeconomic status, language barriers, and discrimination can limit opportunities to access high-quality health services.³,4,5 For example, over half of all immigrants are noncitizens,6 who are uninsured at higher rates than their US-born or naturalized counterparts and therefore encounter greater health care costs and fewer options when seeking specialized care. Furthermore, approximately 13% of foreign-born families live in poverty compared to 11% of US-born families,6,8 which can render health care a major financial burden.

Obstacles to accessing adequate health services are among the many stressors associated with living in a new or unfamiliar environment. Immigrants confront systemic barriers, including racism and cultural and social marginalization, which can prevent them from integrating into society. Loss of familiar social relationships or networks as a result of migration can evoke feelings of loneliness, while policies and norms that ostracize immigrants, such as eligibility restrictions on public benefits like health

insurance,<sup>11</sup> can engender isolation.<sup>12</sup> A growing number of studies have documented increased loneliness among immigrant groups in the US.<sup>13,14,15,16</sup> Moreover, research has demonstrated associations between loneliness and greater risks of physical and mental health conditions,<sup>12</sup> including high blood pressure, depression, anxiety, and cognitive decline.<sup>17,18,19,20</sup>

Extant research on approaches to reduce what has been called "structural loneliness,"<sup>21</sup> while yielding mixed results, points to the importance of education, social cognition, and opportunities for social connection.<sup>22,23</sup> However, when designing interventions for loneliness, few researchers consider the impact of societal structures or contexts that influence interpersonal relationships and opportunities to connect among immigrant communities.<sup>24</sup> In other words, loneliness interventions seldom focus on the challenges that immigrants face in fostering relationships or on the differences and connections among culturally diverse groups.

This article explores cultural brokerage as a strategy for addressing loneliness in patients born outside the US. In health care, cultural brokers bridge cultural and social perspectives to facilitate health care utilization. We first draw upon multiple frameworks—including cultural competency, cultural humility,<sup>25</sup> and structural competency<sup>26</sup>—to recommend health service delivery strategies in diverse communities, especially immigrant communities. We then focus on understanding how cultural brokerage can influence immigrants' health experiences and mitigate loneliness. Finally, by identifying the roles and skills of cultural brokers, we demonstrate how cultural brokerage can be integrated into clinical practice.

#### **Key Concepts**

The US health care system reflects the nation's culture, priorities, and approaches to supporting people's well-being. Despite its intention to enhance quality of life through improved health, this system can produce negative health outcomes for socially vulnerable communities.<sup>27</sup> Immigrants who face obstacles accessing health care can experience discrimination from clinicians, medical mistrust, and low treatment adherence,<sup>28,29,30,31</sup> impairing the patient-clinician relationship. Several factors influence relationships between clinicians and patients. In particular, sociodemographic factors, such as patient race/ethnicity, income, and education, have been shown to be correlated with patients' perceptions of and relationships with clinicians.<sup>32</sup> In particular, lack of trust can affect patient satisfaction and other health outcomes.<sup>33</sup>

Attention to these factors has led to the development of *structural competency* trainings on how *structural factors*, such as social and economic policies and social stratification, can influence health.<sup>26,34</sup> *Cultural competency* training responds to the disparities in health outcomes experienced by minoritized groups by seeking to increase clinicians' understanding of patients' sociocultural backgrounds and cultural values<sup>35</sup> and to develop knowledge, behaviors, and skills that promote effective service delivery for diverse communities and populations. Yet, given the diversity of immigrants' experiences across and within communities, calls for *cultural humility* training have emerged to avoid potential stereotyping or othering of patients through decontextualized "competence" training.<sup>36</sup> Specifically, *cultural humility* involves clinicians reflecting on their own beliefs, values, and biases and adopting a person-centered approach to allow patients to share their perspectives and experiences. Through patient-centered care, clinicians "meet patients where they are," which allows trusting relationships to be built.<sup>35,36</sup> Thus, while cultural competency tends to focus on clinician knowledge and

skills, cultural humility aims to enhance the clinician's capacity to integrate patients' points of view and to communicate with diverse patients. Cultural competency and cultural humility both shape the delivery of culturally sensitive care, which emphasizes awareness of cultural differences to enable patients to feel comfortable and respected during the health care visit.

Rather than perceive culturally competent health care through a binary lens in which care *is* or *is not* culturally competent, it might be more appropriately understood as a continuum along which care can be *more* or *less* culturally sensitive.<sup>37</sup> Shared characteristics, experiences, and language between clinicians and patients can affect the nature of the relationship, potentially improving the quality of care.<sup>38</sup> Yet these characteristics alone are inadequate to the provision of culturally sensitive care.<sup>39</sup> For example, while providing services in patients' preferred language is important for culturally sensitive care, it is inadequate for ensuring that patients feel understood and empowered. By prioritizing patients' perspectives, needs, and preferences, clinicians can work toward delivering care that is more culturally sensitive. Notably, patient-centered communication can empower patients and enable the clinician to understand the personal and context-specific experiences of the patient.<sup>40</sup>

This creation of meaningful linkages between worldviews or systems has been described as "cultural brokerage." While the concept of cultural brokerage was established in the social and anthropological literature, the skills, identities, procedures, and orientations of individuals who have engaged in cultural brokering predate any formal or prescribed recognition of their roles. In health care settings, cultural brokerage involves bridging or mediating between the patient and the health care system, which can be highly relevant for immigrants as they seek integration into new communities. Patients may derive greater understanding of health systems and services from their own cultural perspectives as the result of cultural brokerage. Hence, cultural brokerage does not exclude culturally sensitive care; rather, it can enhance delivery of culturally sensitive services, allowing care to be more robust and relevant for immigrant groups. Despite acknowledgement of the vast potential of cultural brokerage in improving the health of immigrants in the US, greater information on who should engage in cultural brokerage and how to apply specific skills and in which contexts is needed to harness this potential.

Any individual has the potential to act as a cultural broker. Whether a particular individual does or can do so well is contingent upon context—specifically, on the knowledge, skills, and networks involved.<sup>43</sup> Cultural brokers act in varied settings and capacities and can have extensive or little or no training.<sup>43</sup> Children of immigrant families, for example, are often de facto cultural brokers who help their parents interact with mainstream US culture.<sup>44,45,46</sup> In health care settings, social workers and nurses can be described as cultural brokers when, in the course of close work with patients, they gain in-depth understanding of their patients' perspectives<sup>47,48,49</sup> and are able to broker key interactions between health systems and patients.<sup>40</sup>

## **Patient-Centeredness**

Immigrants' challenges to receiving high-quality health services are often the same ones that health care providers and clinicians encounter in providing culturally sensitive care. 48 Lo explains that clinicians rarely know a patient's culture a priori, given that patient culture includes broad orientations and cultural schemata that are multiple, intersecting, and adaptable. 40 Thus, patient-centered, empathic communication with

culturally diverse patients is vital not only for patient satisfaction but also for helping clinicians understand the impact of structural forces such as migration, poverty, religion, and language on patients.<sup>34,50</sup>

This patient-centered attribute of cultural brokers demonstrates that the role of cultural broker is not a static one that is attained and kept but rather a set of skills and motivations that require constant growth.<sup>43</sup> Clinicians can act as cultural brokers by sharing authority with patients in clinical interactions, which involves paying attention to differing patient expectations of and experiences with health treatment and prevention models.<sup>40</sup> Certain interventions or approaches to care may not apply to all patients. Hence, cultural brokers—across different modes of medical and clinical practice—must establish shared understanding of the roles of different health professions to build therapeutic alliances across social divides.

Emphasis on relationship building is also key to cultural brokerage. By approaching interactions with immigrant patients as part of a long-term relationship, clinicians can integrate into their work the multiple and intersecting schemata that shape the patient's culture. Relationship building also allows for the development of trust and mutual respect. As trust forms, consistency, communication, and continuity of care can be strengthened, which are important for immigrants whose complex cultural environmental influences can take time to understand.

#### **Brokering and Loneliness**

The increased understanding, trust, and empowerment that result when clinicians act as cultural brokers can have positive effects beyond the interpersonal relationship. Specifically, brokerage can shape policy and program development as immigrant voices become centered and validated.<sup>51</sup> When immigrants feel heard and understood, they are less likely to feel isolated or excluded from the social environment.<sup>16</sup> Furthermore, immigrants can obtain greater social support by building longer-lasting relationships with clinicians, which can reduce the likelihood of their experiencing loneliness and other poor health outcomes.<sup>52</sup> By gaining skills and acting as cultural brokers, clinicians in the health care system can bolster the health and well-being of immigrant communities, potentially impacting the cultural approaches of clinics and hospitals where services are delivered.

While the benefits of clinicians as cultural brokers are clear, there may be a lack of resources to support them in this role. Cultural brokerage can be a form of labor that is not adequately compensated or valued. In already under-resourced health care settings, cultural brokerage can increase the strain on overburdened clinicians with stressful workloads.

Utilization of community health workers can fill the gaps in the provision of culturally sensitive health education for minoritized communities.<sup>53</sup> Community health workers, who have been identified by several different titles such as lay health advocates and peer health educators, often share the ethnic background, language, and life experiences of the communities they serve.<sup>54</sup> Hence, they often draw upon these experiences to serve as cultural brokers by bridging the service provision gap between community members and the health system. While clinicians are not required to have the same cultural background as their patients to be cultural brokers, developing a depth of knowledge regarding the history, cultural background, and lived experiences of the populations they work with is vital to their roles as brokers. Furthermore, partnering

with existing cultural brokers across specialties, such as community health workers, can strengthen the provision of culturally sensitive services.

Community health workers do not substitute for clinicians or other allied health care workers, but their roles as cultural brokers highlight the importance of patient-centered approaches to care and the importance of meaningfully connecting with all patients. Fostering social connection between clinicians and patients is likely best considered as part of a multipronged health system strategy to reduce loneliness among immigrants in their new communities.

#### **Brokering as Practice**

Cultural brokers often wear several hats and have numerous responsibilities. Immigrant patients may require multiple cultural brokers to help them access different services based on their various needs and backgrounds. Bierschenk suggests that, rather than conceptualizing brokers as social types, "we should speak of brokerage as a bundle of social practices or a social role." Hence, rather than viewing the role of cultural broker as competing with that of medical provider or clinician, cultural brokerage can and should complement the provision of effective health care delivery. In practice, cultural brokerage aligns with the AMA Code of Medical Ethics' emphasis on the physician's dedication to providing competent medical care, respecting the rights of patients, and supporting access to medical care for all people. Therefore, the mechanisms of cultural brokerage should be embedded in the training and skill sets of health professionals and prioritized in cultivating relationships that can improve the health and well-being of immigrant populations in the US.

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# **STATE OF THE ART AND SCIENCE: PEER-REVIEWED ARTICLE**Should Artificial Intelligence Play a Role in Cultivating Social Connections Among Older Adults?

Elena Portacolone, PhD, MBA, MPH and Daisy Elise Feddoes

#### Abstract

This article draws on 4 case studies from our group's research on older adults living alone in the United States and suggests how artificial intelligence (AI) applications can be used to foster meaningful social connections. This article also warns against ways in which AI applications can reduce physical connections and suggests how AI technology should be implemented to avoid this drawback.

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#### **Artificial Intelligence and Connection**

In health care, artificial intelligence (AI) can be used to achieve specific goals (eg, detecting falls) yet allow patients some autonomy by analyzing their environments (eg, databases of videos or text) and taking specific actions.¹ Here, we aim to contribute to the conversation on the most effective pathways for AI to cultivate social connections with the goal of reducing social isolation and loneliness—2 conditions detrimental to our health.²,³ Isolation is more quantitative, with a paucity of meaningful social contact measured in terms of network size and community involvement.⁴,5,6 Loneliness is more subjective; its traditional definition is "a discrepancy between the actual and desired interaction with others."6 We assume that these "others" are *physical* and *human* beings. Our assumption is based on evidence that our well-being is promoted by social connections with other human beings.<sup>7,8</sup>

Although living alone does not automatically imply that someone is either socially isolated or lonely,<sup>9</sup> living alone can hamper efforts to maintain a rich social life, especially in old age; in developed countries, over half of women 80 years of age and older live alone.<sup>10,11</sup> Barriers to connecting with others in old age range from death of partners and friends to having less stamina to organize outings while managing the household alone.<sup>12</sup> As a result, older adults are at high risk of dying by suicide.<sup>13</sup> In the United States, older adults have the highest suicide rate, with older White men having a suicide rate 4 times the national rate<sup>14</sup> and older patients with a recent diagnosis of dementia also being at increased risk of dying by suicide.<sup>15,16,17</sup>

We focus on older adults because Al technology is often developed to support this population by compensating for their declining physical and cognitive abilities, as well as for their usually narrow social circles. Older adults are particularly vulnerable to loneliness and social isolation due to the death or institutionalization of partners and friends, as well as the geographical mobility of their adult children, if any, and the increasing trend of childlessness among younger women that will likely result in higher rates of childlessness as they age. Both loneliness and social isolation are associated with increased mortality in older adults. Both loneliness and social isolation are associated with increased mortality in older adults. Both loneliness and second connections (eg, seeing others in person, receiving and giving pats on the back and hugs) are extremely beneficial to older adults' well-being and sense of belonging. Furthermore, while older adults in senior housing might experience social isolation, Purchermore, while older adults in senior housing might experience social isolation, for fostering should be adults benefit from connections with people of different generations. Alexander adults benefit from connections with people of different generations. In old age, thereby decreasing social isolation and loneliness, especially among older adults living alone.

## Harm or Help?

To contribute to the conversation on the most effective ways to use AI to foster social connections, we propose a distinction between AI aimed at promoting efficiencies and AI aimed at cultivating meaningful human connections. This distinction can be useful to clinicians when weighing whether to endorse the use of specific AI applications for their older patients.

"Efficiencies" and their disadvantages. An example of Al used to promote efficiencies in relieving social isolation and loneliness is electronic companions. For example, in 2022, New York public officers gave companion robots called ElliQ to 800 older residents "to help combat loneliness."24 These small silver-and-white robots called ElliO, like Siri or Alexa, interact with users via a touchscreen tablet.<sup>25</sup> Skills of ElliQ include playing music, reciting poems, showing pictures, as well as giving reminders and greetings.<sup>26</sup> A year earlier, in San Francisco, California, Ms Juanita Erickson, a 93-year-old woman living alone in a continuum of care residence, had received ElliO to keep her company.<sup>27</sup> Following suit, large hospital chains provided older patients with robots—"essentially, a video camera mounted on a metal pole"—whose "disembodied voices" often confused them, in order to cut nurses aides' hours.28 Finally, the ease with which we can all download and chat with our avatar using Al applications, especially those designed to provide emotional support,<sup>29</sup> might tempt clinicians to recommend them to older patients. We caution clinicians to beware of such Al-implemented shortcuts to foster meaningful social connections. We heed the warning of Sherry Turkle, the author of Alone Together: Why We Expect More From Technology and Less From Each Other.30 Turkle argues that interactions with electronic devices "cheapen the notion of companionship to a baseline of 'interacting with something.' We reduce relationships and come to see this reduction as normal."30 Al can also reduce physical connections, which likely increases social isolation and loneliness.

Advantages. On the positive side, Al can be used to help foster meaningful and physical human connections. For example, rather than solely chatting with her companion robot, Ms Erickson, the older woman living alone in San Francisco, asked ElliQ to tell her funny jokes with which she could entertain her friends in the community room downstairs.<sup>27</sup> We can also take lessons from Al designed to foster social connections for persons with disabilities,<sup>31</sup> as disabilities studies often pave the way for aging studies.<sup>32</sup> For example, the phone application AVA efficiently transcribes multiple voices so that persons with hearing impairments can engage in conversations. Similarly, the application Voiceitt

helps people understand the words of persons with speech impediments because of brain injuries. Finally, the application Soundscape describes the surrounding environment to help blind people navigate trajectories outside their homes. Taken together, these examples point to the immense potential of AI to act as a social glue, fostering and facilitating meaningful and physical connections among older adults at risk of being socially isolated or lonely.

#### Cases

Efforts to address social isolation and loneliness should ensure that any interventions and applications are being offered to consenting older adults who want to have a richer social life. Some older adults enjoy solitude and do not need extensive and frequent interactions with others to feel deeply fulfilled. Solitude allows for contemplation, prayer, and creative pursuits, such as drawing and writing poetry.<sup>33,34</sup> It is also important to consider preferences for different types of interactions. For example, an isolated man with cognitive impairment, who was living alone and described himself as a "recluse," explained that his ideal of enjoyable social interactions was sitting in crowded venues and being a wallflower while observing others' interactions. To provide some foundation and spark the conversation on possible applications of Al to foster meaningful social connections among older adults, we reflect on 4 cases from our group's research on isolated older adults<sup>35</sup> and older adults living alone with cognitive impairment.<sup>36,37</sup>

Case 1. Mr J, a 73-year-old legally blind man, lives alone in a building for seniors in a high-crime neighborhood. As a gregarious man, Mr J longed to play chess—to the point that, when he heard footsteps approaching his door, with mixed success he invited strangers to play chess with him, even though he was well aware of the risks of his behavior. He also longed to swim in a nearby swimming pool, so the first author drove him to the swimming pool and swam with him to better understand the barriers to realizing this longing. How could Al be leveraged to foster Mr J's social connections?

We propose a few suggestions. First, with its ability to process large amounts of data, Al could be used to identify older residents at risk of social isolation and loneliness using parameters such as living alone, loss of spouse, and health conditions (eg, being legally blind, having cognitive impairment, having a history of depression). Second, Al could be used to identify possible companions for older adults who express interest in enriching their social life, such as Mr J, based on the type of activities and interactions they would enjoy. For example, we can imagine that Mr J would indicate playing chess and swimming as activities he would enjoy doing with others and the Al tool using this information to match Mr J with other persons interested in these activities. Furthermore, Al could be used to facilitate Mr J's obtaining the public services needed to play chess or swim, such as taxi vouchers and an assistant to accompany him to venues. Perhaps new applications, such as ChatGPT, could be harnessed to connect isolated and gregarious older adults with public service officers.

Case 2. Ms W, a 72-year-old woman with cognitive impairment, lives alone in a minuscule hotel room. A monolingual Chinese speaker with a history of depression and suicidal ideations, Ms W has limited connection to her adult son. She is not as gregarious as Mr J, so she has limited meaningful connections. She particularly enjoys being helped by her public home care aide and walking in her neighborhood. In this case, Al applications, such as the Day Translations App, could be used to ease Ms W's interactions with those who do not speak her first language.<sup>38</sup> In addition, once someone (eg, a case manager) takes time to support Ms W in expressing the types of

social interactions she might enjoy, the Al tool could identify others with whom she could connect.

Case 3. Ms T, an 82-year-old woman who lives alone, is concerned about her recent diagnosis of Alzheimer's disease, which research indicates is a risk for suicide attempts. Ms T feels extremely isolated and lonely because her driver's license was revoked, and she struggles to understand how to use buses. She longs to go to a shopping mall where she can see people. She would also like to get to know her neighbors, but she does not feel comfortable doing so. In her case, Al could be used to identify older adults like her who long for companionship, identify neighbors who enjoy walking and gardening (Ms T's favorite activities), and provide transportation support. Considering her cognitive impairment, the design of Al applications would need to be extremely simple and intuitive because users with cognitive impairment often struggle to manage technologies.

Case 4. Ms C, a 72-year-old woman diagnosed with mild cognitive impairment and living alone, struggles with loneliness. She feels so lonely that sometimes when waking up in the morning, she feels disappointed because she wishes she had passed away during her sleep. A major struggle for her is to make new friends, as well as to connect with old ones, because she feels embarrassed by her inability to remember what she just said. As a result, she repeats herself often, and her speech is often interrupted by her inability to recall specific words—all typical symptoms of cognitive impairment.<sup>41</sup> In our group's research, we often note that older adults with cognitive impairment who live alone tend to self-isolate because conversations gradually become more stressful. Learning from Ms C's representative experience, a superb use of Al would be to find a way to support conversations despite speakers' gaps in memory.<sup>36,42</sup> Imagine Ms C wearing a wristwatch that vibrates every time she repeats a sentence and an ear microphone that gives her options about missing words. These applications do not yet exist, but perhaps it would be easier to develop such applications than to reverse cognitive impairment via pharmaceuticals.

As these examples suggest, AI can be a uniquely useful tool to (1) identify older adults at risk of social isolation and loneliness; (2) capture information on their interests and hobbies; (3) match older adults with potential companions based on this information; (4) facilitate older adults' use of services and receipt of public benefits; (5) translate languages; and (6) compensate for symptoms of cognitive impairment.

#### Conclusion

We call for innovative and ethically sound research to test AI applications' effectiveness in increasing meaningful social connections among older adults when such applications aim to foster *physical* rather than virtual connections. We also call for research comparing and contrasting the effectiveness of different technologies in cultivating older adults' social connections. Finally, we call for stricter regulations to ensure that AI applications designed to foster physical and meaningful connections among older adults demonstrate success while limiting risks. Before institutions implement AI applications to cultivate social connections, reviews should be conducted with ethics committees to ensure that risks are mitigated while harnessing the immense benefits that AI can offer: the sky is the limit.

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# **AMA Journal of Ethics®**

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# **MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE**

How Should Organizations Be Held Accountable for Promoting Environments That Foster Social Connection?

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#### **Abstract**

Growing familiarity with health risks of loneliness and isolation underscores the importance of *social connection* in patients' lived environments and communities. Deficits in social connection are linked to poor cognitive, mental, and physical health and premature death. Design interventions for physical environments—structures, spaces, and soundscapes, for example—can foster social connection, support, and resilience. This article canvasses urban interventions that can support human health investment and development. This article also suggests that designers of community policies, programs, structures, and spaces should be accountable for promoting social connection to help generate measurable health outcomes, such as longevity.

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# **Health Risks of Loneliness**

On June 15, 2005, the front page of the *New York Times* read: "A Frog of a Rail Line Is Set to Become a Prince of a Park," referring to the famous High Line Project in New York City's West Chelsea neighborhood.¹ A former elevated railroad, High Line now boasts a greenway that hosts community events, art displays, and performances. However, some real estate economists have expressed concern over its community impact, noting that the project represents a form of eco-gentrification.² Increasingly, the public is debating the merit of such projects, while developers claim their projects provide community benefits such as improved walkability, sustainability, and even social connection.³,4,5 The claim of improved social connection in particular has appeal: prior to the COVID-19 pandemic, as many as 61% of US adults reported being lonely.6 Humans are a social species and rely on each other for safety and security. As such, feelings of social isolation or loneliness heighten our vigilance, influence physiological functioning, and even cause changes at a cellular level.7,8 Perhaps surprisingly, the health risks of loneliness and social isolation exceed those of obesity and are comparable to those of

smoking<sup>9,10</sup>; they include cardiovascular disease and memory and mental health problems.<sup>9</sup> Accordingly, the US Surgeon General in 2023 identified social isolation and loneliness as "profound threats to our health and well-being," titling his 72-page public advisory, "Our Epidemic of Loneliness and Isolation."<sup>11</sup> Physical environments, a term used to describe both natural and built environments, are social determinants of health, <sup>12</sup> and many in health care recognize that attention to design of our physical environments can improve social connection and health.<sup>13</sup> However, because social connection is often regarded as a natural outcome of most public space or infrastructure "improvement," few projects incorporate research-based design interventions, which are most effective when woven into the fabric of a community and inclusive of diverse community voices.<sup>14,15</sup> Whether a community actually builds physical environments that enhance social connection and community health is a very intentional choice and thus an ethical question.

Similar to medicine, choosing a design intervention often involves navigating competing values within power hierarchies that ultimately affect health outcomes. Our increased understanding of the built environment's effect on human health and well-being engenders an obligation for architects, developers, bioethicists, and community officials to act intentionally when creating the spaces in which we work, live, and play. Specifically, built space interventions that claim to improve social connection and health should be based on evidence that they do so. And because good ethics is backed by good evidence, this paper will first examine evidence of the links between the physical environment, social connection, and health outcomes. It then briefly explores bioethical issues related to current practices of urban development in the United States before concluding with recommendations to improve social connection and community health through the built environment.

#### Social Connection and Design

Strong social connections are associated with many health benefits. These include longer life expectancy and lower disability rates, <sup>16</sup> better access to health services, <sup>17</sup> and more employment opportunities. <sup>18</sup> Social connection is also associated with lower rates of mortality, depression and anxiety, <sup>19</sup> coronary artery disease, stroke, and dementia. <sup>9,20,21</sup> A 2021 review of 25 meta-analyses found that lack of social connection (indicated by social isolation, loneliness, or living alone) is associated with poor physical and mental health outcomes for many conditions. <sup>22</sup>

Strong social connection is also associated with intentional physical environment features. Recreational facilities, parks, and green spaces<sup>23</sup>; higher population density (with caveats) and smaller land parcels <sup>24</sup>; community facilities<sup>25</sup>; and even townhomestyle housing<sup>26</sup> have all been shown to promote social connection. Specifically, the presence of public and private community gathering places frequently called *third places* (eg, cafes, parks, plazas) can increase social connection, social capital, and well-being by serving as "enabling places,"<sup>27</sup> promoting recovery from hardships or providing material and social resources. <sup>14,28,29,30</sup> However, it is not their mere presence but their integration into the social fabric that gives third places their effectiveness. The importance of these connections is reflected in the inclusion of the physical environment as part of a systemic framework for design for health, <sup>13</sup> in alignment with the Healthy People 2030's 5 key domains.<sup>31</sup>

Taken together, these studies and frameworks support the theory that the physical environment is part of an ecosystem for health as proposed by Booske et al<sup>32</sup> and Hood

et al.<sup>33</sup> Similar to how hospital environments affect clinical teamwork,<sup>34</sup> community and city environments are complex systems that impact health and well-being in numerous ways.

# **Building Socially Connected Communities**

Evidence-based design, however, is often difficult to realize. Our physical environments are extensively regulated and the result of lengthy, complex negotiations among numerous stakeholders. Developers, local governments, and community interests often have competing values and goals. Traditionally, the profit-seeking goals of developers may result in designs that increase burdens on the community, such as traffic pollution or infrastructure costs. To gain the community's approval, developers commonly offer to include something in the project intended to benefit the community. These "amenities" may be parks or public spaces, low-income housing, or community event spaces.

In practice, what and how many amenities are involved often comes down to "horse trading" among stakeholders, usually the developer and civic officials. For example, if a developer is allowed to build a high rise a few stories higher than local zoning codes, the project may become more profitable, and, in exchange for a change in zoning code or an exception to the height limit, the community amenity package may expand. But this approach is generally based on preferences of stakeholders who have a voice in the negotiations and rarely includes the community at large or public health interests beyond nonmaleficence (eg, ensuring access to clean drinking water, adequate sanitation, and limiting harmful chemical exposure). The current approach misses opportunities for collaboration with others affected by the project and with experts with knowledge of how to build healthy environments, and it has historically left many groups at a disadvantage.

In a similar way, many design interventions fail to realize their potential because they are based primarily on urban planning or architectural design precedent rather than robust research. These design precedents may appear beneficial at passing glance due to their ubiquitous deployment, historical acceptance, and frequent codification. However, these precedent-based civic approval processes stretch out over years and produce projects designed more to avoid previous failures than to promote connection or health. Generations of residents will live with and in these environments. Community zoning plans often look forward 30 years or more, but comparatively little thought is given to studying the impact of a project on its community members' health and well-being, despite mistakes being often difficult and expensive to remedy.

In some cases, the public may be at odds with development interests in the private sector and with local government. The public has good reason to be skeptical, as the United States has a long history of harming disadvantaged groups through control of the physical environment, including redlining—which limited investment in improving the physical environment of minority neighborhoods <sup>35</sup>—and construction of the interstate highway system, which demolished large swaths of minority neighborhoods. <sup>36</sup> While many of these examples are in the past, other forms of gentrification continue their deleterious effects in the modern age. With little or no commitment on the part of developers to accurately understand a project's long-term impact on health or general welfare, existing divisions between interest groups are perpetuated.

# An Ethics-Based Approach

While these debates occur outside the health care setting, decisions about the built environment significantly impact health outcomes, and, as noted previously, the issues involve the integration of competing values <sup>37</sup> within power hierarchies. <sup>38</sup> As such, a broadly defined bioethics-informed framework is ideally suited to the task of achieving evidence-based, just outcomes. Our increasing knowledge of the profound impact of the physical environment on social, physical, and mental health engenders an obligation to employ designs based on current evidence-based practices. <sup>39</sup> Such an approach suggests that we can improve our communities by being more intentional about community amenities and aligning evidence-based design interventions with community needs and health. Doing so not only benefits a community but also enables developers to offer new amenities for a community's benefit. <sup>40</sup>

Applying a bioethical framework to urban development would entail several elements. First, stakeholder negotiations should give primary weight to how a project harms and benefits the health of the community. Rather than developers' financial interests taking priority in decisions about design interventions, validated health outcomes should be considered first, thereby creating new roles for community bioethicists trained in ethics, public health, and urban planning. Second, by adopting research ethics-based approaches, such as citing studies to support claims and fostering a culture of peer review, developers could make substantiated claims about real health benefits dispassionately supported by data rather than relying on subjective measures like curb appeal among groups of community members who distrust the system. Third, design of third-party post-occupancy studies should be standardized and widely employed to improve knowledge for future projects. Fourth, and finally, community health determinants, such as job opportunities, transportation, affordable housing, and access for the elderly and those with disabilities, should also be given more weight.

Similar to the development of environmental impact plans and post-project analyses in environmental ethics, an urban development bioethical framework would seek to explain how a project affects important measures of health and well-being. This approach would also be beneficial for development interests because the interventions would more definitively demonstrate value to every member of the community—and assist in adapting already-built projects to better promote community health. Overall, this approach presumes that the health of the community, measured by both direct health outcomes and related indicators like affordable housing access, should be the primary consideration in development decisions due to the significant and inflexible impact of the physical environment on human health.

There are challenges to adopting this approach, however. Social connection and health outcomes may not accurately indicate the impact of the built environment on relocated residents, as communities are dynamic and transient in nature. Reliable researched-based outcomes, such as life expectancy, often take years to develop. These challenges, which largely reflect a lack of intentionality and follow-up in current design practices, could be addressed with consistent effort.

### **Connection Through Community Development**

Our increasing knowledge of the physical environment as a social determinant of health presents an opportunity to focus development projects' designs on measurably improving community health and well-being. Development projects that claim to improve social connection and health should implement evidence-based designs supported by

research using validated metrics of social connection and health outcomes. Factors closely linked with health outcomes should be included in publicly published post-occupancy studies to enable examination of the positive, neutral, and negative effects of design interventions, as these may be more proximately measurable than long-term indicators like mortality. This approach could help redress the historic marginalization of minorities and other groups lacking social, political, and financial power. If developers use validated instruments to collect data, communities could benefit from truly efficacious interventions backed by defensible data. And developers would benefit from offering a new value proposition: community amenities shown to be of actual benefit, which are more likely to win approval from stakeholders interested in public health and well-being.

While we have focused on community amenity negotiations, adopting evidence-based design interventions to improve health and well-being is increasingly being recognized as a subject matter within health care, public health, architecture, and, indeed, bioethics. As such, medical practitioners and ethicists are in a unique position to contribute critical subject-matter expertise, critical thought, and knowledge to the discussion of how to build environments that promote human health and social connection and to advocate for healthy, connected communities.

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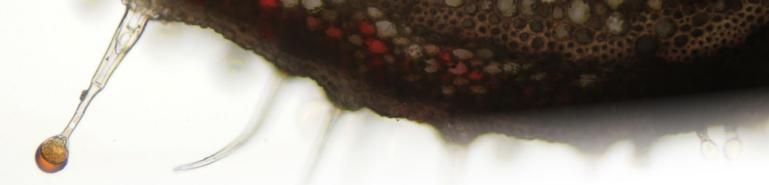
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# **HISTORY OF MEDICINE: PEER-REVIEWED ARTICLE**

The Internet and Loneliness

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### Abstract

The internet and related media play key roles in education, work, and leisure. It could be argued that people have better interpersonal interactions because of social media, which could reduce loneliness. But documented internet use patterns suggest that the internet increases loneliness. Studies conducted prior to and during the COVID-19 pandemic demonstrate an association between what's called "internet addiction" and loneliness, although findings vary with participant demographics and frequency and types of internet use. There is a need to conduct longitudinal research to determine the direction of causality and whether what we define as "balanced" internet behavior positively affects well-being.

#### Loneliness and Media

Loneliness can be defined as the feeling we get when our need for rewarding social contact and relationships is not met. There are many factors that can increase loneliness, a recent example being the reduced social contact caused by the COVID pandemic. Loneliness is associated with poor health; it elevates stress,¹ which can cause mental health problems that in turn can influence physical health.² One factor associated with loneliness is internet use. Internet use covers various behaviors, with some being considered positive (eg, the use of the internet in education and work) and others (eg, social media use, gambling, viewing pornography)—especially when excessive—being associated with addiction³,⁴ that can undermine well-being. Internet addiction is compulsive internet use, which manifests as addiction symptoms and withdrawal signs when the user is not connected to the internet, as well as impairment of life activities, including those performed at work and at home. Problematic internet use is more common and is defined as internet misuse, which has a general negative impact on the internet user's life.⁵

Debate about whether the internet improves or harms participation in community life and social relationships started in the 1990s.<sup>6,7</sup> An early study of the internet and psychological well-being found that greater internet use was associated with a decline in participants' communication with family members, a decrease in their social circle, and an increase in depression and loneliness.<sup>6</sup> Subsequent studies have reported similar results. An early review of research on this topic by Morahan-Martin supported 2 opposing hypotheses about the causal relation between internet use and loneliness.<sup>7</sup>

First, loneliness may be a product of excessive internet use because users invest in online relationships at the expense of real-life ones. Alternatively, lonely individuals may be drawn to online activities because they offer connectedness, companionship, and community membership. The present article aims to review the literature on the internet and loneliness to answer the question: What role does the modern internet play in alleviating or exacerbating loneliness?

# Loneliness and the Internet

A search of the PubMed database using *loneliness* and *internet* as search terms retrieved 77 articles on the internet and loneliness published between 2000 and 2010 and 177 such articles published between 2011 and 2018. Another literature search using PubMed retrieved 394 articles published in 2019 or later on the topic of social isolation, loneliness, and internet use.

Cause and effect. Similar to Morahan-Martin, a 2009 study suggested that loneliness can be both the cause and the effect of problematic internet use.8 A 2021 systematic review and meta-analysis found a moderate association between internet addiction and loneliness, although most of the studies included in the review were carried out prior to the start of the COVID-19 pandemic.9 Based on a review of the literature on the relationship between internet use and loneliness, Nowland et al concluded that when the internet is used to enhance existing social relationships and develop new social connections it is a valuable tool for reducing loneliness (the "stimulation hypothesis"), but when it is used to escape from the social world and withdraw from social interactions it will increase feelings of loneliness (the "displacement hypothesis").¹0 On the displacement hypothesis, lonely people who use the internet to escape from social interaction may reduce the time they spend on offline social interaction, suggesting that they need psychological support in managing their internet use to enhance existing relationships and create new ones.

Specific groups. Several review articles published after 2010 focus on specific groups, such as the elderly, <sup>11</sup> children, <sup>12</sup> or adolescents. <sup>13</sup> In the case of the elderly, results show that internet communication technology may be appropriate for some individuals (eg, those with good computer literacy) but not for everyone. Future research should aim to identify those who would gain the most benefit.

Isolation induced by the COVID-19 pandemic. Internet use significantly increased during the pandemic due to the lockdown and people having to work and interact from home, with significant detrimental effects on people's mental health. 14,15 During periods of social isolation, social media identity bubbles may provide substantial social resources. However, these resources cannot shield people who are lonely from increased psychological discomfort, 16 and virtual friendships have been shown to predict greater loneliness among adolescents with learning disabilities. 17 Even if virtual friendships ease the emotional loneliness that comes from a lack of intimate, physical relationships for some, there is reason to believe that many of the relationships made online are little more than virtual friendships. How we use the internet may contribute to feelings of isolation, and perceived social isolation is positively related to problematic social media use. 18 Although in-person interactions are still the most effective strategy to combat feelings of isolation, people may sometimes find the support they need in virtual communities.

Research has shown that loneliness increased during the pandemic. In one survey of Italian adults, respondents of all ages reported that they spent more hours using social media during the lockdown than before, with perceived loneliness being associated with both excessive social media use and anxiety, <sup>19</sup> consistent with the findings of a survey on Chinese adults' WeChat use. <sup>20</sup> However, a study of middle-aged and older English adults found that those who used the internet more than once a day and for communication purposes felt less lonely than those who used the internet once a week during the quarantine, indicating that frequency of internet use is related to subjective sense of well-being. <sup>21</sup>

During the pandemic, loneliness increased among the elderly,<sup>22</sup> and, in particular, among elderly adults with physical impairments or lack of ability to use or access technology to socialize online.<sup>23</sup> Feelings of loneliness increase with age,<sup>24</sup> and, among older adults, loneliness and social isolation are associated with anxiety, depression, mortality risk, and cognitive decline.<sup>25</sup> Although internet use was shown to mitigate loneliness among the elderly in an "age-friendly" city in Taiwan during the pandemic,<sup>26</sup> a study of internet addiction among the elderly in China during the pandemic conversely found that internet addiction can be mitigated by increasing real-life social support that lessens the feeling of loneliness among the elderly.<sup>27</sup>

There was also a rise in loneliness and mental health-related effects among children and adolescents during the COVID-19 pandemic, <sup>28</sup> with loneliness both contributing to and exacerbating depression and anxiety in children and adolescents with preexisting mental health conditions. <sup>29</sup> Lonely adolescents were more likely to use social media as a strategy for coping with restricted social contacts in real life. <sup>30</sup> A study of Turkish adolescents during the pandemic showed that loneliness increases internet addiction, <sup>31</sup> and other studies showed that internet-based addictive behaviors increased during the pandemic, negatively impacting young and adolescent internet users. <sup>32,33,34</sup> Within this group, internet use, loneliness, and social isolation have been found to be correlated with mental health issues such as anxiety, stress, and depression. <sup>30</sup>

Our and our colleagues' research confirms that the association between internet use and loneliness depends on the characteristics of the sample.<sup>35</sup> In a survey of over 500 participants from Kuwait and Saudi Arabia, loneliness was found to be associated with both problematic internet use and the number of hours spent online, with younger participants reporting greater loneliness than older ones and those who reported greater loneliness frequently obtaining news about the pandemic from social media. The quality of the relationship with the person(s) with whom participants were spending their lockdown was also correlated with loneliness. In summary, the literature shows that the association between internet use and loneliness depends on the nature of the internet use and the characteristics of the user.

# **Next Questions**

Despite the large literature on internet use and loneliness, there are many issues that require further study. For example, are there differences in the loneliness-producing effects of different internet activities? Does internet literacy have an effect on loneliness? Are cultural differences important because of differences in the availability of and attitudes toward different internet resources? What is it about online relationships that makes them less satisfying than in-person interactions? And does loneliness cause internet use or vice versa? Most studies do not show a causal relationship between internet use and loneliness but rather an association that could be

bidirectional. Moreover, in research conducted during the COVID-19 pandemic, social isolation may be confounding the association between internet use and loneliness.

From an ethical perspective, one can argue that both the prevention of loneliness and appropriate use of the internet are important topics that require appropriate guidance. The specific form of this information depends on the findings from the research, and it is apparent that there are many issues to resolve before appropriate guidance can be given.

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# **ART OF MEDICINE**

**Loneliness and Cultural Hyphenation** 

Julia Bhuiyan

# Abstract

Forever a Work in Progress is a painting that explores complexities of isolation as one consequence of navigating a culturally hyphenated identity.



### Media

Acrylic paint on canvas, 16" x 20".

This acrylic self-portrait considers the artist's experience of cultural hyphenation as a Bengali-American teenager. Among young adults with hyphenated cultural identity labels, feelings of loneliness can be exacerbated by frustrations of striving to maintain a delicate, convoluted balance among values, beliefs, and expectations stemming from multiple, often conflicting, cultural demands. Discovering and exploring one's cultural hyphenation identity processes and experiences tends to be messy and lonely.

Emerging cultural identity, suggested in the painting by homogenous blue tones, is not free from assimilation's indignities, suggested by red tones. New norms of selfhood acceptable in American culture are simultaneously transformative and demand ongoing transformation, signified here by movement of a paintbrush wielded by the hand of the figure in the lower right. Given oscillating native and adopted cultural influences, it is unclear how the blank-faced figure will experience being painted, colored, transformed.

Julia Bhuiyan is an undergraduate student at Harvard University in Cambridge, Massachusetts. She is studying chemistry and history of science, and her interests include adolescent medicine, reproductive health, and intersections of art and science.

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**Rest Is the First Casualty of Constant Messaging** 

Kathleen Wong

### Abstract

This drawing considers how sources of patient demand are also sources of light pollution in a room in which a clinician tries, in vain, to rest.



#### Media

Hand drawn, colored on digital medium with iPad app Ibispaint X.

# Caption

This comic considers intersections between patients' internet-based access to their health and health care information and clinicians' duties to respond to online prompts and messages from patients. For instance, instead of visiting in person, a patient might ask a question or raise a concern—even about potentially life-threatening conditions that might demand immediate attention—via health care organizations' online messaging applications. Sources of light in the comic suggest this demand and its corresponding burden on clinicians.

**Kathleen Wong** is a fourth-year medical student at the Arizona College of Osteopathic Medicine in Glendale.

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# **Isolation**

Zachary G. Jacobs, MD

### Abstract

This comic tells the true story of a hospitalist physician learning from a patient how to slow down. It is a commentary on the isolating experience of hospitalization—magnified for patients by infection control precautions and hospital restrictions and for clinicians by long hours away from family and friends, particularly during peaks of the COVID-19 pandemic.

Figure. Detail from Isolation, Connection, and Learning to Slow Down



(Click here to view the entire comic.)

### Media

Adobe Photoshop.

Hospitalization is one of the most isolating experiences imaginable. Separated from home and disconnected from family, friends, and other social support, patients in the hospital are frequently lonely and, in many cases, outright alone. This experience can be further compounded by infection control precautions, which impair socialization and hinder meaningful connection with staff. These compounding effects were exemplified in the early stages of the COVID-19 pandemic, when patients were quarantined behind closed doors and staff minimized time spent in rooms. Many hospitals banned visitation altogether, a decision decried by some as unethical.<sup>1</sup>

It is clinicians' duty to support patients suffering from isolation; however, to do so is time-consuming and adds to their stress, especially in the context of infection control precautions and other barriers to efficiency. Personal well-being and duty to family are frequently at odds with beneficence, or the desire to be universally present for patient needs. Ethically, physicians have the right to strike a balance between the duty to care and the duty to self and family<sup>2</sup>—arguably more than ever during a deadly pandemic<sup>3</sup>—but even the briefest moments of accompaniment<sup>4</sup> can make all the difference in the lives of patients, particularly during times of isolation.

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Zachary G. Jacobs, MD is a hospitalist at the Oregon Health & Science University in Portland. He uses graphic art, creative writing, and photography to combine his passions for healing and storytelling.

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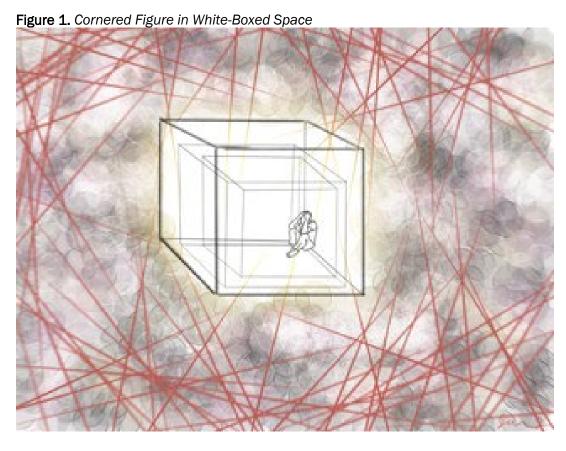
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**Triptych on Stress, Anxiety, and Loneliness** Jaylen Lanier

# **Abstract**

Three digital drawings invite interpretations of a cornered figure's orientations to space, color, and its own boundaries and self. Little variation among lines and spaces, their colors and shades, and the figure's position suggest the representational importance of each to discerning meaning about how we forge connection.



Media Procreate®.

# Caption

A lone figure occupies a corner of nested boxes that separate the figure from lifelines—the necessity and urgency of which are suggested in red—to connection.

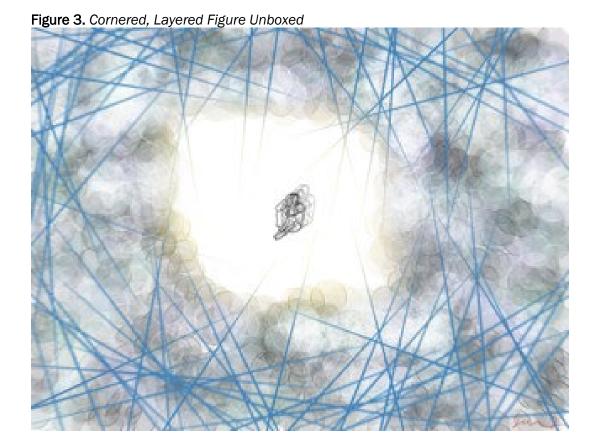
Figure 2. Cornered Figures Unboxed in Black Space

# Media

Procreate®.

# Caption

A lone, layered figure is postured as cornered, replicated, and accompanied by itself and its mirror images in black space. No lines connect the figures, which are delineated in white instead of black. Are the figures complementary or connected? Perhaps the presence of company does not mean the absence of isolation, and being alone might not mean accompaniment is needed.



# Media

Procreate®.

# Caption

A lone, layered figure is postured as cornered in white space surrounded by gray. Blue lines suggest penetration of space immediately surrounding the figure—perhaps en route, perhaps to connect.

**Jaylen Lanier** is a student at the School of the Art Institute of Chicago in Illinois. In late 2022, he was the Art of Medicine intern for the *AMA Journal of Ethics*.

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### **Abstract**

This essay connects loneliness with health problems and argues that both are comorbid with authoritarian politics. Although an old idea from Plato and Aristotle, this problem takes an acute shape in the contemporary world, as argued by Hegel, Hannah Arendt, and Kate Manne, and has a gendered dimension, as men are lonelier than women. This article also attends, briefly, to empirical material about loneliness in the contemporary world.

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### Witness as Social Capital

In despair, my best friend called me.

He is a married gay man. I had been present at a dinner at his home 6 weeks before when a faculty member from his 8-year-old daughter's school called to warn him about an impending set of virulently homophobic policies. Now he described the institutional discrimination that the young child was facing because of his sexual orientation—discrimination so frightening that her pediatrician had sent her to the emergency room with acute appendicitis, only to discover that she suffered from terrible anxiety. He began to weep as he described how, because of her age, they had hoped she would be insulated from adults' bigotry. However, teachers talk and so do parents, and bad news travels fast on the playground. He asked me, among other questions, whether his own child would eventually become a bigot, under this and similar pressures. I reassured him that she would not.

I was left with many questions, and among them are topics of this essay: What if, for reasons of gender socialization or social capital, he had been unable to call me? What if I had not been at his house to bear telephonic witness to his trauma? What if, busy or simply distracted, I had not picked up the phone on the day of despair? What if, a week later as the policy emerged, I had not sat with him as we read the policy together, just so he would not have to be alone in a room full of hate? What if, many weeks later, for whatever reason, I had been unable to give his daughter a small gift as she started her new school, to take her for the weekend to give him and his husband time to

recuperate, and to attend her new activities as a loving and trusted adult? In short, what if the conditions that make friendship and solidarity possible had not been present? My friend and I had dined nearly weekly for 20 years, a connection made possible by multigeneration intellectual capital, good jobs, and the moral luck of having landed those good jobs in physical proximity to one another. But many people in advanced capitalist societies suffer loneliness in their times of trauma. This loneliness is not only bad for our health; it is also comorbid with authoritarian politics, currently rife with the very homophobia that my friend was suffering from.

#### **Loneliness Observed**

Adults in the contemporary United States are remarkably isolated. According to Daniel Cox, summarizing the May 2021 American Perspectives Survey, "nearly one in five Americans reported having no close social connections, a double-digit increase from 2013." The survey's methodology defines "close social contact" as the kind of contact my friend had sought from me: having someone to speak to about an important personal matter, and within the last 6 months.

Although discrimination is especially painful, particularly when it targets and affects a child, you could substitute any of the routine indignities of adult life for my friend's: the slow decline of a parent or spouse; the generalized fear that comes with living in the giant medical experiment constituted by a novel coronavirus; and, of course, actual pediatric cancer or appendicitis or the loss of a child to death. To these we might add the particular pains of economic life: loss of a job or the denial of a promotion; the pain of inflation and wondering if one's resources will be enough to protect one's family; worry about medical costs; and acculturation into an environment that associates happiness exclusively with material gain.

At the distance of several months, my friend has stopped the smoking he began. He again sleeps through the night. In fits and starts, he has regained his lifelong exercise program, helped along by me as we meet for a session on the elliptical. He is a person of great personal strength. But it did not hurt that I and some others were able to stand by him in friendship and counsel.

### Insight From Philosophy

Arendt. Rich is the theory that connects isolation and loneliness to authoritarian politics, especially in Hannah Arendt's writings. Near the end of *The Origins of Totalitarianism*, Arendt explains what she calls "organized loneliness": "[w]hat prepares men [people] for totalitarian domination ... is the fact that loneliness, once a borderline experience usually suffered in certain marginal conditions like old age, has become an everyday experience of the ever-growing masses of our century." Such loneliness—which can be experienced in a crowd, too—happens when friendships are unlikely, impossible, or threatened.

Arendt's main philosophical influences are Plato, Aristotle, Hegel, and Marx. All are thinkers who refute the premises of the social contract theory that informs modern political life—and especially the idea of an isolated individual as a premise or starting point, which severs our most basic connections with other humans. For Arendt, once human nature as a concept is filled in with ideological individualism, we are cut off from other humans so dramatically that the 2 basic functions of human community are abrogated. First, we no longer are able to verify truths of the physical world by asking for confirmation from a fellow person. Common sense erodes as there is nothing common

or sensical,<sup>2</sup> a point highlighted beautifully by the erosion of truth in the many alternative realities now available, as mediated by our tiny screens. Second, in this extreme loneliness, we are no longer able to organize or be a self, because, as Arendt writes: "for the confirmation of my identity I depend entirely on other people." Arendt draws the 2 functions from Hegel, whose critique of ideological individualism also caused him to reject the contract tradition. Hegel derives these 2 functions from Aristotle's notion of *zoon politikon* (political animal), which Hegel has not only understood better than most other commentators, but also applied to the modern world.

*Marx*. Hegel's student Marx, in his 1844 manuscripts, gives an account of how everyone suffers in modernity: though we do not often focus on loneliness, according to Marx, the suffering it causes cannot be escaped entirely even by the very rich.<sup>3</sup> The word Marx uses for loneliness, *alienation*, has 4 dimensions. Our loneliness is so extreme that we are alienated from the physical world, from our own activity, from the practices through which we might actively construct—in community—a human nature apart from that prescribed by contractarian individualism, and from other humans in our day-to-day lives. Marx worries, in particular, about the way modernity forces everyone to view everyone else as a competitor for scarce resources, even in the most intimate friendships. It is difficult to imagine a more organized loneliness, indeed. The critique is so comprehensive that it leaves readers wondering how anyone, even my friend and I, could have formed a friendship at all.

Plato and Aristotle. We find connections between organized loneliness and authoritarian politics already and explicitly in both Plato and Aristotle. In the Symposium, Plato argues that (non-Greek) political regimes have deliberately hobbled friendships "on account of their tyrannies ... for I suspect that it is not to the advantage of the rulers that great and proud thoughts be engendered among their subjects, any more than friendships and associations." Aristotle echoes the idea in the Nicomachean Ethics, after explaining the kind of virtuous friendship that allows one to seek counsel from a friend as the highest form of friendship—and after arguing that such virtuous friendships are necessary for happiness, the highest good. But, as Aristotle warns, "while in tyrannies friendship and justice hardly exist, in democracies they exist more fully; for where citizens are equal they have much in common." For Plato and Aristotle, true friendship thus was moral, had functions of counsel and correction as well as accompaniment—as applied in the global health work of Paul Farmer6—that made better political bodies possible, and made life worth living.

Manne. Yet we cannot neglect the gendered dimensions of isolation, loneliness, and the collapse of friendship. As the 2021 American Perspectives Survey also reveals, men suffer from a decline in close friendships at a more precipitous rate than women, with 15% of men reporting no close friendships at all, a 5-fold increase since 1990.¹ When we parse these empirical data by age, we find that young men are the most vulnerable to loneliness.

As Kate Manne points out, the *incel phenomenon*—a category overwhelmingly populated by young heterosexual males who are either White or idealize whiteness—is characteristic of persons who blame loneliness, whatever its causes, on women.<sup>7,8</sup> The social structure of forced competition highlighted in Arendt and Marx also causes members of incel communities to compete for status and blame women for their resulting loneliness. The violent consequences of this blame of and competition for individual women structure the misogyny Manne analyzes.<sup>7</sup> And, they are, indeed,

violent public health problems: among other incidents, Manne highlights the 2014 Isla Vista sorority shooting as well as domestic violence.<sup>7</sup>

Theweleit. And these men, as Klaus Theweleit puts it, could be "the tip of the patriarchal iceberg, but it's what lies beneath the surface that really makes the water cold." Men might be lonelier in part because of misogyny: they are both isolated from women and reliant on them for social connections with friends and family. Because such connections take time and effort to cultivate but might not appear to do so, the work of forging connections is yet another kind of labor to which men might feel entitled. Unsurprisingly, then, authoritarian regimes have, historically, reoccupied the terrain of "traditional gender roles" and aggressively controlled reproductive labor, as Theweleit also documents. My friend's gender socialization, tempered by his sexuality, might have insulated him from the worst consequences of regressive gender role nostalgia. 10

Still, we must ask how loneliness feeds the public health epidemics of our times—or even if it is itself a public health epidemic—and how we might combat or remedy such loneliness in our moral practices, including our principled stands against misogyny.

By asking for a friend.

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