Editorial

RURAL HEALTHCARE ACCESS: ISSUES FOR CONSIDERATION IN RURAL HEALTH RESEARCH

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Important differences in health outcomes across populations and geographical regions may reflect differences in access to healthcare services. Many studies have shown the effect of low access on health outcomes. Studies that look at access and disparate health outcomes are important in understanding and changing how and where healthcare services are located.

Physicians in the United States most often practice in urban communities rather than rural communities. In 1997, only one out of ten physicians provided healthcare services in rural areas. This statistic means that only eleven percent of this nation's physicians provide healthcare to 20% of its population (USDA, 2002). Rural areas also have lower proportions of all healthcare professionals (Ricketts, 1999). Rural health services often experience diseconomies of scale in that their long run average cost increases as output increases (Folland et al. 2001). Providing care becomes too expensive; the providers lose money, and close or merge with other services thereby decreasing access. Rural populations then experience an increase in distance and travel time to access necessary healthcare services.

Central to the study of rural health is how "rural" is defined. Merriam-Webster (2004) defines rural theoretically as "open land" or "relating to the country, country people or life, or agriculture". But there are many operational definitions of rural. The U.S. Department of Agriculture Economic Research Service (ERS) created the rural-urban continuum codes (RUCCs) as a measure of rurality of U.S. counties (USDA, 2002). This common designation of rurality is based on the Office of Management and Budget (OMB) classification by a simple metropolitan (metro) versus non-metropolitan (non-metro) dichotomy. Based on the central place theory, this method of classification takes into consideration adjacency factors as an indicator of urban influence and economic dependence. The code further distinguishes metro and non-metro counties by the degree of urbanization and adjacency to metro areas. Codes 1 through 3 distinguish levels of metro counties by degrees of rurality and metro proximity. RUCCs provide a means for the study of the location, distribution and accessibility of healthcare facilities for rural populations.

Rural populations differ in many ways from their urban counterparts. Many features of the rural environment create barriers to healthcare access. It is important for rural health research to include these differences. Dunkin (2000) provides a framework for the development of health interventions for rural people. This model takes into account the financial, sociocultural (or personal), and structural factors that are a part of the complex web of causation in rural health. These factors affect health-seeking behaviors, health service utilization, and ultimately health outcomes in rural areas.

Sociocultural factors include cultural and spiritual beliefs, language, education, selfreliance, and concern about confidentiality. Financial factors include a lack of health insurance, adequate health insurance, or income or financial resources to personally pay for needed health services. Structural factors are those factors that have to do with physical accessibility to healthcare resources. They include availability of primary care providers, medical specialist, or other healthcare professionals, and health care facilities. Structural factors are measured in terms of availability and configuration of healthcare services, transportation to them, and distance and travel time to them. Over the past fifty years sociocultural and financial factors that influence healthcare services have received extensive attention (Bushy, 2000; Eberhardt, et al., 2001; Folland, Goodman, & Stano, 2001; USDHHS, 2000), while the geographical factors of healthcare access have received minimal consideration.

Healthcare policy changes over the past decade have drastically decreased access to healthcare services. The rural health environment has felt the impact of these changes in many ways (Bushy, 2000; Folland, et al., 2001). Significant decreases in healthcare services to the already vulnerable, at-risk rural populations have compounded the existing problem of resource disparities. Of noted importance are the drastic cuts in health services created by the Balanced Budget Act (BBA) of 1997 and the Medicare Prospective Payment System (PPS). Loss of community health services, healthcare professional shortages, rapidly rising cost, hospital closures, homecare cut backs, and tighter government payment schedules are just a few of the changes that have led to greater resource disparities for rural populations (USDHHS, 2000; Eberhardt, et al., 2001). Healthcare resources and healthcare use vary considerably by level of urbanization (Eberhardt et al, 2001). Because of structural, financial and sociocultural barriers in rural populations, they have fewer healthcare resources than urban populations. Rural resource disparities often lead to adverse health outcomes and rural health status disparities (Fryer, Drisco, et al., 1999; Lovett, Haynes, Sunnenberg, & Gale, 2002; Lin, Allen, & Penning, 2002).

In recent years changes in the kinds of health problems in rural populations have been noted. Vulnerable populations (persons with HIV-AIDS, the aging, those with chronic illness, those mentally ill, and/or abused persons) living within rural areas have compounded issues and added challenges associated with resource disparities and access to care (Bushy, 2000; Ricketts, 1999; Eberhardt, et al., 2001; Aday, 2001).

Many issues of supply-and-demand are evident in rural populations. Because healthcare is a highly competitive industry in the U.S., supply-and-demand analysis can provide valuable insight into the relevance of rural health issues. Variables that affect the demand for health care are income, insurance, and taste (or preferences) (Folland, et al., 2001). Because rural areas have a lower population density and rural residents generally have lower levels of income, a lack of health insurance, and prefer informal care to formal care, the demand for health care is often lower (Bushy, 2000). At the same time an increase in demand caused by a "sicker" population due to greater health status disparities could increase the demand for healthcare services.

The supply of healthcare is affected by variables such as technological change, the size of the healthcare industry, and most importantly by demand (Folland, et al., 2001). Healthcare is a very large industry driven in part by economic incentives and technological change. Progressive industry would not seek to supply services in an area resistive to change and utilization of services and without the means to pay for services. As rural residents consume fewer healthcare services, less is supplied. These changes in supply and demand in healthcare perpetuate problems with access to care in rural areas.

The effect of supply and demand is easily seen in the fact that rural people have a lower level of access to both primary care providers and specialized services. Over the past decade a decline in community hospital occupancy has led to the closure of many rural hospitals (Eberhardt et al. 2001). Between 1980 and 1998 approximately 1,072 hospital closures, mergers,

or conversions led to an 11.8% decline in the total number of community, general hospitals (from 5,842 to 5,153) (Ricketts, 1999, p. 104). Furthermore, Ricketts notes that community hospital closures have had a profound effect on local communities in terms of changes in utilization of health services and health status.

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