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The double disparity facing rural local health departments: A short report

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The double disparity facing rural local health departments: A short report

Abstract

Rural residents in the U.S. face significant health challenges, including higher rates of risky health behaviors and worse health outcomes than many other groups. Rural communities are also typically served by local health departments (LHDs) that have fewer human and financial resources than their suburban and urban peers. As a result of history and need, rural LHDs are more likely than urban LHDs to provide direct health services, which may result in limited resources for population-based activities. This review examines the double disparity facing rural LHDs and their constituents: pervasively poorer health behaviors and outcomes and a historical lack of investment by local, state, and federal public health entities.

Keywords

health disparity, health departments, rural health

Cover Page Footnote

This Frontiers article is a shorter version of the following article: The Double Disparity Facing Rural Local Health Departments by Jenine K. Harris, Kate Beatty, J.P. Leider, Alana Knudson, Britta L. Anderson, and Michael Meit. Click here to access the full article in the Annual Review of Public Health: http://arevie.ws/2d5Ccly. No competing financial or editorial interests were reported by the authors of this paper.

INTRODUCTION

Residents living in rural areas in the U.S. face many social and health-related disparities compared to people living in urban and suburban areas. They are generally older, poorer, and have riskier health behaviors leading to worse health status and health outcomes.[1] Local health departments (LHDs) serving rural communities typically have fewer resources and provide fewer services which impacts their ability to meet the public health needs of their residents.[2–5] Moreover, these services are more likely to be focused on direct clinical care, rather than population-based services. The review entitled "The Double Disparity Facing Rural Local Health Departments"[6] characterized the challenges facing rural communities: inadequate capacity in LHDs and poor health status indicators among residents. This review was based on the conceptual framework for understanding health inequality by the World Health Organization (Figure 1; see Additional File). The review focuses especially on the portions of the framework relating to disparities, social determinants, and health services provision. This paper highlights the major findings of the review and policy implications.

RURAL HEALTH DISPARITIES

Rural residents have higher rates of many risky health behaviors that are associated with a higher burden of disease and premature mortality. Specifically, they have higher rates of tobacco use, obesity, physical inactivity, and lower rates of fruit and vegetable intake compared with residents of nonrural areas. Rural areas have higher incidence of cancer and higher rates of poor cancer outcomes, including increased mortality. Similarly, diabetes rates, end-stage renal disease, and injury mortality rates are higher in rural than in urban areas. Rural populations experience higher rates of multiple chronic conditions than do suburban populations. Mortality rates among all age groups are higher among rural populations compared with suburban and urban populations. The life expectancy rates for Americans living in rural areas were up to 9.1 years lower than the U.S. average, with some variation by race and geography.[6]

SOCIAL DETERMINANTS OF RURAL HEALTH

Rural residents are also disproportionately affected by the social determinants of health. Lower socioeconomic status (SES) has been independently associated with poor health and early mortality after controlling for risky health behaviors and uninsured status, and rural residence exacerbates this relationship. Almost two thirds of rural communities experience persistent poverty compared to 14% of metropolitan counties. The lack of financial resources impacts access to health insurance for rural populations with 23% of the non-elderly population lacking health insurance in rural communities compared to 19% in suburban counties. In addition, low-income rural residents are more likely to reside in a state that has not expanded Medicaid as part of the Affordable Care Act (ACA).[6]

Sociocultural context also influences rural health. Rural cultures tend to value self-reliance, independence, religiosity, and social conformity in communities that are often isolated, segregated, and allow little anonymity. However, rural communities are also characterized by high social integration.[1,6]

RURAL HEALTH DEPARTMENT CHARACTERISTICS AND PERFORMANCE

While governmental public health has its roots in urban health, rural public health steadily grew through the early 1900s until the Hill-Burton Act of 1945, which shifted efforts toward safety net services in rural areas.[6] Despite recommendations to divest from direct service provision in the 1970s and in the 1988 Institute of Medicine 'Future of Public Health' report,[7] many rural jurisdictions continued to provide direct services due to community demand.[6]

Local health departments serving smaller/rural populations tend not to perform as well as their larger or urban counterparts on some or all of the three core functions of public health and the Ten Essential Public Health Services (EPHS; Table 1[2–5]). In addition to performance on the core functions and EPHS, compared with their larger/urban counterparts, LHDs in smaller/rural jurisdictions have lower compliance rates, are significantly less likely to report using evidence-based decision making or administrative evidence-based practices, report using fewer strategies to combat health disparities, and report providing fewer types of services.[6]

Table 1. Studies comparing small/rural and large/urban health department performance*

Core Function	Essential Service	Small/rural performs better	No large/ significant difference	Large/urban performs better
Assessment	1. Monitor health status to identify and solve community health problems		(1,2)	(3–11)
	2. Diagnose and investigate health problems and health hazards in the community		(1,2,12)	(3–11)
Policy Development	3. Inform, educate, and empower people about health issues		(1,2,4,5)	(3,6–11)
	4. Mobilize community partnerships and action to identify and solve health problems		(1,2,4,5,12)	(3,6–11,13–16)
	5. Develop policies and plans that support individual and community health efforts		(1,2,4,5,17)	(3,5–11,18)
Assurance	6. Enforce laws and regulations that protect health and ensure safety		(2,4)	(1,3,5–11)
	7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable	(19)	(1–5)	(6–11,15)
	8. Assure competent public and personal health care workforce	(20)	(1–5,21–23)	(6–11,24–26)
	9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services		(1–5)	(6,7,9–11)
	10. Research for new insights and innovative solutions to health problems		(1,2,4)	(3,5–12)

* References for the table are found at the end of the paper.

Essential Public Health Services performance may be influenced by the smaller budgets and fewer FTEs compared to large/urban departments. Rural LHDs often have limited access to technology, limiting access to information available electronically, including the latest public health evidence, training opportunities, and quality improvement materials. Small/rural health departments are also less likely to adopt and use new media, such as Facebook and Twitter. In addition to internal resources, rural LHDs rely on partnerships to provide services but are limited in the number and types of local organizations available to partner and may partner with the same local organizations for multiple purposes.[6]

POLICY IMPLICATIONS AND FUTURE DIRECTIONS

Due to the limited capacities, health departments in rural communities are less equipped to address the poor health outcomes of their communities (Figure 1). Recommendations for addressing the capacity issues of rural LHDs have included cultivation of additional partnerships and consolidation of adjacent jurisdictions.[8–10] Other recommendations include developing more partnerships, including formal and informal cross-jurisdictional sharing; increasing involvement in other sectors; and partnering with neighbor agencies.[9,11]

In addition to consolidation and partnerships, the Institute of Medicine suggests prioritizing a "minimum package of public health services" focused largely on population-level activities and paralleling the minimum health care services prescribed in the ACA. The Public Health Leadership Forum translated the minimum package into the Foundational Public Health Services (FPHS) model.[12]

Finally, building an evidence base to aid in explaining and improving health in rural jurisdictions is seriously challenged by the lack of a consistent definition of rurality, the lack of consistent units of measure that can be harmonized (e.g., county to jurisdiction), and sampling frames in rural areas that do not typically allow for data use or sharing.[6]

Improving population health in rural areas will require a substantial effort from policymakers and public health and healthcare researchers and practitioners to address health behaviors and risk factors, poverty, and the healthcare and public health environments. First steps toward this goal may include building and disseminating an evidence base of best practices for rural LHDs based on successful and geographically and demographically diverse rural health departments, increasing population-level public health activities (e.g., policy activity) in rural areas, and working toward better data quality on health behaviors, outcomes, and service provision in rural areas.

SUMMARY BOX

What is already known about this topic? Individual and environmental characteristics affect health outcomes for rural residents. These characteristics include higher rates of risky health behaviors, limited financial resources, limited access to healthcare and poor healthcare quality, and a weak public health policy environment.

What is added by this report? Health outcomes for rural residents are also influenced by LHDs that lack the capacity for high performance of the 10 EPHS. Many rural LHDs have fewer staff and lack specialty staff compared with urban LHDs, with the exception of nursing staff (e.g., few rural LHDs have epidemiologists) and rely on partnerships to provide services but are limited in the number and types of local organizations available to partner. Suggestions for addressing the capacity issues of rural LHDs have included cultivation of additional partnerships and consolidation of adjacent jurisdictions.

What are the implications for public health practice, policy, and research? Research on rural jurisdictions is seriously challenged by a lack of consistent definition of rurality, a lack of consistent units of measure that can be harmonized (e.g., county to jurisdiction), and sampling frames in rural areas that do not allow for data use or sharing. Collaboration among funders, researchers, and practitioners is needed to address this critical gap.

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