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A PORTRAIT OF RURAL HEALTH IN AMERICA

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Rural America is home to more than 59 million people (USBC 2012). Health and health care issues affect the lives of these many millions of people. While rural residents confront many of the same health issues and health care challenges that their urban counterparts experience, they are often considered a more vulnerable population due to their economic disadvantages, poorer health, and limited health care access. Congress in the Healthcare Research and Quality Act of 1999 (Public Law 106-129) specified rural residents as one of the Agency for Healthcare Research and Quality's (AHRQ) priority populations (U.S. Department of Health and Human Services 2012). To promote the health of rural residents and communities, the top ten rural-specific health priorities were identified in Rural Healthy People 2020 (Bolin and Bellamy 2012): access to quality health services; diabetes; mental health and mental disorders; nutrition and weight status; heart disease and stroke; substance abuse; physical activity and health; older adults; cancer; and maternal, infant, and child health.

Rural America has experienced notable minority population growth that has important health policy implications (Johnson 2012). Coupled with the persistent economic disadvantages and structural barriers in the health care system, the recent economic recession places more challenges on rural residents to obtain needed health care. Moreover, the recent health care reform that enacted health coverage expansions is likely to have substantial impacts on residents, health care providers, and health care systems in rural communities.

This special issue of the *Journal of Rural Social Sciences* presents studies focusing on the current rural health and health care issues that reflect the impacts of demographic changes and some of the top public health priorities for Rural Healthy People 2020. These studies employ varied theoretical and methodological approaches to examine rural health issues at various levels (e.g., individual, neighborhood, and community). Before introducing each paper in this special issue, I provide some brief descriptions regarding American rural health focusing on the following five aspects: population characteristics, the current health issue, health insurance, health care access and services, and the potential changes in health care that may take place with the enacted coverage expansions under the Patient

Protection and Affordable Care Act (ACA). The relevant statistics and information are drawn from various studies and recent reports on rural communities and rural health issues.

POPULATION CHARACTERISTICS

Health and health care issues in rural areas are closely related to the population characteristics. Overall rural residents are often older and poorer than urban residents. More than 17 percent of rural residents are aged 65 or older, compared with 13 percent of the total U.S. population (U.S. Census Bureau 2011). Per capita income is much lower in rural than urban areas ($28,781 versus $40,570 annually), and the income disparity is even greater for rural minorities (United States Department of Agriculture 2007). Poverty rates, particularly the child poverty rate, have been disproportionately high in rural areas. According to Mattingly, Johnson, and Schaefer (2011), 81 percent of counties with persistent child poverty are designated as rural areas. This persistent child poverty is not limited to areas with a high proportion of minorities, but is also widespread in white-dominant areas such as Appalachia and the Ozarks. The rural economic disadvantages could be even worse due to the recent economic recession.

Rural America has experienced notable demographic changes. According to Johnson (2012), rural areas have become more racially and ethnically diversified, while non-Hispanic whites are still a dominant group (about 79 percent) in those areas. Between 2000 and 2010, minorities contributed roughly 83 percent of rural population growth. Hispanics, in particular, have had considerable impacts on recent rural demographic changes. Moreover, a substantial and rapid increase in minority children has been witnessed, contrasting with the notable decrease of non-Hispanic white children. With this demographic change, there is a growing impact of the minority population on rural communities in various respects (e.g., health care, education, and economy). Local health care systems especially are required to address and accommodate the health care needs of this diverse population.

HEALTH ISSUES

Overall rural residents often have poorer health than urban residents. A higher rate of rural residents report that their overall health is fair or poor compared with urban residents (19.5 versus 15.6 percent) (Bennett, Olatosi, and Probst 2008). Chronic health conditions such as diabetes, cardiovascular and cerebrovascular disease, and hypertension are more common in rural areas, particularly among rural minorities and those in the South (Bennett et al. 2008; Gamm et al. 2003). The rural

South is often called the "stroke belt" and the "heart failure belt" because of the high rates of age-adjusted hypertension and stroke and heart failure mortalities (Mujib et al. 2011). The rural and urban gap in cancer death rates has also widened (Agency for Healthcare Research and Quality 2012).

Obesity, a cause of many negative chronic health conditions, is a serious health issue for rural adults and children alike, particularly among racial minorities (Bennett et al. 2008; Liu et al. 2008). Obesity is closely related to physical inactivity and unhealthy diet. Rural residents, particularly racial minorities and economically disadvantaged populations, are less likely to meet the recommendations for moderate or vigorous physical activity (Bennett et al. 2008) and fruit and vegetable intake (McClelland et al. 1998). Coupled with the socioeconomic characteristics of rural residents, the environmental features of rural areas influence the patterns of dietary behavior, physical activity, and weight status. Despite the merits of a natural environment in rural communities, the rural built environment (e.g., few or no sidewalks and bike lanes, limited outdoor and indoor physical activity amenities, few healthy food outlets) and land use policies are challenges for healthy lifestyles (Adachi-Mejia et al. 2010; Hennessy et al. 2010; Liese et al. 2007; Yousefian et al. 2010). Rural residents are more likely to experience a lack of available recreation/fitness facilities, access to affordable healthy foods, public transportation, and independent access to a vehicle (Bustillos et al. 2009; Liese et al. 2007; Morton et al. 2005; Sharkey 2009).

Mental health issues are another great health concern for rural residents. Rural adults are more likely to report their mental health status as fair or poor compared with urban counterparts (Ziller, Anderson, and Coburn 2010). A greater proportion of rural children have mental health problems and a behavioral difficulty (Lenardson et al. 2010). Despite their higher mental health care needs, many rural residents forego treatment or receive services from nonspecialists (e.g., primary care physicians). This pattern is associated with the limited availability of mental health services and a lack of sufficient insurance coverage for mental health in rural areas (Gale and Lambert 2006; Ziller et al. 2010). Rural minorities may experience even more challenges to receiving mental health services due to the lack of culturally- and linguistically-competent mental health services. A significantly higher suicide rate is also found in rural areas, particularly among men; and the suicide rate of rural women is rapidly increasing (Gamm et al. 2003). High suicide rates among rural residents have been related to their higher prevalences of depression and alcohol and substance abuse (Moscicki 2001). Alcohol and substance abuse is a serious health risk for suicide, as well as for chronic health conditions and deaths

from motor vehicle accidents and other injuries (Ringold 2006). Although rural residents have a lower drinking rate than urban residents, they are often more involved in alcohol abuse and excessive drinking (Borders and Booth 2007a, 2007b; Substance Abuse and Mental Health Services Administration 2011). This issue is particularly problematic for rural youth. For example, binge drinking is more common for rural youth aged 12 to 17 (Substance Abuse and Mental Health Services Administration 2011). Rural residents also have a higher rate of cigarette smoking, and cigarette smoking among rural youth (12^{th} graders) is more than twice that of their urban counterparts (Gamm et al. 2003; Substance Abuse and Mental Health Services Administration 2011). Regarding illicit drugs, rural residents are less likely than urban residents to use, but use did increase from 5.6 percent to 7.3 percent from 2008 to 2009 (Substance Abuse and Mental Health Services Administration 2010).

HEATLH INSURANCE

Although health insurance does not fully guarantee optimal health outcomes, a lack of health coverage is associated with poorer health outcomes, delayed care, and negative experiences with the health care system (Institute of Medicine 2009). Considering their demographic, economic, and health characteristics that lead to a greater need for health care, health insurance is particularly important for rural residents. According to Bennett et al. (2008), rural residents are more likely to be uninsured than urban residents (17.8 versus 15.3 percent). Hispanics are the least-insured ethnic group among rural residents. The uninsured rate of those who live in small, remote rural counties is 56.1 percent. In terms of dental coverage, 73 percent of rural residents do not have insurance (Ettinger et al. 2004).

There are unique characteristics in health coverage of rural residents. First, rural residents have a higher dependency on public programs including Medicare, Medicaid, and the Children's Health Insurance Program (CHIP), which makes rural residents to be more susceptible to changes in coverage levels in public programs (National Rural Health Association 2004). Second, rural residents have relatively low private, employer-sponsored health care coverage and prescription drug coverage, due in part to their employment characteristics such as being part-time, seasonally, or self-employed (Lenardson et al. 2009; Ziller, Coburn, and Yousefian 2006). For example, The Access Project (2007a) reported that 36 percent of insured farm and ranch operators listed individual purchase as a source of health insurance, compared with the national average of 8 percent. Third, a significant and growing problem in rural areas is being underinsured or inadequate health coverage. Ziller

and colleagues (2006) found that 10 to 12 percent of rural residents were underinsured, compared with 6 percent of urban residents. Underinsurance might be related to the higher prevalence of individual (purchased) policies of health insurance, which often provide less comprehensive coverage accompanied by higher deductibles and co-pays than group policies (Ziller and Coburn 2009). Thus, many rural residents spend more on health care out of pocket and a higher proportion of their income for health insurance coverage (National Rural Health Association 2004; Ziller et al. 2006). The Access Project (2007a, 2007b) reported that about one third of family farmers and ranchers who participated in that survey rely on individual policies, and about one-fifth of insured farmers have medical debt. These features of the health insurance coverage can put rural residents at a disadvantage in obtaining needed health care, by influencing their access to adequate health care services and quality care. Coupled with high poverty rates, employment characteristics, and health insurance characteristics, the recent economic recession could lead rural residents to face more challenges in accessing health service for needed care by causing them to lose health coverage and by increasing health care costs in rural areas.

RURAL HEALTH CARE ACCESS AND HEALTH SERVICES

Access to quality health services is ranked as the top priority in the Rural Healthy People 2020 (Bolin and Bellamy 2012). Despite their greater need for health care access, rural residents have more limited access to health care services. Rural residents are more prone to delayed care due to cost and underuse of preventive health services, compared with urban residents (Bennett et al. 2008). With respect to quality care, a recent national survey of patients and primary physicians showed that both rural patients and primary care doctors often rate the quality of care lower than their urban counterparts (UnitedHealth Center for Health Reform & Modernization 2011).

A great challenge in health care access and quality care among rural residents stems from the rural health care system. Rural areas have suffered from severe shortages of health workforces. It is even worse for remote, small rural areas (Bennett et al. 2008). As of March 9, 2013, the number of rural primary medical health professional shortage areas (HPSAs) was 3,728, representing 63 percent of the primary care HPSAs and more than 33 million people (Office of Shortage Designation 2013). Rural areas have one-half of the specialists that urban areas have (Fordyce et al. 2007). Belsky et al. (2009) reported that 95 percent of counties without a surgeon are nonmetropolitan/rural areas. In terms of mental health care

providers, 60 percent of rural residents live in mental health professional shortage areas (Gale and Lambert 2006). Such shortages of mental health professionals place a great burden on primary care physicians because 65 percent of rural residents receive mental health services from their primary care physicians (Gale and Lambert 2006). The shortages of the health workforce in rural areas may become even worse because of a higher percent of near-retirement doctors and continued challenges for recruitment and retention (Burrows, Suh, and Hamann 2012; Doescher, Fordyce, and Skillman 2009; Mitchell et al. 2009). In addition, the limited supply of dentists, pharmacists, and emergency medical services (EMS) personnel are great concerns for access to quality care in rural areas (Burrows et al. 2012; Office of Shortage Designation 2013).

The rural health delivery system is based on various health care facilities that offer a wide range of health care services to a dispersed population. Rural health clinics and community health centers, including federally-qualified health centers, play important roles in providing primary health care services to rural residents, particularly in remote rural areas. Rural hospitals provide a wide range of health services including primary, acute, chronic, and long-term care to rural residents (American Hospital Association 2011). These rural hospitals are often smaller and nonprofit or government facilities; many rural health care facilities depend heavily on public programs such as Medicare and Medicaid (American Hospital Association 2011). Because a significant proportion of their revenue is derived from reimbursement from public programs, reimbursement rates for services are closely related to their financial ability to continue the services. Despite federal support, rural health care facilities and providers have lower reimbursement rates than urban ones (American Hospital Association 2011; National Rural Health Association 2008). Low reimbursement for services is a critical challenge for rural hospitals to provide quality services, coupled with other challenges such as difficulties in recruitment and retention of skilled health care providers and financial stress generated by smaller size, provision of a broad range of basic services to fewer patients, and low and declining occupancy (American Hospital Association 2011).

Besides the shortage of health care providers and limited health care services, rural residents face more barriers to obtaining health care, such as limited transportation and greater travel distance. For example, 13 percent of rural patients travel more than 30 minutes to visit their usual health care provider, compared with 10 percent of urban patients (Ziller and Lenardson 2009). Rural residents often have longer travel distances for specialty care or surgical procedures: the average

distance to the referred specialty care is about 60 miles (UnitedHealth Center for Health Reform & Modernization 2011).

POTENTIAL EFFECTS OF HEALTH CARE REFORM

The Patient Protection and Affordable Care Act (ACA), a U.S. federal statute aimed at decreasing the number of uninsured Americans as well as health care costs, was signed into law by President Barack Obama on March 23, 2010. As coverage expansions under the ACA take shape, rural communities need to prepare for potential changes to existing health care systems. Under the law, a significant number of the uninsured population will enter the health care system. By 2019, 32 million people are estimated to be newly insured because of coverage expansions of the ACA (Congressional Budget Office 2012). An additional 8.1 million rural residents are projected to be insured through Medicaid or state health exchanges when the ACA becomes effective (UnitedHealth Center for Health Reform & Modernization 2011). Even considering other sources of care, the net rural coverage expansion could be 5.4 million. That is an increase of 16.1 percent in the insured rural population, and the impact on remote rural areas might be even greater.

The increase of the insured population will influence current health care systems in rural areas (American Hospital Association 2011). It may aggravate existing pressure on the already overextended rural health care workforce to meet the increased health care needs, particularly in health professional shortage areas. The law includes several provisions to alleviate the rural health professional shortages such as funding for community centers, workforce planning, and higher education institutions for new primary care residents, physician assistants, and advanced registered nurse practitioners (Miller 2011). However, such provisions to increase availability of those providers may not be enough to meet the greater health care needs. The newly-covered Medicaid patients may have even more difficulties in finding health care services and local referrals, considering the primary care physicians' substantial uncertainty in serving the newly-covered Medicaid patients beginning in 2014 (United Health Center for Health Reform & Modernization 2011). The ACA expanded coverage will also influence rural hospitals (American Hospital Association 2011). Although coverage expansion will reduce uncompensated care for many rural hospitals, the hospitals have to make upfront investments to meet the needs of the influx of new patients. With rural hospitals' unique circumstances mentioned above, they experience challenges to find new ways to improve care and reducing costs in the health reform era.

In sum, persistent disparities between urban and rural areas in health outcomes and health care are a national concern. Rural residents have greater health needs and experience severe structural barriers to adequate health insurance coverage and health care access. Despite its potential benefits, the recent health reform legislation phased in through 2020 will entail considerable changes and place new challenges on the health care system, providers, and residents in rural areas. These challenges might translate into vulnerability of residents, communities, and health care systems in rural areas, threatening well-being and productivity. For healthier rural communities, a deeper understanding of the current issues of rural health, health care access, service, and health care systems and provision of future research and policy recommendations are essential.

OVERVIEW OF THIS SPECIAL ISSUE

This special volume includes five papers. All of the papers except one focus on the current rural health and health care issues in the United States. Although the article by Hogan, Scarr, Lockie, Chant, and Alston is based on the Australian context, it is included in this special volume because of its valuable contribution to the theoretical perspective on farmers' suicide.

The first article, by Vitale and Bailey, explores Hispanics' experience and difficulties in seeking primary health care services in a southern rural county, using in-depth individual interviews with Hispanic residents, local health professionals, and key community informants. The authors selected a southern rural county in Georgia that has experienced a continuous influx of Hispanics and their fast population growth, but was not prepared to accommodate the health and social needs of the newcomers. Using Penchansky and Thomas's (1981) five dimensions of access to health care as an analytical framework, they found that Hispanic residents experience socioeconomic and cultural difficulties, as well as structural barriers in seeking primary health care services. The authors suggest a better understanding regarding Hispanic culture and health needs, as well as more culturally- and linguistically-competent health care services, to reduce health care barriers, provide adequate health care, and improve Hispanics' overall health status.

In the second article, Sparks and Schmidt analyze nationally representative data, from the 2008 Behavioral Risk Factor Surveillance System (BRFSS), to examine differences in adult normal weight, overweight, and obesity by residential locations. They estimate the relative risks of overweight and obesity respectively, compared with normal weight, in both metropolitan and nonmetropolitan adults. Then they identify the predictors of overweight and obesity in each location. Sparks and

Schmidt note weight disadvantages in nonmetropolitan areas and assert that different factors contribute to adult overweight and obesity risks in metropolitan and nonmetropolitan areas separately. The authors conclude with the need for tailored health policies and programs by residential location.

The next article, by John, Mccahan, and Gaulocher, presents the Partnering to Enable Active Rural Living (PEARL) Project in three rural New Hampshire communities, which is based on a community participatory action research approach. The authors argue that community participation contributes to an increase in individuals' willingness toward and engagement in physical activity, a shared awareness of the roles of community groups and organizations, and locally-driven health environment and policy changes for active living. They analyze qualitative data from multiple sources, using a constant comparative method and triangulation. They identify attributes of people and places that shape active living in rural communities, and examine how the interactions between the two influence the physical activity behaviors and conditions in rural communities. They note the importance of sustainable organizational supports, the natural and built environment, and policies within rural communities, as well as individual-level factors in promoting active living and health in rural communities. The authors conclude that various levels of effort to improve active living in rural communities should consider how the attributes of people interact with attributes of places.

The article by Choi and Pate provides a snapshot of school neighborhood environments related to childhood obesity in a rural community in Texas. Choi and Pate argue that weight status and health behavior are likely influenced by environmental factors. School neighborhood environments, in particular, could be crucial for children's dietary behavior, physical activity, and obesity. Based on multiple sources, they assess three dimensions of school neighborhood environment related to childhood obesity: socioeconomic characteristics, food environment, and physical activity environment. The authors find school neighborhoods in their study often have socioeconomic disadvantages and an unhealthy food environment. The positive effects of building an environment for active travel to school (e.g., improvement of physical activities) could be negated by the unhealthy food environment of school neighborhoods. The authors argue for the importance of comprehensive and balanced planning and interventions to reduce childhood obesity.

The last article in this issue by Hogan, Scarr, Lockie, Chant, and Alston focuses on the problem of farmer suicide. With recognition of the absence of a coherent conceptual framework on male farmer suicide, the authors propose a theoretical

framework through a review of the substantive sociological theories and an application to the context of Australian male farmers. The framework is developed based on Durkheim's foundational theoretical work on suicide through the integration of destabilization factors within the sociological insights of Giddens and Warren regarding identity and risks to subjectivity. The authors argue that a loss of social predictability undermines ontological security, which is central to identity and social competence. A ruptured identity and the will to suicide are influenced by the combined effects of a loss of the coherency of identity, the potential loss of a continuity of social practice, reluctance to acknowledge difficulties, the misperception of one's problems, and experiences of shame. Finally, the authors present how the insights from the theoretical framework can be translated into suicide prevention programs.

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