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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^{9,10}; they include cardiovascular disease and memory and mental health problems.⁹ 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.”¹¹ Physical environments, a term used to describe both natural and built environments, are social determinants of health,¹² and many in health care recognize that attention to design of our physical environments can improve social connection and health.¹³ 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.^{14,15} 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,¹⁶ better access to health services,¹⁷ and more employment opportunities.¹⁸ Social connection is also associated with lower rates of mortality, depression and anxiety,¹⁹ coronary artery disease, stroke, and dementia.^{9,20,21} 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.²²

Strong social connection is also associated with intentional physical environment features. Recreational facilities, parks, and green spaces²³; higher population density (with caveats) and smaller land parcels²⁴; community facilities²⁵; and even townhome-style housing²⁶ 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,”²⁷ promoting recovery from hardships or providing material and social resources.^{14,28,29,30} 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,¹³ in alignment with the Healthy People 2030’s 5 key domains.³¹

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 al³² and Hood

et al.³³ Similar to how hospital environments affect clinical teamwork,³⁴ 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 neighborhoods³⁵—and construction of the interstate highway system, which demolished large swaths of minority neighborhoods.³⁶ 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 values³⁷ within power hierarchies.³⁸ 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.³⁹ 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.⁴⁰

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.^{41,42} 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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