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WOMEN'S HEALTH CARE PHYSICIANS

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Committee on Health Care for Underserved Women

This information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

Health Disparities in Rural Women

ABSTRACT: Rural women experience poorer health outcomes and have less access to health care than urban women. Many rural areas have limited numbers of health care providers, especially women's health providers. Rural America is heterogeneous where problems vary depending on the region and state. Health care professionals should be aware of this issue and advocate for reducing health disparities in rural women.

Significant health disparities exist between rural and urban women. Various definitions of "rural" are used to study and report population data, and to determine eligibility and reimbursement levels for federal and state programs. In this document, because of the complexities of definitions, the term "rural" will be used interchangeably with "nonmetropolitan" and the term "urban" will be used interchangeably with "metropolitan."

Rural America represents 75% of the national land-mass and is home to 22.8% of U.S. women aged 18 years and older (1, 2). Rural communities are heterogeneous, with substantial regional differences in ethnic and racial composition (3, 4). Whereas 83.5% of nonmetropolitan residents are non-Hispanic white, Hispanics and Asians are the fastest growing rural subgroups (2).

Rural Health Disparities

Although national data on women's health and outcomes according to residence are limited, disparities in rural women are apparent. General health conditions and behavior that U.S. rural women experience at higher rates than their urban counterparts include, self-reported fair or poor health status, unintentional injury and motor vehicle-related deaths, cerebrovascular disease deaths, suicide, cigarette smoking, obesity, difficulty with basic actions or limitation of complex activities (4, 5), and incidence of cervical cancer (6). Other comparisons show that death rates from ischemic heart disease in rural women exceed that for all U.S. women. In some regions of the country, women in nonmetropolitan areas have higher rates of heavy alcohol consumption (4). Proportionately fewer rural women receive recommended preventive screening services for breast and cervical cancer. Rural

African American, Hispanic, Asian, and white women are less likely to have cervical cancer screening. African American, Hispanic, and white women are less likely than their urban counterparts to have mammograms (7). Comparisons of female patients in whom invasive breast cancer was diagnosed in Georgia from 2000 to 2009 indicate that women living in small rural and isolated areas were 30% more likely to have surgery and 17% less likely to receive radiotherapy as first-course treatment than their urban counterparts. Also, within these rural areas, African American patients were 57% less likely to have surgery than white patients (8).

Obstetric and Reproductive Health Outcomes

National level data show relatively little difference between metropolitan and nonmetropolitan women for a number of obstetric outcomes (9). In contrast, risks vary by levels of rurality in many parts of the country. Prenatal care initiation in the first trimester was lower for mothers in more rural areas compared with suburban areas (10). Relative to women living in large fringe metropolitan and medium to small metropolitan areas, rural women experienced slightly higher rates of hospitalizations with complications during pregnancy in 2008 (11).

With respect to adverse birth outcomes, a 2002 study in Pennsylvania found that women residing in the two most rural types of communities experienced risks of low birth weight (LBW) and preterm birth similar to those identified for women living in urban areas, even after controlling for pertinent maternal variables (12). Calculations of 5-year average (2000–2004) infant mortality rates for the United States and its counties indicated

a rate of 6.9 deaths per 1,000 live births. There were 1,041 nonmetropolitan counties (51%) with rates that exceeded the U.S. rate, and a subset of 128 nonmetropolitan counties (6.2%) with rates more than twice the national rate (3).

Receipt of reproductive health services by sexually active women, aged 15–44 years, within the past year, was less likely for women living in nonmetropolitan areas (13); rural women relied on female sterilization (35%) to a greater extent than women living in central metropolitan (24%) or fringe metropolitan (25%) areas (14). A 2006 survey of women aged 18–44 years in Colorado found that women in small towns or rural areas indicated that they plan for contraceptive use less and were more likely to have had an unintended pregnancy than women in more urban areas (15).

Health Services Access

Access to health care for rural residents is complicated by patient factors as well as those related to the delivery of care. Rural residents are more likely to be poor, lack health insurance, or rely substantially on Medicaid and Medicare; they also travel longer distances to receive care or to access a range of medical, dental, and mental health specialty services (16). Less than one half of rural women live within a 30-minute drive to the nearest hospital offering perinatal services. Within a 60-minute drive, the proportion increases to 87.6% in rural towns and 78.7% in the most isolated areas (17, 18). During 2008–2010, rural women aged 18–64 years reported the highest rates of delayed care or no medical care due to cost (18.6%) and no health insurance coverage (23.1%), both rates increased since 2002–2004 (5). According to 2006 birth certificate data, home births were higher in counties with a population size less than 100,000 (0.87%) than in counties with a population size of 100,000 or more (0.50%) (19).

Regional organization of perinatal services is an important strategy to improve outcomes for underserved women and their infants in rural communities. One outcome indicator is the percentage of very LBW (less than 1,500 g) deliveries that take place in subspecialty hospitals. Based on this indicator, 9 of the 12 lowest ranked states have rural populations that exceed one third of the state population (20, 21). Some studies that examined deliveries of very LBW infants suggest that residing in more distant areas from a subspecialty facility, as well as inadequate prenatal care, increases the likelihood of delivery in a lower level facility (22–24).

Obstetric–Gynecologic Workforce in Rural Areas

In 2008, only 6.4% of obstetrician–gynecologists practiced in rural settings (25). By 2010, 49% of the 3,143 U.S. counties (home to 10.1 million women or 8.2% of all women), lacked an obstetrician–gynecologist. These predominantly rural counties exist in all states, but are

particularly prevalent in the central and mountain west states. The ratio of obstetrician–gynecologists per 10,000 women is highest in metropolitan areas, and decreases in less populated and rural counties (18, 26). In some rural areas, family physicians provide 100% of obstetric care. Even so, practice data show that obstetric services provided by family physicians is decreasing, with only 19.2% providing routine deliveries (27, 28). At the same time, an increasing proportion of women are entering obstetrics and family practice; however, substantially fewer females compared with males in both specialties choose to practice in rural areas (26, 29, 30). These trends could contribute to a potential decrease in the rural workforce.

Availability of Specialty Women’s Health Services

Obstetric and gynecologic health services, including family planning, are limited in many nonmetropolitan areas. Substantial decreases in the availability of vaginal birth after cesarean delivery (VBAC) services from 1999 through 2005 reported for hospitals in Colorado, Montana, Oregon, and Wisconsin disproportionately affected smaller and more isolated or rural hospitals (31). Local availability of abortion services also is a concern. Eighty-seven percent of U.S. counties, in which 35% of reproductive-aged women lived, had no abortion provider in 2008. Obstetrician–gynecologists with rural mailing addresses were significantly less likely to perform abortions (6.5%) than their urban counterparts (17.0 %) (32). Rural women seeking abortions in 2008 traveled substantially greater distances than nonrural women. Thirty-one percent traveled more than 100 miles and an additional 42.9% traveled between 50 miles and 100 miles, compared with 3.8% and 7%, respectively, for nonrural women (33).

Among the 14 states ranked the highest on percentage of women aged 13–44 years in need of publicly funded contraceptive services and supplies, nine have rural populations exceeding 33% of the state population (20, 34). Only 46% of the agencies providing publicly funded family planning services reported that their clinic sites are located in mostly rural locations, the majority of which are health departments and Federally Qualified Health Centers (35). In Colorado, where almost three-quarters of the counties are considered rural, substantial numbers of reproductive-aged women live in counties where there is no identified pharmacy or health clinic that either prescribes or fills prescriptions for contraceptives (36). Despite concern about access to emergency contraception, data on current over-the-counter availability of emergency contraception in U.S. rural pharmacies are lacking.

Current Initiatives to Improve Services for Rural Women

A variety of initiatives have been established to address the difficulties in providing care to rural women, funded

by a range of state and federal programs and medical school department budgets. Examples of recent or current approaches include:

- Wyoming, a state with no tertiary care centers for pregnant women or infants and few pediatric specialists, approves out-of-state health care providers and facilities as state Medicaid providers, allowing the state to reimburse transport to and care and delivery in an out-of-state subspecialty hospital when medically necessary (37).
- The University of Texas Medical Branch in Galveston's Department of Obstetrics and Gynecology developed its Regional Maternal & Child Health Program to serve geographically underserved women in multiple off-site clinics. The program addresses culturally relevant services and transportation needs, and uses electronic medical records to facilitate continuity of care. It also provides housing in its Regional Perinatal Residence for high-risk women (and family members) living in distant locations to facilitate their access to regional center care when hospitalization is not necessary (38).
- The Arkansas Medicaid Program and the University of Arkansas for Medical Sciences are collaborating with the state's medical community to enhance primary obstetric care in rural Arkansas and increase risk-appropriate referrals to maternal-fetal medicine subspecialists. The system uses telemedicine and clinic networks to facilitate access to maternal-fetal medicine consultation services, and to provide continuing education for practitioners (39).
- Oregon enacted legislation to offer financial incentives, such as a state income tax credit for rural practitioners and assistance with medical liability insurance, for obstetricians practicing in rural areas. An evaluation of the program 2 years after full implementation found that the subsidy had not halted the overall decrease in rural clinicians who performed deliveries in that time frame. Clinicians receiving the subsidy, however, indicated that it was an important reason that they were able to continue maternity care (40).
- Twenty-four family medicine residency programs have incorporated a rural training track. Graduates of these programs are two to three times more likely to practice in rural areas than graduates of family medicine residencies overall. The majority of those physicians initially selecting rural sites remained in rural locations 2 years after graduation (30).

Recommendations

Obstetricians and gynecologists in every region of the United States can work to reduce rural health disparities. The diversity of rural communities necessitates local

solutions to local problems. The American College of Obstetricians and Gynecologists encourages obstetrician-gynecologists to do the following:

- Collaborate with maternal-child and rural health agencies in their state to identify the health needs of rural women and barriers to health care.
- Share professional expertise as a member of an advisory committee or task force focused on improving the health of rural women.
- Partner with family physicians and other women's primary care providers to ensure that appropriate consultation and training are available for practitioners in rural areas.
- Promote state initiatives offering financial incentives to rural health care practitioners and providers of rural obstetric care and reproductive health services.
- Encourage graduates of obstetric-gynecologic residency programs to participate in loan repayment programs that require practicing in rural locations for a specific length of time.
- Reinvigorate the implementation of regionalized perinatal care in underserved, rural areas.
- Share and network resources as well as clinical expertise.
- Foster and participate in efforts to utilize effective telemedicine technologies (in accordance with state regulations) to expand and improve services for rural women.
- Advocate for comprehensive professional liability reform to facilitate the practice of health care providers in rural areas.
- Monitor the availability of obstetric and gynecologic services in rural and underserved areas.
- Promote research to determine factors and conditions that support the retention of obstetrician-gynecologists in rural communities.
- Conduct further research to understand acceptable conditions for performance of VBAC in rural areas and to study the effect of VBAC policies on access to care for rural women.
- Advocate for increased access for rural women to contraceptive methods and emergency contraception.
- Advocate for the availability of safe and accessible abortion services.
- Include place of residence in the collection of data for health-related databases and their analyses to ensure improved understanding of rural-urban health disparities among women.
- Encourage research on the education, employment, and poverty disparities that affect the health of rural women.

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