

Positive Social Connection: A Key Pillar of Lifestyle Medicine

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A PILLAR OF HEALTH

During the past several years, and particularly during the COVID-19 pandemic, there have been rising concerns about social isolation and loneliness as public health issues. Notably, the National Academies of Sciences, Engineering, and Medicine (NASEM) published a consensus report on the medical and healthcare relevance of social isolation and loneliness.¹ The committee concluded that there is substantial evidence that social isolation and loneliness are associated with a greater incidence of major psychological, cognitive, and physical morbidities, with the strongest evidence found for risk for premature mortality.¹ Conversely, several meta-analyses and large-scale prospective epidemiologic studies document the protective effects of social connection.^{1,2} For example, a meta-analysis of 148 independent studies demonstrates that those who are more socially connected had a 50% increase in survival odds relative to those scoring lower on measures of social connection.³ Controlling for age, initial health status, and a variety of other potential confounding factors, there is a robust body of evidence establishing social connection as an independent protective factor and social isolation and loneliness as risk factors for premature mortality from all causes.^{1,2}

Socially isolated patients (those with inadequate social resources) experience poorer clinical outcomes, including increased hospitalization and higher medical costs.⁴ Social isolation significantly predicts a greater risk for coronary heart disease and stroke,⁵ type 2 diabetes,⁶ and susceptibility to viruses and upper respiratory illnesses.⁷ Furthermore, there is evidence of the mechanisms by which social connection may influence morbidity and mortality, including psychological

factors such as perceived stress⁸ and depression; behavioral factors such as sleep,⁹ physical activity, and smoking¹⁰; and biological factors such as inflammation.¹¹ Put simply, one's social well-being can significantly influence chronic disease morbidity and mortality. However, few healthcare professionals discuss this with their patients.¹² Explicit acknowledgment of the health effects of social connection/isolation within the medical community, establishing a biopsychosocial/emotional approach to health, is a potentially important step in addressing this gap.

THE CONTINUUM OF SOCIAL CONNECTION

These chronic health and mortality findings are based on scientific evidence accrued utilizing diverse conceptualization and measurement approaches, including the structure (existence of relationships and social roles), function (actual or perceived support or inclusion), and quality (positive and negative affective qualities) of relationships.¹³ Each aspect consistently predicts morbidity and mortality,³ but they are not highly correlated, suggesting each may be contributing to risk and protection independently. When multidimensional assessments that encompass the structure, function, and quality of social relationships were considered, the odds of survival were 91%, relative to 50% when these components were averaged.³ Thus, on the basis of converging evidence, the umbrella term “social connection” refers to a multifactorial construct used to predict health risk (when low) and protection (when high).¹³

On the basis of aggregate data, the evidence supports a continuum from risk to protection. Data from four nationally representative samples document a dose-response effect of social connection on physiologic regulation, including blood pressure, body mass, and inflammation, and health disorders across the life course from adolescence to older age.¹⁴ These data suggest a causal continuity of influence on biomarkers of disease, with early emergence and persistence during the life course. Insufficient social connection, whether it is because of poor quality or infrequent contact, can lead to physiologic dysregulation and, over time, poorer health. Thus, disrupt-

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ing the physiologic dysregulation associated with social disconnection, or maintaining regulation associated with positive social connection, may be key to delaying or preventing chronic disease later in life. Like other lifestyle factors, one's level of social connection can become a chronic pattern that can put a patient on a path to better or poorer health.

ROLE OF PHYSICIANS

Is it possible to prevent, treat, or even reverse diseases and health problems by enhancing positive social connection? Evidence has amassed on the strong causal associations between social relationships and mortality as well as other health outcomes,^{1,14,15} and there is emerging evidence of impacts on healthcare utilization.¹ Nonetheless, important questions remain as to how we can translate this evidence to promote health. Although efforts to promote health go beyond the medical community, physicians can take an active role. Indeed, the NASEM consensus committee recommends that physicians include assessing and promoting social connection as part of ongoing primary, secondary, and tertiary prevention and care.¹

When benchmarking the magnitude of effects of social connection on mortality risk, the effects are comparable with and in some cases exceed those of other lifestyle factors such as smoking cessation, alcohol consumption, body mass index, and physical activity, as well as medical interventions such as antihypertensive medications and flu vaccinations.^{3,13} However, the public tends to underestimate the importance of social factors relative to these other factors¹⁶—factors physicians routinely discuss with patients. Thus, it is important to educate patients on the importance of social connections for health—emphasizing evidence demonstrating that it is an important health risk factor.¹ Such education may include practical evidence-based steps individuals can take to apply this in their lifestyle (eg, joining social groups, mindfulness practices, volunteering). Education and awareness are needed to buoy preventive efforts because prevention may be more effective than trying to reverse the severe health consequences resulting from long-standing patterns. Social connection also significantly influences other lifestyle factors (eg, nutrition, physical activity, sleep) implicated in chronic disease development and progression,¹⁷ via social encouragement, social control, and social norms that guide behavior. Thus, promoting positive social connection and supports has the potential to help patients achieve other treatment goals.

Just as physicians routinely assess other risk factors, assessment of patients' level of social connection is needed. The Institute of Medicine identified social connection/isolation as one of the 10 domains most crucial to influencing

health outcomes and treatment effectiveness and recommended the inclusion of social connection/isolation in the electronic health record (EHR).¹⁸ Routine assessment, using validated instruments (eg, PROMIS,¹⁹ the UCLA Loneliness Scale,²⁰ or the Social Network Index),²¹ allows for identification of early risk and any changes may be tracked over time.

By identifying patients at risk, mitigation steps can be taken to disrupt or reverse further progression. Physicians and other healthcare professionals can discuss with a patient factors that may have contributed to changes in social connection and tailor their approaches to the patient's background, needs, and desires.¹ There are many examples of coordination between the healthcare system and community-based social care providers included in the National Academies' report *Integrating Social Care into the Delivery of Health Care*.¹⁷ Referrals should also take into account barriers to access. For example, physicians often explain the benefits of exercise but struggle getting patients to actually exercise. Just as patients may not have access to a pool or prefer walking to swimming, patients may lack access to existing social supports or community-based social programs, and patients may prefer some social programs over others. Thus, tailored approaches that address underlying causal factors are needed. Physicians may access Commit to Connect, housed within the Department of Health and Human Services' Administration for Community Living, to identify best practices and evidence-based interventions.²² Further, data from 106 randomized clinical trials and more than 40,000 patients revealed that patients who received psychosocial support in addition to treatment as usual were 20% more likely to survive and 29% more likely to survive longer than patients who just received standard medical treatment.²³ This suggests support provided to patients within clinical settings significantly improves treatments outcomes.

CONCLUSION

Lifestyle and behavior are widely recognized as the prime drivers of chronic disease, and the degree of social connection is just as influential yet is currently underappreciated by most patients as relevant to health. Thus, promoting positive connection in clinical care settings is recommended across the life course, from pediatrics to geriatrics. It may be possible to improve prevention and treatment of the leading chronic diseases and increase life expectancy by enhancing positive social connection. ●

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