Response to Invited Commentary

Dr. King Responds to “History of Place, Life Course, and Health Inequalities”

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I thank Dr. Pearce for his commentary (1) on our paper (2). Pearce points out the challenges posed by the use of cross-sectional data on the geography of health-related resources. An additional factor is the potential benefit of considering population heterogeneity. Our present theoretical paradigms tend to see neighborhood links as “one size fits all,” but it may be that environmental features differentially benefit or harm persons with differing physical capacities, household compositions, or time constraints. Understanding what features benefit whom under what circumstances could make it possible to incorporate residential choices into health advice for individuals. Places which foster physical activity and social connectedness, for instance, may not be the same for children and for older adults.

As households choose or are sorted into available housing units, they seek to maximize their well-being. Their decision criteria may include the potential for healthy living through access to resources and avoidance of environmental hazards. Thus, cross-sectional studies are deeply confounded by residential selection. Further research into how people take into account specific aspects of neighborhoods and housing units could contribute to our understanding of the roles of residential selection and causal effects in the associations of place with health.

Further, as Pearce points out (1), there is a need to concurrently consider change in residence across the human life course as well as the “life cycles” of neighborhoods. For example, picture a newly developed suburban housing complex occupied by upper-middle-class families with small children. The neighborhood, children, and adults age simultaneously. As the children leave home, the parents may wish to downsize. Whereas parents of small children prefer quiet, cohesion, and places to play, midlife adults may prefer smaller dwellings with easier access to commercial and medical destinations. This triggers turnover in the neighborhood, as new neighbors arrive. The in-migrants likely differ from the prior residents, since the position of the neighborhood in the local housing market will have changed as well. Both gentrification and neighborhood decline can pose substantial challenges to residents. The initial development itself may have drawn residents away from other neighborhoods, encouraging neighborhood decline there. Meanwhile, the out-migrants have left behind decades of social ties and place-specific knowledge. At present, researchers have begun to bemoan the negative consequences of residential succession, the ways in which neighborhood social composition changes over time. However, we have developed few recommendations on how to encourage prosperous dynamic stability for places or for individuals—the capacity to age within a community even as housing needs evolve. Certainly, longitudinal analysis of both places and people is crucial. Diversity appears to be key: Large-scale homogeneous developments may be less adaptable to changing circumstances.

One hopeful opportunity may lie in new data collection methods such as smartphone-based surveys, which can offer a dynamic picture of where respondents spend their time and experience key health events. In the long term, the lower cost potential and greater accessibility of these methods may allow for longer-term tracking of participants, who might be willing to enter real-time health and consumer behavior information. Smartphone applications for tracking physical activity and nutrition are a growing market, and it would be feasible to design apps in such a way that the research platform could also provide a benefit to the consumer. For instance, participants considering a move might answer questions about their housing search, so that changes in health behaviors before and after the move could be studied in relation to both the environmental change and the goals of and constraints faced by those seeking a new home. Of course, such studies might have their own selection problems.

The built environment literally forms the foundation of our cities, often locking cities into a spatial pattern which can influence urban social character, economic vitality, fiscal and environmental sustainability, and population health for decades or centuries. As global megacities arise, they often look to more established cities as models. Meanwhile, established
cities like Detroit, Michigan, face redevelopment challenges, with a substantial need for an evidence base. Research on how specific design-relevant features of the built environment may causally affect health is still nascent. Epidemiology has a lot to offer in terms of research methods and measures, respect for vulnerable populations, and ability to integrate a broad range of evidence and outcomes to inform policy.

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REFERENCES
