PUBLIC HEALTH

Syndemics and global health

Syndemic theory considers how social inequalities drive disease interaction. A new study uses a mixed-methods approach to examine how stress interacts with multiple diseases to affect quality of life in Soweto, South Africa.

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Although all humans experience distress, what is stressful in one locale may not be in another. How stress is internalized and articulated is culturally prescribed, but also indicative of context-specific causes. That is, what is stressful for the people of a particular community is part and parcel of their multiscale social, political, economic and ecological contexts. In this regard, individual experiences represent a process of localization[1]. That structural inequalities result in the proliferation of infectious and chronic diseases is well-documented. Determining precise mechanisms through which structural inequalities affect well-being — that is, how they are localized — has more recently come to the fore in global health research.

Syndemic theory asserts that structural inequalities drive diseases to cluster, resulting in interactions that produce worse health outcomes[2]. A new study by Mendenhall and colleagues[3] used a mixed qualitative and quantitative approach to assess the localization of stress and its syndemic relationship with other diseases in Soweto, South Africa. Drawing on interviews and epidemiological survey data, the authors found stress significantly interacts with multiple morbidities (that is, multiple diseases or symptoms), such as diabetes and hypertension, and with infectious diseases, including HIV and tuberculosis, to predict quality-of-life scores. The development of a locally derived stress scale is a key feature of this research. The methods used in these analyses allowed the researchers not only to see that multimorbidities are associated with lower quality-of-life scores, but also to discern which diseases are significant and which relationships are amplified by the presence of high stress.

Overall, this paper highlights how mixed-method approaches are well-suited for syndemic studies, as they capture local perceptions and experiences of life stress as well as syndemic interactions between stress and disease. The level of detail associated with qualitative data is a notable strength of mixed-method approaches. Anthropology and allied disciplines have long differentiated biomedical conceptualizations of disease from illness, which more broadly incorporates nonmedical causes and effects. Moreover, quantitative approaches to modelling disease outcomes are strengthened by qualitative methods that iterate which illnesses are most subjectively salient and how they are experienced in tandem with others. Although this may seem evident to social scientists or those who primarily use qualitative approaches, it is not evident across disciplines. These kinds of data are relevant for policy and practice.

Clinical approaches to comorbidities may miss concomitant psychoemotional and psychosocial stress and the understanding of the social nature of disease, not only in terms of causation but also of coping. Diseases and illnesses are enmeshed in social relations and have social meaning. Mendenhall et al.'s[3] paper responds to critiques of global health approaches that focus solely on individual disease: that is, that diseases are due only to individual behaviour, while neglecting social and structural determinants. 'Risk' is not a static state but, rather, is processual and relational. How people manage living with multiple diseases is contingent on a variety of nonmedical factors, including emotional, social and financial support. There are concrete implications for understanding the totality of well-being in terms of clinical outcomes. Less stress may lead to better disease outcomes and — as evidenced by Mendenhall et al.[3] — quality of life. Often, the literature discusses co-occurring diseases as syndemics without speaking to either the interaction between diseases and/or stressors[4] or to how syndemics are localized. Mendenhall et al.'s[3] paper addresses both of these concerns.

Similar to most research conducted since 2019, this study was affected by COVID-19. Specifically, the researchers were not able to conduct as many in-depth interviews as they originally intended. Additional qualitative research will prove critical for moving forward in understanding the lived experiences of multimorbidities in Soweto, and elsewhere. The analyses of Mendenhall et al.[3] are also probably affected by underreporting: for example, there were limitations associated with ongoing stigma, as participants opted out of HIV testing. Relatedly, individuals with a better quality of life at the time of the study would probably underreport the effects of multimorbidities, even if they had previously been affected. This latter limitation reflects the nature of cross-sectional designs more broadly. Important interrelationships between variables may be missed at the time of measurement.

Broadly speaking, Mendenhall et al.[3] foreground an important concept: pandemics, by definition, are global, but they are comprised of multiple, local epidemics or syndemics[5]. This understanding is particularly relevant as we all experience the ongoing pandemics of COVID-19, as well as of HIV/AIDS. While researchers are tasked with assessing the global scope of disease, they must recognize that risks and responses are varied and uneven. They must balance the understanding that syndemic permutations and disease interrelationships are locally specific with the need for population-level data[6]. Importantly, ongoing research should continue to investigate localization and use mixed-method and transdisciplinary approaches to explore the relationships between diseases. Multimorbidities are a suite of diseases, but each may have differential subjective weight and some diseases are harder to manage, are more stressful and may more substantially affect quality of life. Finally, future research should continue to examine the totality of human health, including related infectious, chronic and psychoemotional diseases and illnesses. ❐

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Competing interests

The author declares no competing interests.