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Suicidal Ideation and Social Capital – Community Matters

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With 25% of its population now over age 65, and up to 40% forecast by 2060, Japan is the harbinger of aging for developed nations, including the United States, which anticipates a tripling of its old old population in that same time frame. We have much to learn about how best to prepare for this “silver tsunami,” including assurance that mental health and well-being are maintained in this new, older world. The article by Dr. Noguchi and colleagues¹ in this issue of the *American Journal of Geriatric Psychiatry* provides some guidance with regard to suicide risk management of older adults.

Using a cross-sectional sample of 10,094 older adults living in rural Japan, Dr. Noguchi and colleagues address whether individual- and community-level measures of social capital are associated with the presence of suicidal ideation. As it is in many countries, older adults dying by suicide in Japan is a major public health problem, where the age-standardized nationwide suicide incidence rate of 18.5 per 100,000 is considerably higher than in the United States (12.1 per 100,000).² Death-by-suicide risk factors are wide-ranging and span psychiatric illness, physical illness, functional capacity, and social connectedness to family, friends, and community.³ While the importance of social connections and the community context to suicide risk is evident, studies to date have primarily focused on individuals and individual-level characteristics. Dr. Noguchi and colleagues make an important contribution by examining the association of suicidal ideation with social capital (at individual and community levels), with social capital being defined as “the resources that are accessed by individuals as a result of their membership of a network or a group.”¹

The concept that the environment in which we live can have, at times, a profound impact on our health dates back to at least 5th century BC Greece and has an especially storied history with infectious disease.^{4, 5} In the modern, industrialized world evidence clearly indicates that communities can have a significant impact on health independent of individual characteristics.^{5, 6} More specifically, neighborhood deprivation and poverty have been linked to cigarette smoking, higher body mass index, lower quality diet, worse self-rated health, intimate partner violence, depressive symptoms, and mortality.⁵ Community-level policy changes (e.g., sanitation systems, lead removal, seatbelts) can meaningful impact population

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health and have contributed to the epidemiologic transition from infectious to chronic disease management.

As Dr. Noguchi and colleagues remark, they are not the first to establish a link between social capital and suicidal ideation. Nonetheless, their contribution is notable in that they use multilevel analyses to examine social capital, social support, and psychological distress concurrently at the individual level with social capital at the community level. Multilevel analysis is an underutilized tool that can account for clustering of observations across multiple dimensions (e.g., grouping of observations by the social environment or community) and elucidate unique relationships that may be present in individuals and their environments.^{4, 5} The authors examined two components of social capital, community “trust” and “reciprocity.” To derive these measures, they aggregated individual responses for each of the 35 included communities. The authors’ analyses found that individual- and community-level mistrust were associated with a nearly two-fold increase in the odds of suicidal ideation among older adults with psychological distress (but had no association among those not in distress), even after accounting for demographics, social support, and physical functioning. That social capital may have a more prominent role in older adults under duress and that community-level social capital may yield community-wide benefits with regards to suicidal ideation reduction is intriguing and warrants further exploration. Social support has been postulated to increase an older adult’s resilience to stressors and it is possible that social capital likewise could buttress the resilience of older adults in psychological distress[0] and increase feelings of social connectedness that, in turn, could led to a reduction in suicidal thoughts and behaviors.

Despite some important limitations in their methods (e.g., this suicidal ideation item conflates feelings of depression and suicidal ideation), this work raises important questions and has implications for future investigations. In particular, the mechanisms by which social capital potentially affects late-life suicidal ideation are not clear. The social capital definition used by the authors suggests that older adults living in communities with high levels of social capital have more resources available to them. What exactly are these resources, however, and how might their effect vary based on an older adult’s characteristics such as living arrangement, socioeconomic status, and functional impairment? While epidemiologic studies historically would have relied heavily on data generated by participant self-report to answer these questions, we can do much better now. Research efforts are increasingly incorporating biomarkers, electronic health records, geospatial mapping, online social networking, and other administrative (e.g., census tract) data to meaningfully enrich the questions we are able to answer while mitigating the risk of the “individualistic fallacy” (analogous to the ecological fallacy) that can occur when the *context* within which relationships occur is unaccounted for.⁵

There are examples from Japan of multimodal interventions that focused in part on connectedness and strengthening community relationships that are associated with a significant reduction in suicide attempts among older adults living in rural areas.⁷ We also know that suicide risk factors, when applied to individuals, can be poor predictors due to the low suicide incidence rate. Consequently, adoption of a public health approach to suicide prevention efforts that focuses on community-level policy changes (e.g., limiting access to

lethal means and promulgation of media guidelines for reporting on suicide deaths) hold promise for reducing suicide mortality. Also, the authors' findings suggesting that a high level of community social capital is associated with less suicidal ideation in psychologically distressed older adults is further evidence that moving beyond indicated interventions (e.g., treating depression in outpatient offices) to universal interventions (e.g., advocating for community-wide services and supports, targeting overall well-being in later life) to improve the communities in which our patients live may be appropriate and provide widespread benefit.

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