References to the case studies are found throughout this chapter (look for the case study icon). Readers should keep the case studies in mind as they read the chapter.

CASE 1

Lydie, an 80-year-old woman, was born in France. She came to the United States in her early 20s to be a cook for a wealthy family in a metropolitan area. She became a U.S. citizen, and when she retired in her mid-50s, she settled alone in a rural community in the United States along the Canadian border—unmarried, independent, and financially secure. She bought a small farm, raised goats, made goat cheese, and swore off any primary healthcare. She basically believed that she was in charge of her health; in reality, she found primary healthcare highly inconvenient. Although she did drive, seeing a physician or a nurse practitioner required a car ride of 90 minutes, and she had too much to do on the farm to be bothered with that commute.

Lydie fell one day while milking her goats. The mail carrier, who noticed that her mail was untouched for 3 days, found her and notified the local volunteer fire department. The moment she fractured her hip in the fall was a sentinel event that spiraled into many losses, including her farm, goats, and a life of solitude, because she had no immediate family, extended family, or friends who could help her and little access to local healthcare that would have allowed her to stay home and enter a rehabilitation phase after surgery. Lydie died 4 months after her fall in a nursing home in a metropolitan area 150 miles away from her beloved farm. She was diagnosed with hypertension, diabetes, and congestive heart failure during her time in rehabilitation and died of complications from these comorbidities.

CASE 2

Saliha, a 15-year-old girl, has been in a youth detention facility awaiting placement to foster care. She was arrested and brought to the center for selling marijuana in the neighborhood, as well as involvement with trading sex for money. Her home situation is less than ideal. Her mother is an active intravenous drug user and the single head of the household. Saliha is the only child living at home, and her mother, who is not a positive role model, often forgets to remind her daughter to attend school. Saliha has been living at friends' homes in the neighborhood for about 18 months, saving money she earns through selling marijuana and exchanging sex for money. She gets free healthcare at the local hospital, which has a clinic for people just like her, but she rarely follows through on any of the advice she receives from the nurses and doctors.

Saliha takes a positive step toward taking care of herself that often lasts for a month and then reverts to what she is most familiar with (i.e., a disruptive life on the streets). She frequents a place where she feels the safest, where she can get food, shower, and condoms. It is a harm reduction drop-in center. She is beginning to like and trust a nurse who volunteers there on Friday afternoons.

CASE 3

Reluctantly, Jan decides to make an appointment with her gynecologist to start having an annual Pap Test. Her best friend has been diagnosed with cervical cancer, and she doesn't want this to happen to her. She has stopped seeing any sort of primary care physician, more from a sense of disillusionment than anything else. Although Jan, a bisexual woman, was once married to a man, she is now in a committed relationship with a woman. The female physician assistant (PA) who sees Jan begins to ask all the routine assessment questions, including whether Jan is sexually active and uses safe sex practices. Jan says "yes." Jan senses that the PA assumes that Jan is heterosexual, because she, the PA, refers to condoms when she discusses prevention of human immunodeficiency virus/acquired immunodeficiency syndrome. Jan wonders why the PA doesn't ask her if she is having sex with men, women, or both, as at least a way to tailor her remarks. Jan is left feeling confused by assumptions and misdirected information.

THE CONTEXT OF HEALTH RISKS

We have a responsibility as a state to protect our most vulnerable citizens: our children, seniors, people with disabilities. That is our moral obligation. But there is an economic justification too—we all pay when the basic needs of our citizens are unmet.

John Lynch, American football player

Vulnerability

Discussions regarding the health risks of certain groups of people who have a greater disproportionate risk of poor health often identify the individual people who make up these groups as members of "vulnerable" populations. One definition of a vulnerable population comes from the seminal writing of Flaskerud and Winslow (1998)—that is, "social groups who have an increased relative risk or susceptibility to adverse health outcomes" (p. 69). Unfortunately, this definition is accurate in terms of negative outcomes complicated by struggles for the basic needs associated with a quality of life. However, vulnerability implies being a victim, with little recourse but to depend on others for help with healthcare goals and outcomes. Vulnerability seems to mean lacking sufficient ability to advance health and wellness, along with greater need to look to others for solutions.

PRACTICE POINT

It is important to remember that definitions of categories, such as urban or metropolitan and nonurban or rural, change with the new perspectives and calculations based on the census. The census data collected in 2010 will no doubt shift these classifications. This is important information for community and public health nurses to know because as leaders in health promotion, initiators of disease-prevention projects, or as client advocates, nurses need to know where to access data that support the rationale of needed healthcare services or personnel. The U.S. Census Bureau has a useful area on its website that helps health professionals know how many persons live in a certain area.

Health Personnel Issues

Whether a geographic area consists of densely or less-densely populated segments, the notion of the public health core function of assurance (all people have access to healthcare) is of crucial importance in the role of the community and public health interdisciplinary team. The Health Resources and Services Administration (HRSA) has developed a system for designating areas with a shortage of healthcare professionals based on certain criteria (HRSA, 2009). The HRSA then decides how to develop initiatives to train and secure health professionals to serve in these areas and to create networks of care that are models of services that meet the unique needs of the populations. The use of the terms **health professional shortage areas (HPSAs), medically underserved areas (MUAs),** and **medically underserved populations (MUPs)** is part of the system that establishes a designation that becomes the focus of federal assistance. For example, if an area is designated as an HPSA or an MUA, then the HRSA can support programs to educate personnel who are needed in these areas and provide services to these areas with the help of tax dollars. It does this by soliciting grant proposals for healthcare models to meet population needs and by fiscally supporting training of healthcare personnel to meet these needs. See Box 17.2 for more information. Special attention is directed to MUPs. Underserved people may be living in the middle of a busy designated metropolitan area but are underserved for economic, cultural, or literacy reasons.

EVIDENCE FOR PRACTICE

1. The Interprofessional Rural Program of British Columbia (IRPBC) is an example of a pilot program created to recruit interdisciplinary health professionals for rural communities in British Columbia, Canada (Charles, Bainbridge, Copeman-Stewart, Kassam, & Tiffin, 2008). The program has given training to students to be health professionals and the opportunity to evaluate whether this experience increases the likelihood of their working in nonurban settings after their education is complete. Researchers used interview and survey data to determine the impact of IRPBC on students and communities. The students who participated in it benefited not only from the chance to engage in rural practice but also from the opportunity to interact within an interprofessional context. The communities participating in the program profited from enhanced healthcare and the possibility of attracting new practitioners from these students.
2. Many of the interventions recommended to improve client safety have largely been based on research conducted in urban hospitals. Thornlow (2008) has demonstrated the extent and type of nursing research being conducted to advance rural-specific client safety research. The studies were conducted in various settings, with topics ranging from error reporting in hospitals to safety screening in the community. Guidance is offered for a future nursing research agenda to include the need for interdisciplinary research; cross-national and international collaboration; and, at a minimum, the necessity for nurse researchers to sample rural hospitals in larger studies of client safety.

box 17.2 Health Professional Shortage Areas and Underserved Populations

Health professional shortage areas (HPSAs) may be designated as having a shortage of primary medical care, dental, or mental health providers. They may be urban or rural areas, population groups, or medical or other public facilities. As of March 31, 2009, there were:

- **6,080 primary care HPSAs** with 65 million residents. It would take 16,585 practitioners to meet their need for primary care providers (a population-to-practitioner ratio of 2,000:1).
- **4,091 dental HPSAs** with 49 million residents. It would take 9,579 practitioners to meet their need for dental providers (a population-to-practitioner ratio of 3,000:1).
- **3,132 mental health HPSAs** with 80 million residents. It would take 5,352 practitioners to meet their need for mental health providers (a population-to-practitioner ratio of 10,000:1).

Medically Underserved Areas/Populations:

- **Medically underserved areas (MUAs)** may be an entire county or a group of contiguous counties, a group of county or civil divisions, or a group of urban census tracts in which residents have a shortage of personal health services.
- **Medically underserved populations (MUPs)** may include groups of people who face economic, cultural, or linguistic barriers to healthcare.

Source: Health Resources and Services Administration (2009). Shortage Designation: HPSAs, MUAs & MUPs. http://bhpr.hrsa.gov/shortage

box 17.4 Ranking of Rural Health Priorities (*Healthy People 2010 and Healthy People 2020* Goals)

1. Access to quality healthcare
2. Heart disease
3. Diabetes
4. Mental health and mental disorders
5. Oral health
6. Tobacco use
7. Substance abuse
8. Education and community-based programming
9. Maternal, infant, and child health
10. Nutrition and overweight
11. Cancer
12. Public health infrastructure
13. Immunization and infectious disease
14. Injury and violence prevention

Source: Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. *Healthy People 2010.* http://www.healthypeople.gov/.

Elderly People

Elders, who are diverse in culture and ethnicity, face many challenges as they age in rural settings. According to Krout and Kinner (2007), most elders do not live on farms. They may be isolated in a variety of housing situations, including family homes in which they brought up their families; the children have now left the area and the parents may live as widows or widowers. They have incomes that can be up to 20% lower than that of their urban counterparts because of lower social security payments, smaller levels of assets in the bank or in property, less pension coverage, and less opportunity to make up the difference because of lack of part-time employment possibilities (Krout & Kinner, 2004). In many cases, fewer options for leisure and recreation are available to these older people.

What complicates these issues are the healthcare service components that are lacking or are created on the basis of the primary mechanism of payment (i.e., Medicaid). Generally, there are fewer healthcare professionals—physicians, nurses, occupational therapists, and physical therapists—in rural areas, especially with expertise in gerontology, palliation, and end-of-life care. Lack of public transportation puts a burden on the elderly to find private transportation. If they are disabled or cannot drive, dependence for transportation rests on the network of friendships or connection to relatives that may or may not be in place.

It was once said that the moral test of government is how that government treats those who are in the dawn of life, the children; those who are in the twilight of life, the elderly; and those who are in the shadows of life, the sick, the needy, and the handicapped.

Hubert H. Humphrey

In Lydia's case, she had no relatives or friend networks available to help, primarily because she chose to live a solitary life that she thought was health-promoting for her. In the end, her approach isolated her so much that she had little recourse but to deal with her healthcare issues from a preventive perspective; she prided herself on "not needing those doctors and nurses" and not seeking any primary care treatment. In her mind, toughness in not doing this was a sign of personal and spiritual strength.

When it comes to elder care in rural communities, seven factors compound disease-prevention and health-promotion efforts to identify and reduce modifiable risk: (1) availability, (2) accessibility, (3) affordability, (4) awareness, (5) adequacy, (6) acceptability, and (7) assessment. These are defined in Box 17.5. Community and public health nurses should discover how to deal with these issues. They should realize that they can use meeting places that seem to draw the greatest group of citizens to good effect. The nurses can work toward developing an education infrastructure to help rural citizens at least understand what modifiable risks they may be facing and how they may receive help if a coalition of requested services can be initiated. For example, in MUPs in inner cities, healthcare professionals often reach elders through churches. In rural areas, solutions may begin through education in a church, post office, or grocery store. In addition, public health nurses in collaboration with other interested citizens and professional disciplines can work together developing networks of volunteers helping with transportation needs or other needs that may be identified from a thorough assessment.

box 17.5 The Seven A's of Challenges to Elders in Rural Areas

1. Availability: insufficient number and diversity of formal services and providers; lack of acceptable services and human service infrastructure
2. Accessibility: shortages of adequate, appropriate, and affordable transportation; cultural and geographic isolation
3. Affordability: poverty and inability to pay for services
4. Awareness: low levels of information dissemination; literacy issues
5. Adequacy: lack of service standards and evaluation; evidence-based practice compromised
6. Acceptability: reluctance to ask for help
7. Assessment: lack of basic information on what is needed using research rigor and analyses

Source: Krout, J. A., & Kinner, M. (2007). Sustaining geriatric rural populations. In L. L. Morgan & P. S. Fahs (Eds.), *Conversations in the disciplines: Sustaining rural populations* (pp. 63–74). Binghamton, NY: Global Academic Publishing.

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