The Special Nature of Rural America

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The chapter on "The Social Context of Substance Abuse" reviewed the complex processes through which individual characteristics, family processes, and community structures come together to influence risk for substance use and abuse. This chapter considers the fact that individuals and families live in communities that vary greatly in terms of cultural and ethnic heritage, socioeconomic conditions, geographic placement, and population density. The drama of individual lives, including achieve- ments and behavioral dysfunctions, is played out against the backdrop of these important social, economic, and cultural variations. The following discussion indicates how significant distinctions between and within the categories of urban and rural locations play a major role in influencing how the dynamics portrayed in the aforementioned chapter actually occur in daily life.

Researchers and policymakers concerned about the problems of substance abuse have turned their attention from a singular focus on urban America to consider as well the special health needs of rural people. Multiple concerns have lead to this new interest in rural issues. A major factor has been the acute and chronic economic problems in rural areas that have generated increased risk for emotional, behavioral, and substance use disorders (Conger and Elder 1994). Contrary to the myth that rural communities are well insulated from the problems of mainstream America, there is growing recognition that entrepreneurs of illegal drugs have found new market niches in America's small towns and countryside (O'Dea and Murphy, this volume). Moreover, a careful consideration of the epidemiological evidence suggests that, while the drugs of choice may differ somewhat in urban and rural places, substance abuse in the rural United States is quite comparable to that in large population centers (Wagenfeld et al. 1994).

This chapter first considers demographic and socioeconomic dimensions of rural life that should relate to problems of substance use and abuse. For example, the discussion considers the definition of rural places and how they have been changing in a fashion that should affect drug, alco-hol, and tobacco use. After exploring the various dimensions of rurality, the focus turns to the relationship between geographic location and substance use. How do rural and urban places differ in terms of problems with the consumption of both licit and

illicit drugs, and how can these differences be used to inform research on substance use and abuse? Finally, the chapter considers some of the implications of rurality for the delivery of treatment and prevention services.

FINDING RURAL AMERICA

According to the Bureau of the Census (1993), approximately 62 million Americans (24.8 percent of the total population) lived in rural areas in 1990. The other 75.2 percent of the population lived in places designated as urban. The definitions of rural and urban, however, are far from straightforward. For example, places with populations of 2,500 or less would normally be defined as rural unless they are in certain States or are located within a larger metropolitan area (Bureau of the Census 1993). An urban place, on the other hand, is normally defined as an area with 50,000 or more inhabitants. Thus, in practice, rural is often defined as places that are not urban (i.e., that are nonmetropolitan). This approach is not without problems. For example, people living in metropolitan areas can sometimes be designated as rural and citizens living in rural places can sometimes be classified as metropolitan (Hewit 1989).

One must question, however, whether an exact definition is essential. Simply put, a crude dichotomy differentiating rural from urban cannot capture the qualities of place that may be important in understanding how people come to abuse, or fail to abuse, various substances. Patton (1989, p. 1,012) notes that investigators need to think not of an urban/rural dichotomy, but rather of an urban/rural continuum ". . . from the remote frontier communities to the larger rural cities." For many purposes, contrasts between rural and urban or metropolitan and nonmetropolitan are a good first step in beginning to understand the influence of place on substance use problems. Ultimately, however, researchers will want to investigate substance use in relation to gradations in population density, as will be illustrated in later sections of this chapter.

Especially important, size of place can be directly related to variations in the cultural traditions, social structures, economic conditions, and inter-actional processes that are likely to have a direct influence on drug, alco-hol, and tobacco use. For example, both distance from metropolitan areas and population density influence economic opportunity as well as communication beyond the borders of a specific community. Moreover, geographic isolation can create

cultural barriers that may either exacerbate or reduce risks for substance abuse.

As shown in table 1, all regions of the country have significant numbers of rural citizens. The table provides the percentages of the population living in rural and urban areas of the United States in 1990. For each region, the table identifies the States with the highest and lowest percen- tages of urban and rural citizens. For example, although about 25 percent of the total population is rural, 31.4 percent of the people in the southern United States live in rural areas. In West Virginia, the majority of the population lives in rural places (63.9 percent). By way of contrast, only 13.7 percent of those living in the western United States are designated rural, even though almost one-half of Montana's citizens (47.5 percent) live in rural places. The data reveal then, that rural America is all around, from the high-density, industrialized Northeast to the stereotypically rural States of South Dakota and West Virginia.

TABLE 1. *Percentage of people living in rural areas in 1990.*

		Rural areas	
Regions	Overall percentage	Highest percentage	Lowest percentage
Northeast	21.1	-	-
New Jersey	-	-	10.6
Vermont	-	67.8	-
Midwest	28.3	-	-
Illinois	-	-	15.4
South Dakota	-	50.0	-
South	31.4	-	-
Washington, DC	-	-	0.0
West Virginia	-	63.9	-
West	13.7	-	-
California	-	-	7.4
Montana	-	47.5	-

SOURCE: U.S. Bureau of the Census 1993.

RURAL DISPERSION, DIVERSITY, AND DISADVANTAGE

The pervasiveness of rural places throughout the United States has important implications for the relationship between substance abuse and geographic location. First, developments in urban America can more easily influence rural life than has been true in the past. Thus, increasing urban drug problems are easily transported to rural places and rural drug dealers easily find markets in urban areas. Indeed, the contemporary interstate highway system has created the same opportunities for illegal commerce as it has for legal business activities. As a result, there is little impediment in the flow of substances and practices regarding their use between places with low and high population densities. Illegal drugs manufactured in rural areas easily find urban markets, and vice versa, and rural areas are providing major new markets for the current oversupply of drugs in large cities (O'Dea and Murphy, this volume).

A second implication of the wide dispersion of rural places across the United States is that rural America is highly diverse. The people living in rural places represent an array of ethnic and cultural traditions that is as varied as that found in large population centers. This variety in the rural social landscape is seen across the country and ranges from Native Americans in all corners of the land to Hmong tribespeople from Southeast Asia in rural Iowa to African-Americans in the rural South. Rural America encompasses multiple ethnic groups that have varying histories of discrimination, disadvantage, and cultural practices, including substance use and abuse. In Iowa, for example, some rural ethnic groups have strong admonitions against drinking while others consider the consumption of alcohol to be a normal part of everyday life. These different traditions obviously affect the orientation of individual group members toward the use of alcohol.

Rural America is diverse not only in its ethnic and cultural makeup but also in its economic structures and fortunes. Although there are wealthy rural citizens, rural America has experienced devastating economic reversals in farming, manufacturing, and extractive industries during the past two decades. Indeed, despite the conventional wisdom that rural America is a stress-free bastion of tranquillity and health, studies have shown that rural Americans are more likely than urban citizens living in the suburbs to suffer socioeconomic disadvantages approximating those of individuals living in high-risk central cities (O'Hare and Curry-White 1992). Other research shows that economic problems such as these are associated with risk for mental disorder and functional impairment in rural, urban, minority, and majority populations (e.g., Brody et al. 1994; Conger et al. 1994; Kessler et al. 1994; McLoyd et al. 1994).

If it ever was true that rural people were especially protected against problems associated with substance use, the stressful economic conditions in many sectors of contemporary rural society have substantially reduced such insulation. During the past several years, much of rural America has moved from the severe economic dislocation of the 1980s to a period of chronic economic stagnation or decline, with poverty rates more akin to those in central cities than to the country as a whole (O'Hare and Curry- White 1992). Consistent with these trends, Davidson (1990) documents the rise of "America's Rural Ghetto" and notes that, in a fashion similar to inner-city urban areas (e.g., Wilson 1987), the devastation of the farm crisis years along with failures in other rural industries has led to selective out-migration of the most prosperous, educated, and younger rural citizens, leaving behind the most disadvantaged and elderly portion of the population.

A number of reports have been supportive of Davidson's view. They suggest that disruptions in the rural economy have given rise to inner-city-like subcultures in rural towns and population centers. For example, U.S. News and World Report magazine (Whitman et al. 1994) identified Waterloo, Iowa, as one of the communities in rural areas that contains a growing white underclass, defined as people living in census tracts where 40 percent or more of the residents live below the official Federal poverty line. Such places are marked by conditions similar to those existing in poor, inner-city neighborhoods, including high crime rates and substance abuse, a large proportion of single-parent households, domestic violence, and intergenerational continuity in poverty. More work is needed to improve understanding of this phenomenon in small, rural cities. Even with current evidence, however, the results suggest that there are important gradations within rural experience, from the open countryside to villages to small towns and cities, that have an important influence on rates of substance use. These differences among rural areas in risk for substance use again call into question the utility of a simple urban/rural dichotomy.

Despite the fact that chronic economic stress in rural areas is a relatively recent phenomenon in much of the Midwest, it has long been characteristic of many sections of the rural South. Importantly, these rural economic conditions, whether recent or chronic, give rise to the problematic social environments just discussed, environments that greatly increase risk for substance abuse among adults, adolescents, and children. In light of the earlier discussion regarding a rural-urban continuum, it is especially important to note that the underclass characteristics associated with both poverty and inner-city life are more prevalent among rural citizens than among urban people living in the metropolitan areas located outside a central city core.

For example, using census data, O'Hare and Curry-White (1992) define as underclass those individuals who: (1) have not completed high school, (2) receive public assistance, (3) are never-married mothers, or (4) are long-term unemployed males. Again, these are characteristics associated with the intransigent social and behavioral problems of poor, inner-city areas. The researchers report that in 1990, 3.4 percent of cen-tral city inhabitants belonged to the underclass compared to 2.4 percent of rural residents. Only 1.1 percent of urban residents not in the inner city meet these criteria for underclass membership. These findings indicate that important distinctions are possible within urban experience similar to those noted earlier for rural places. These additional categories of suburban versus central city have a major influence on socioeconomic risks for substance abuse. These findings suggest again that a simple urban/rural distinction is too crude to identify important variations in both urban and rural life that influence the developmental trajectories of individual people. The simple observation that rural residents are twice as likely to be members of the underclass than urban residents living outside central cities underscores the need for finer distinctions than a simple urban/rural dichotomy. Failure to go beyond the dichotomous approach to studying urban/rural differences in life experience will impede efforts to understand fully the relation between place of residence and the probability of high or low rates of substance use and abuse.

SUBSTANCE USE AND THE RURAL/URBAN CONTINUUM

The Monitoring the Future study provides a good, general overview of differences in substance use among high school students by geographic location (Johnston et al. 1994). Table 2 provides data from the study for the prevalence of substance use as reported by high school seniors nation- wide in 1993. The table subdivides the sample by geographic location. The first column refers to seniors living in the 16 largest metropolitan statistical areas (MSAs) in the country, including cities like New York, Chicago, Los Angeles, and Houston. These places represent areas typically thought of as urban, with large numbers of disadvantaged, central-city residents.

TABLE 2.*Annual prevalence (percentage) for substance use in 1993 by high school seniors in metropolitan and nonmetropolitan areas (does not include medications taken by a doctor's orders).*

	Residential status		
Type of substance	Large MSA	Other MSA	Non-MSA
Marijuana	29.1	26.2	23.1
Inhalants	7.4	7.3	6.0
Hallucinogens	7.3	8.1	6.3
LSD	6.7	7.6	5.6
Cocaine	2.7	3.9	2.7
Crack	1.3	1.8	1.4
Other cocaine	2.6	3.6	2.0
Heroin	0.6	0.5	0.5
Other opiates	3.1	3.7	3.7
Stimulants	6.5	8.5	9.8
Barbiturates	2.6	3.1	4.3
Tranquilizers	2.9	3.6	3.7
Alcohol	77.9	75.2	76.0
Been drunk	49.1	49.1	51.0
Steroids	0.7	0.9	2.2

KEY:MSA = metropolitan statistical areas.

SOURCE:Johnston et al. 1994.

The second column in table 2 refers to high school seniors living in a county or group of adjacent counties with at least one city or two adjoining cities with a population of 50,000 or more. Column three includes everyone else (i.e., the nonmetropolitan or rural population). The first remarkable finding in the table is that nonmetropolitan youth are not substantially different from those living in larger cities in terms of their reported substance use. For example, 2.7 percent of nonmetro-politan seniors reported using cocaine in 1993, exactly the same percentage as youth living in large MSAs. In some instances (e.g., the use of barbiturates), rural teenagers actually report greater substance use than seniors living in either type of metropolitan area.

Also significant is that in many instances the prevalence of substance use is greater in the smaller rather than larger MSAs. For example, 8.1 percent of youth in the smaller MSAs report using hallucinogens

compared to 7.3 percent in the large MSAs. Even cocaine use, stereotypically considered a large city phenomenon, is more likely to occur among high school seniors in the smaller MSAs. It is important to keep in mind that the places referred to by the middle column in the table include many rural population centers (e.g., Waterloo, Iowa). These findings provide support for the notion that much of the socioeconomic risk for substance use is as characteristic of rural communities and rural population centers as it is of large urban areas. The findings also emphasize the need to examine population density as a gradient rather than as an either-or dichotomy of rural/urban. Only in this fashion can investigators pinpoint the often curvilinear trends in substance use in relation to size of place, as shown in table 2.

The importance of moving beyond a rural/urban dichotomy is further illustrated in table 3. The percentages in table 3 refer to the daily use of substances by high school seniors during the past 30 days in 1993 rather than to any use during the past year as profiled in table 2. For these measures of heavy use of the most frequently ingested substances, there are few differences among seniors residing in places that vary by population density. The percentage of seniors using marijuana is slightly higher in the large MSAs, binge drinking is more prevalent in rural nonmetropolitan areas, and daily use of one or more cigarettes is very slightly higher in moderate-sized MSAs. Considering tables 2 and 3 together, the variations in table 2 substance prevalence rates across area probably indicate variability in access and perhaps social control, whereas the similarities in rates in table 3 probably indicate that the percentage of those who will become problem users in the adolescent population is relatively small and stable across settings. Thus, once the opportunity presents itself, those adolescents with a propensity for antisocial behavior will likely engage in it.

TABLE 3. *Thirty-day prevalence (percentage) of daily substance use in 1993 by high school seniors by metropolitan and nonmetropolitan residence*.

	Residential status		
Type of substance	Large MSA	Other MSA	Non-MSA
Marijuana	2.5	2.4	2.3
Alcohol	2.7	2.3	2.5
Five or more drinks in a row	27.6	26.5	29.2
Cigarettes (1 or more daily)	17.3	19.7	19.2
Half pack or more daily	9.1	11.2	11.7
Smokeless tobacco	1.7	3.0	5.2

SOURCE: Johnston et al. 1994.

These data provide strong support for the hypothesis that rural and urban areas experience comparable socioeconomic, ethnic, historical, and cultural diversity that affects risk for substance use. In addition, a wide range of studies has reported very similar findings, suggesting either that there are few differences in drug use between rural and urban areas or that any differences are rapidly narrowing (Wagenfeld et al. 1994). But, if the risks of drug, alcohol, and tobacco use are essentially the same in rural and urban areas, what is special about rural places? And, most important, what new information about risk for substance use can be generated by focusing attention on the relationship between population density and substance use and abuse?

THE SPECIAL NATURE OF RURAL SUBSTANCE USE

There seem to be at least three unique qualities of rural life that give it a special importance in the study of substance use and abuse. The first two relate to social structures and processes that influence risky behaviors, while the third concerns difficulties in the delivery of intervention and prevention programs. Survey findings reported by Edwards (this volume) from the Tri-Ethnic Center for Prevention Research at Colorado State University help to illustrate the first special quality of rural places.

Edwards provided findings from the American Drug and Alcohol Survey for 1991-93 and reported on lifetime prevalence of substance use among 12th grade adolescents from across the United States. The results discriminated among very small rural communities of less than

2,500 population, nonmetropolitan places not adjacent to a metropolitan county, nonmetropolitan places adjacent to a metropolitan county, and metropolitan counties. An important quality of very small communities should be that friendship and support networks among adults are much more extensive than in urban places. According to Sampson (1992), when adults in a community know each other and work together to supervise and direct the activities of youth, there will be less deviant behavior among teenagers in the community. Edwards' data are consistent with this thesis.

Edwards' results showed that lifetime prevalence and heavy involvement in most types of substance use were lowest in the smallest communities. These are the communities one would expect to have the most extensive and integrated adult interpersonal networks. The data also showed, however, that these networks of social control must degenerate fairly rapidly with even modest increases in population density in that the nonmetropolitan, nonadjacent communities had substance use rates quite similar to even the largest metropolitan places. These findings are consistent with the results from the Monitoring the Future study reviewed earlier.

A first very important, special quality of rural America, then, is that it contains the gradations in population density, from the smallest rural places to rural population centers, that can provide the information needed to understand how adults can come together to provide communitywide social control mechanisms capable of reducing substance use and abuse. In effect, rural communities varying in size provide important laboratories for the study of social control processes that seem to be fairly effective in reducing risk for substance abuse. These communities have much clearer boundaries for studying such social processes in that they are not immediately adjacent to other social units, as would be typical in larger metropolitan areas. One expects that the study of how adults come together to jointly influence the development of their children will provide important information for urban as well as rural populations. Indeed, it seems reasonable to expect that disadvantaged urban neighborhoods will be unlikely to solve their substance abuse problems on a household-by-household or family-by-family basis. The study of rural communities should identify important strategies of adult cooperation that will be equally important to urban citizens.

Edwards' data also point to a second feature of rural life that has impor-tant implications for the study and understanding of substance

use. Rural communities with different cultural and ethnic heritages, divergent histories of discrimination and disadvantage, and varying socioeconomic characteristics have very different rates of substance use. For example, Edwards' analyses of data from three different very small communities (population less than 2,500) showed that the prevalence of multidrug use by 12th graders in one of the communities was over three times higher than in metropolitan areas in general. In the second community, the prevalence rate was about 25 percent higher than in metropolitan places, and in the third community there was no multidrug use.

The special importance of these findings is that each place represented a very different community history, a different ethnic and cultural tradition, and different socioeconomic circumstances. Each community, again, pro-vides a fairly well-bounded laboratory in which ethnic, cultural, historical, and socioeconomic influences on risk for substance use and abuse can be studied. Large urban places, in which these various dimensions of com-munity are often blurred and intermingled, make the study of these various processes much more difficult.

Thus, a second special quality of rural places is that they provide a research setting in which the multiple facets of social, economic, psycho-logical, historical, and cultural experiences and characteristics can be studied in relatively pure form as they relate to the risk for alcohol, drug, and tobacco abuse. The understandings generated by such research con-ducted in rural areas will provide a means for generating new knowledge about similar processes in urban settings. The final special characteristic of rural places concerns the delivery of programs aimed at reducing substance use.

RURAL SERVICES FOR SUBSTANCE USE AND ABUSE

The characteristics of rural America just reviewed focused on the special strengths these areas provide as research laboratories for the study of substance use. This section considers the third special quality of rural America, the difficult obstacles it poses for the delivery of effective substance use services.

Medical care in general profits from the economies of scale provided by a large population base. Only when a sufficient clientele exists within a given geographic area can specialized services be provided in an efficient and effective manner. For example, it would be

unreasonable to provide advanced cardiovascular surgery in most rural hospitals simply because there is an insufficient patient base to maintain the skills or cover the expenses of a team of such specialized medical personnel.

Rural places face the same difficulty when it comes to providing specialized mental health or substance abuse services (Wagenfeld et al. 1994). The lower population density of rural areas simply makes it more difficult to provide specialized substance use or mental health services. As a result, rural people often must travel long distances to get the pro-grams or care they need to remedy or prevent substance use problems. The provision of services in rural areas also needs to accommodate the sometimes different beliefs and traditions of such places.

For example, compared to urban residents, rural people tend to be more family centered and rely more heavily on family members for help and support during times of need (Conger and Elder 1994). They also tend to be more dubious of the effectiveness of mental health or substance use services (Wagenfeld et al. 1994). These characteristics can create additional problems in the delivery of rural health programs.

The problems associated with providing programs to reduce substance abuse in rural areas are the same as the difficulties in the delivery of rural health care in general. Although several professional bodies have made recommendations for dealing with these problems, and although some research has been done to provide better information for finding effective solutions (e.g., the National Advisory Committee on Rural Health 1991), the study of service delivery in rural America remains in its infancy. This part of the special nature of rural America is in desperate need of a significant research base that will lead to creative solutions to the rural health care dilemma (see also Wagenfeld et al. 1994).

DISCUSSION

This chapter has addressed certain special characteristics of rural America that should influence risk for alcohol, tobacco, and other drug use in rural areas. The first task was to attempt to define rurality, with the conclusion that there is no simple way to distinguish rural from urban. Rather, the evidence suggests that a more meaningful approach to understanding the effect of population density on substance use is to use a graduated approach, from degrees of rural to degrees of urban. When this strategy is followed, one finds both similarities and differences in substance use problems and processes along the continuum from rural to urban.

Regarding similarities, the data reviewed here demonstrated that rural places have undergone tremendous social and economic change in the recent past. Today, many people living in rural areas face a degree of economic disadvantage more similar to residents of impoverished central cities than to those living in the suburbs. And, contrary to common stereo- types, rural places experience all of the ethnic, cultural, historic, and economic diversity of urban America. The stresses and strains of rural life create the same risks for alcohol, tobacco, and other drug use as found in metropolitan centers. Indeed, the review of data from large nationally representative samples regarding substance use prevalence showed that there is little difference between larger and smaller places in terms of the proportion of the population using substances of some kind. However, nonrepresentative community studies suggest that there is great variability among rural communities in terms of rates of substance abuse.

In addition to similarities, there is a special nature to rural America that should influence how to investigate its relation to substance use. First, smaller communities oftentimes demonstrate greater solidarity and network support among adults in the community than is typical in larger population centers. These adult networks are an effective means for reducing the initiation and maintenance of substance use and abuse by teenagers and young adults. By studying rural social systems of various sizes, important insights can be gained that can be applied to the solution of substance abuse problems in communities that range from villages to metropolitan centers.

In addition, it was noted that rural places provide an opportunity to study ethnic subgroups, historical events, cultural traditions, and community beliefs and behaviors in relative isolation. Because rural

communities vary widely in terms of the degree of substance abuse that they experience, researchers can connect unique combinations of these community charac-teristics with the rates of substance abuse in them, thus generating a good estimate of the degree of association between substance abuse and these community qualities without the confounds that would exist in the study of urban places. Because rural areas typically do not have the same degree of enmeshment of multiple cultural, socioeconomic, and ethnic characteristics within the limited confines of a large metropolis, even rural population centers provide a better means for identifying the links between community characteristics and substance abuse problems than do urban areas. These community characteristics are likely to play a central role in determining risk for substance use and in providing the means for creating effective programs to reduce such problems.

The final special quality of rural places that was considered was the role of population density in the delivery of health services in general and sub-stance use and abuse services in particular. The evidence suggests that effective means have not been found for solving the problem of providing specialized substance use services in widely dispersed populations. There is a great need for additional research in this area. In addition to examining the difficulties of dispersed populations, services and prevention research in rural areas also will need to improve understanding of the belief systems that create opportunities and problems in delivering effective health ser-vices. Quite likely, solution of these problems in rural areas will provide insights for the delivery of care to underserved urban citizens as well.

Thus far, however, one special quality of rural places that often goes unmentioned has not been emphasized. Researchers need to reinforce the reality that 25 percent of the U.S. population lives in rural areas, almost 62 million people (Bureau of the Census 1993). The bias toward studies of urban America often treats rural places as relatively unimportant, at best a residual category to urban. Obviously, this creates great peril to the future if the health and welfare of such a large segment of society continues to be neglected.

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