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<https://escholarship.org/uc/item/78j39503>

Journal

Journal of Aging and Health, 26(8)

ISSN

0898-2643

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Publication Date

2014-12-01

DOI

10.1177/0898264314562148

Peer reviewed



Published in final edited form as:

J Aging Health. 2014 December ; 26(8): 1251–1260. doi:10.1177/0898264314562148.

Aging and Place—Neighborhoods and Health in a World Growing Older

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Introduction

The global population is aging and an increasing proportion of older adults are living in urban areas (Hayurin, 2007; United Nations, 2002). In addition to overall growth in the population of older adults, in the United States the older population is increasingly non-White (Vincent & Velkoff, 2010). For example, the proportion of older Hispanics is projected to nearly triple between 2010 and 2050—from 7% to 20% of all older Americans (Papademetriou & Terrazas, 2009). These trends together with the concept that people want to age in place, that is, stay where they are most familiar for as long as possible, suggest an additional urgency for identifying place-based interventions to address racial/ethnic disparities in health, the disproportionately higher rates of morbidity and mortality for non-Whites.

A growing body of research investigates the effects of neighborhoods on the health of older people (Yen, Michael, & Perdue, 2009). The research includes few studies of racial/ethnic minorities, and studies generally rely on administrative data to describe aggregated elements of the neighborhood environment. To address these gaps, we organized a workshop “Aging and Place—Neighborhoods and Health in a World Growing Older” convened in San Diego in November 2012 with funding from the National Institute on Aging. The goals of the workshop were to bring together researchers and key stakeholders interested in neighborhood influences on health -in particular those who focus on racial/ethnic minority older adults, learn about current research, new methods, encourage research development in priority areas, and identify policy implications relevant to creating and maintaining age-friendly communities.

This special issue features research and policy relevant to these important demographic trends. The research studies are informed by decades of social science, gerontology, and public health research that has investigated how the environment affects aging. We provide some background on relevant theories and concepts to set the stage for the issue’s articles.

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Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Environment and Aging

Theories of environmental aging suggest that as people age and their individual competence declines, their residential neighborhood environment may become more relevant to their health and well-being (Lawton, 1998). M. Powell Lawton, one of the foundational thinkers in this field, emphasized the dynamic interplay between individuals and living environment, which he termed “competence-environmental press” (Lawton, 1981, 1983). Within this framework, the environment is both the context of behavior and an active agent in shaping behavior. Older adults with age-related loss of function are characterized as being particularly vulnerable to environmental press (Lawton, 1982). For example, research provides support for the hypothesis that physical function interacts with neighborhood built environment in relation to disability in instrumental activities of daily living, such that neighborhood amenity diversity protected against disability among older adults with lower-extremity mobility limitations but neighborhood was not associated with disability among those without mobility disability (Clarke & George, 2005). Neighborhood and place factors may be accentuated among older adults due to combinations of physical/mobility and mental decline associated with age, reduction in social networks and social support, and increased fragility (Johnson & Troll, 1994; Shaw, Krause, Liang, & Bennett, 2007). In the United States, close to 80% of people above age 65 own their homes (Lawler, 2001) and as people age, mobility (i.e., getting around) becomes an issue. Optimal mobility, a key component of healthy aging, has been defined as “being able to safely and reliably go where you want to go, when you want to go, and how you want to get there” (Satariano et al., 2012, p. 1508). Concurrent with loss of optimal mobility, the frequency of contact with social networks may decrease with age (Shaw et al., 2007; van Tilburg, 1998).

Models of Health Disparities and Inequities

A number of models incorporate place and/or emphasize place in creating health disparities. Currently, the most important include the socioeconomic model, the psychosocial stress model, and the structural-constructivist model.

The socioeconomic model posits that regardless of race/ethnicity, residents in low-income communities have access to fewer positive neighborhood resources and are exposed to greater hazards (Phelan, Link, & Tehranifar, 2010). Lower neighborhood socioeconomic status (SES) was associated with significantly greater biological “wear and tear” in a nationally representative sample of adults (Bird et al., 2010). However, there may be a differential impact of neighborhood SES on health by race/ethnicity. For example, a recent study reported that neighborhood stressors contributed to racial/ethnic disparities in levels of hypertension in a large population of White, Black, and Hispanic middle-aged and older adults (Mujahid, Diez Roux, Cooper, Shea, & Williams, 2011).

The psychosocial stress model emphasizes stress associated with institutional and interpersonal racism as a cause of racial/ethnic disparities (Clark, Anderson, Clark, & Williams, 1999). In this model, institutional racism directly influences residential location, which indirectly influences health through neighborhood resources as well as stressful experiences related to interpersonal racism and crime. Black women living in the most

disadvantaged neighborhoods were less likely to report racial discrimination compared with Black women living in more advantaged neighborhoods, whereas neighborhood socioeconomic position was unrelated to reports of racial discrimination among Whites (Dailey, Kasl, Holford, Lewis, & Jones, 2010).

The structural-constructivist model argues that race/ethnicity is primarily a social construction and the influence on health is primarily mediated by the cultural construction of life goals that are limited by racial geographic stratification (Osypuk & Acevedo-Garcia, 2010). While these three models of health disparities are not specific to aging, a life-course perspective suggests that the effect of healthy or unhealthy environments may accumulate over a lifetime of exposure to these environments (Glymour, Ertel, & Berkman, 2009).

Racial and Ethnic Health Disparities in Older Adults

Disparities vary by health outcome and race/ethnic group. We focus on a few health outcomes identified as key elements of effective aging: disability, social connectedness, and health behaviors, including physical activity and diet (Curb et al., 1990).

In terms of disability, studies comparing elderly non-Hispanic White and Black populations found that Blacks experienced the onset of disability earlier than Whites and at a higher overall rate (Mendes de Leon, Barnes, Bienias, Skarupski, & Evans, 2005; Moody-Ayers, Mehta, Lindquist, Sands, & Covinsky, 2005). Similarly, among older American Indian/Alaskan Native adults, the unadjusted prevalence of disability was higher than among Whites (Okoro et al., 2007). In contrast, compared with White non-Hispanic adults 55 years of age and older, Asian American/Pacific Islanders in the same age group had lower disability prevalence (Fuller-Thomson, Brennenstuhl, & Hurd, 2011). Finally, in a nationally representative sample of adults aged 55 and above, SES-adjusted disability was comparable between Mexican, Cuban, and non-Hispanic Whites born in the United States, and all immigrants had lower prevalence of functional limitations than U.S.-born non-Hispanic Whites (Fuller-Thomson, Nuru-Jeter, Richardson, Raza, & Minkler, 2013).

In terms of disparities in social connectedness, a review of literature evaluating differences by race or ethnicity in social resources reported that there is little evidence from existing studies for substantial differences, although research in this area is sparse (Mendes de Leon & Glass, 2004). The review concluded that minority older adults may have somewhat closer knit family networks compared with non-Hispanic Whites but an overall smaller network, especially with regard to friendship ties. Similarly for social engagement, older Whites were somewhat more socially active in terms of volunteer activities and membership in formal or informal social organizations, while minority older adults may be more involved in church-based organizations and activities (Mendes de Leon & Glass, 2004).

A recent study evaluated racial/ethnic differences in physical activity and dietary behaviors in middle-age (45-64 years of age) and older adults (65+ years) using data from the California Health Interview Survey. In terms of physical activity, Blacks, Asian/Pacific Islanders, and Hispanics were less physically active compared with non-Hispanic Whites in middle age but not in older age. In terms of diet, Black older adults had limited

English-proficient Latinos were less likely to eat the recommended amount of fruits and vegetables compared with Whites (August & Sorkin, 2011). Another study with a nationally representative sample that focused on a broad set of dietary outcomes reported that older Hispanics had better dietary patterns than older Whites, but found no other racial/ethnic differences in diet among older adults (Hiza, Casavale, Guenther, & Davis, 2013).

In summary, consistent health disparities were reported for disability by race/ethnicity among older adults. While patterns of social connectedness may differ by race/ethnicity, there does not appear to be a clear disparity. Evidence of disparities in terms of physical activity and diet is equivocal but minority older adults may be at greater risk than non-minority age group counterparts. Few studies have considered interactions between neighborhood characteristics and individual-level race/ethnicity and age (Yen et al., 2009). From existing neighborhood and health research, we know that the racial/ethnic composition of one's neighborhood is associated with health in different ways depending on the race/ethnicity of the study subject (Acevedo-Garcia, 2001; Eschbach, Ostir, Patel, Markides, & Goodwin, 2004; Ostir, Eschbach, Markides, & Goodwin, 2003; Osypuk & Acevedo-Garcia, 2008). More research on how neighborhood effects vary across the individual level [missing word?] could yield new insights into the connection between neighborhood environments and racial/ethnic disparities in health and aging.

Research in This Special Issue and Gaps

The articles included in this special issue address a number of issues related to aging and place in diverse communities, including policies and strategies to aid aging in place, elements of the social environment such as racial segregation, social support and connectedness, and social capital, as well as factors in the built environment that influence mobility. Despite the wide range of scholarship represented in this special issue, additional opportunities for future research can be identified. Specifically, we note the importance of research to assess neighborhood mechanisms for health, measure relevant environments other than the residential environment, and assess the impact of policies and practices relevant to aging and place.

Collecting Data on Neighborhood Mechanisms for Health

One of the top priorities is to better understand the specific place-based exposures relevant to older adults and how they may be related to health. Socioeconomic disadvantage is an important element of neighborhood context, but researchers need to better understand characteristics of neighborhood social connections, sources of stress, and physical environment that may be more directly relevant to health. To address shortcomings in census and administrative data, researchers are directly measuring potential mechanisms through systematic social observation of the physical and social features of neighborhood environments (Schaefer-McDaniel, Caughy, O'Campo, & Gearey, 2010). This strategy is important for health research because it more directly captures detailed and varied data on neighborhood environments that may be important for some health outcomes, particularly among older adults, whose routine activity patterns may depend heavily on the micro-level conditions of the blocks in and around where they live (G. O. Cunningham &

Michael, 2004; G. Cunningham, Michael, Farquhar, & Lapidus, 2005). While neighborhood observation has been increasingly incorporated into research, the existing methods are limited by the absence of specific theories linking neighborhood influences to health, failure to conduct formative research in the development of tools, inconsistent processes for data collection, and lack of psychometric testing (Schaefer-McDaniel, Dunn, Minian, & Katz, 2010).

Spatial Perspectives on Health

To gain a fuller appreciation of contextual effects on health, we must consider places beyond the boundaries of administratively defined neighborhoods. The idea that people engage in a variety of activities in multiple locations, often at some distance from their immediate neighborhoods, is not new to sociologists or geographers (Matthews, 2008; Matthews, Detwiler, & Burton, 2005). For frail older adults or older adults who have compromised mobility and minimal social ties to other people who can provide transportation support, the proximal environment could be more relevant. Older adults, however, are a highly heterogeneous group; many are very active and comfortably drive cars to varied destinations (Fain, 2003; Lyman, Ferguson, Braver, & Williams, 2002). Gerontologists have begun to appreciate the value of evaluating “life space” or the spatial area traveled by an individual as part of his or her daily routine over a specified period of time (Baker, Bodner, & Allman, 2003). The life space model recognizes that there are multiple determinants of life space beyond physical impairments—including environmental influences—and that these determinants interact with and influence one another (Rosso, Grubestic, Auchincloss, Tabb, & Michael, 2013; Webber, Porter, & Menec, 2010). Incorporating these concepts into future research would permit researchers to delve deeper into the linkages between place and health for older adults.

Policy and Practice

In 2007, the World Health Organization (WHO) introduced the Age-Friendly Cities and Communities program to foster learning across cities to create environments to support aging. The program organized focus groups of older adults, caregivers, and service providers in 33 cities to learn about the circumstances of older people and generate recommendations for policy and practice. The guide that emerged highlighted housing, transportation, civic engagement and social participation, and outdoor spaces (e.g., safe, clean, and green). In 2010, WHO initiated the Global Network of Age-Friendly Cities to formalize a structure of information exchange among cities and to promote awareness of providing infrastructure for older adults. Canada, France, Portugal, Spain, Brazil, South Africa, and Australia are active in the network (Plouffe & Kalache, 2010).

Not covered in this special issue, but a key point that for policy consideration is the growing and substantial market power of older adults in the United States and internationally. In 2009, in the United States, consumers aged 50 and older spent US\$2.9 trillion, a 45% increase over the prior 10 years (Horovitz, 2012). In addition, more and more households are one-person households. Housing options for both aging and resourced or aging and not resourced singles need to be a part of city and government planning.

Summary

The articles in this special issue make it clear that there are interesting and policy-relevant research to identify place-based strategies to improve health and reduce health disparities among older adults. The articles also reveal important areas of future research and policy innovation that are needed related to place and aging.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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