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Community-Level Barriers to Recovery for Substance-Dependent Rural Residents

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Abstract

This article identifies potential barriers to substance use recovery associated with rural residence. The evidence is discussed and illustrated with examples. Fourteen specific barriers to substance abuse recovery are identified within 4 broad categories: access to treatment services, access to other professionals, access to peer support groups, and barriers to confidentiality. Although telehealth, expansion of mental health care, intensive referral, and other efforts might enhance access to care, the evidence suggests practitioners and researchers should remain aware of community-level barriers to recovery from substance use disorder and work with clients to overcome them.

Keywords: access to care, alcohol use disorder, barriers, rural, substance use disorder, treatment

Disparities in health between various segments of the population have been well documented and usually are attributed to disparate access to health care resources. Ensor and Cooper (2004) identified both supply-side and demand-side attributes as barriers to care—and ultimately to better health. Research into both supply-side and demand-side barriers tends to focus on either cultural or organizational characteristics or on the most obvious socio-

demographic attributes of patients and providers: gender, age, ethnicity, and socioeconomic status (Balsa & McGuire, 2003; Braveman, 2006; Kawachi, Daniels, & Robinson, 2005; Lasser, Himmelstein, & Woolhandler, 2006).

Health disparities based on rurality in the United States have received less attention than disparities based on sociodemographic attributes, perhaps because they are more challenging to research. Although rural-urban distinctions are more complex than simple geographic location, rural-urban classifications are generally based on zip code of residence, county, census blocks, and distances from urban areas or sites of service delivery, such as health care. For example, the U.S. Veterans Administration employs a hybrid classification scheme using census tracts and counties (West et al., 2010), whereas the widely used Rural-Urban Community Areas (RUCAs) scheme takes into account commuting distances to urban centers (U.S. Department of Agriculture, 2014). Regardless of approach, rural residence is more likely than sociodemographic variables to vary over time. Further, unlike demographic characteristics, rurality is an attribute reflecting both compositional/individual and contextual/environmental dimensions (Macintyre et al., 2003; Sparks, 2012). In other words, identifying as rural reflects both an individual perspective and a set of opportunities and constraints relative to a more metropolitan identity. Those perspectives, opportunities, and constraints, however, vary for each individual.

Despite the challenges, research into rural-urban health disparities is necessary. Research consistently shows variations in health related to rurality, but the directionality of influence is unclear and might reflect both variations in health behaviors and access to health care (Judd et al., 2002; Sparks, 2012). To illustrate, geography is increasingly identified as a barrier to care, but it is often framed in terms of distance to health care resources and therefore applicable both to rural residents and urban residents in disadvantaged areas without health facilities (Frist, 2005). For rural residents, however, their community's population density constitutes an additional dimension to the geographic barrier. Compared to urban residents, those in rural areas have social networks that are smaller, denser, and based more on family ties (Beggs, Haines, & Hurlbert, 1996).

The relationship between rurality and substance use is particularly complex. Borders and Booth (2007b) documented that rural residents were more likely than urban residents to both abstain from alcohol and have an alcohol use disorder. Regional differences, however, were common. Researchers have found little difference in drug use rates between rural and urban residents (Donnermeyer & Scheer, 2001; Wang, Becker, & Fiellin, 2013), although evidence suggests methamphetamine use is higher in rural than in urban areas (Gfroerer, Larson, & Colliver, 2007). Reviewing the literature on substance use disorder (SUD) treatment, Borders and Booth (2007a) concluded, "rural populations have lower availability and utilize needed drug abuse services less frequently than their urban counterparts" (p. 79). Rural residents who do seek SUD treatment tend to be younger and less ethnically diverse than their urban counterparts, 41% are less likely to self-refer to treatment, and 82% are more likely to be referred by the criminal justice system (Substance Abuse and Mental Health Services Administration, 2012b).

Overall, these studies portray a rural population with treatment needs comparable to their urban counterparts, yet significantly less able or willing to enter treatment. Dew,

Elifson, and Dozier (2007) proposed a multilevel social epidemiological approach to reducing drug use vulnerability in rural populations. The three overlapping levels they identified were individual circumstances, family conditions, and community environment. They identified four community-level characteristics increasing rural residents' vulnerability to substance use: stigma, lack of treatment resources, increased availability of substances in rural areas, and lack of law enforcement resources. The purpose of this analysis is to extend the work by Dew, Elifson, and Dozier by describing community-level barriers facing rural residents seeking to recover from SUD. By *community-level* barriers we mean to exclude barriers reflecting individual characteristics and motivation, cultural and regional patterns of health behaviors, and organizational and systemic influences on access to care. Our exclusive focus on community-level variables is due to the fact that there are marked cultural differences among rural people across the United States, and although this is important, investigating the unique contributions these various cultures might make is beyond the scope of this article. Instead, our analysis focuses on obstacles faced by residents of any community characterized by low population density and distance from a larger center of population.

Method

The topic of this article—rural residents' community-level barriers to recovery from SUD—is narrow, but the manifestations of those barriers are potentially many and varied. Unfortunately, a systematic review of the empirical research would fail to identify several potential barriers because little or no research exists, for instance, on the differences in the types of people who attend peer support group meetings in rural versus urban settings. Our method, therefore, relies on the social scientific tools of logic and observation in an analytic method of abduction, what Sober (2012) called "reasoning to the best explanation." According to Krippendorff (2004), researchers employing abductive analysis use "a mixture of statistical knowledge, theory, experience, and intuition to answer their research question from available texts" (p. 38). Because the "available texts" that illustrate community-level barriers to recovery faced by rural residents appear in different forms (e.g., statistical data, qualitative research, and logic) across different domains (e.g., social scientific research, medical research, legal and policy research, and even narrative), an abductive approach is warranted. It allows researchers to develop a working hypothesis that best fits the available knowledge. The following sections explore 14 specific barriers to recovery across four categories discussed next.

Results

Table 1 presents 14 barriers to recovery from substance dependence faced by rural residents. Each will be considered within one of four broad categories: access to substance abuse treatment services, access to other professionals, access to peer support groups, and barriers to confidentiality. These four broad categories are outlined next.

Table 1. Community-Level Barriers to Recovery for Substance-Dependent Rural Residents

Category of barrier			
Access to treatment services	Access to other professionals	Access to peer support groups	Barriers to confidentiality
Distance to care	Availability of professionals	Distance to meetings	Professional relationships
Distance to aftercare	Diversity of professionals	Number of meetings	Support group member relationships
Family involvement	Training of professionals	Recovery program diversity	Social and community relationships
		Meeting diversity	
		Sponsorship options	

Access to Substance Use Disorder Treatment Services

Distance to Professional Treatment

This first barrier to recovery is perhaps the most significant practical barrier faced by rural residents with an SUD. Although current substance abuse treatment in the United States is inadequate to meet the demand and approaches are highly variable (McLellan & Meyers, 2004), evidence has long supported the effectiveness of SUD treatment (SAMHSA Center for Substance Abuse Prevention, 1995). Even controlling for years of substance use and race, Warner and Leukefeld (2001) found rural residents significantly less likely to seek treatment and noted that cultural explanations cannot account entirely for the disparity. Distance is undoubtedly a contributing factor: A methamphetamine addict living in Goldfield, Nevada, (population 258) would have to travel 68 miles one way to the closest treatment center listed on the Substance Abuse and Mental Health Services Administration’s (SAMHSA) substance abuse treatment facility locator (<http://findtreatment.samhsa.gov/TreatmentLocator/>).

In rural areas, even those who voluntarily seek professional treatment are likely to find distance an obstacle to entering and completing a program. In the best case scenario, a rural resident has reliable transportation to a distant inpatient or local outpatient facility. However, entry into professionally delivered SUD treatment is frequently precipitated by a driving violation (e.g., driving under the influence of alcohol), which rural residents are significantly more likely to receive than urban residents are (Webster, Pimentel, Harp, Clark, & Stanton-Tindall, 2009). In rural settings, distance and the lack of public transportation compound the typical transportation challenges of fuel costs, lack of an automobile, and lack of a valid driver’s license in accessing SUD treatment. Although rural residents are more likely to receive substance-related driving citations, they are significantly less likely than urban residents to receive a sentence requiring substance abuse treatment (Olson, Weisheit, & Ellsworth, 2001). Thus, rural residents might be more likely to enter the criminal justice system due to a driving violation, but less likely to be steered toward treatment or able to go to treatment if they are referred there by a judge.

Those who do enter treatment are likely to find significant differences between treatment offerings in rural and urban areas. Nationwide, 26% of treatment facilities in the

United States offer residential treatment, but 81% offer outpatient treatment, indicating the standard of care is to treat patients while they are integrated in their home setting (SAMHSA, 2012a). Yet, only 14% of outpatient facilities are located in rural counties, suggesting rural residents routinely must seek treatment far from home. Further, most of the outpatient facilities located in rural counties attempt to treat a range of mental health conditions, with only 42% focusing primarily on SUD (SAMHSA, 2011). By comparison, 65% of outpatient facilities in urban counties focus primarily on SUD. Although the rural outpatient facilities more likely use an integrated approach to treatment (addressing both substance use and co-occurring problems), they have fewer staff and funding resources than their urban counterparts (SAMHSA, 2011). Rural outpatients also tend to be younger and less ethnically diverse than urban outpatients (Davis, 2009). In short, the distance barrier faced by rural residents not only reflects transportation obstacles but also important restrictions on the types of care available and the composition of treatment groups.

Distance to Continuing Care

In his review of 20 years of controlled studies of continuing care, McKay (2009) found evidence for the effectiveness of longer and more active aftercare programs, but also called for alternative delivery methods, noting patients might be unwilling or unable to attend traditional aftercare. He specifically mentioned transportation as a barrier. Research confirms that the distance barrier is particularly acute for rural residents. After treatment discharge, only 40% of patients living more than 25 miles from the nearest aftercare facility complete any aftercare; those traveling less than 10 miles are 2.6 times more likely to receive continuing care than those traveling 50 miles or more (Schmitt, Phibbs, & Piette, 2003). Further, research shows that admission to a halfway house significantly increases participation in continuing care programs (Hitchcock, Stainback, & Roque, 1995) and supports the gains made during treatment (Polcin, 2009), yet such living arrangements are rarely available in rural areas.

Limited Family Involvement

Again, distance to the treatment facility is implicated in this barrier. Both rural and urban family members might be ambivalent about treatment and recovery (Le Poire, 2004), but even supportive family members might be unable to fully participate if they live at some distance from the treatment facility. Research indicates family members' most important role might be to motivate individuals to seek treatment (Steinglass, 2008, 2009), but their participation in education and therapy can increase the effectiveness of the treatment (Edwards & Steinglass, 1995; O'Farrell & Clements, 2012; Stanton & Shadish, 1997).

For rural family members, the distance barrier could reflect a lack of reliable transportation or more complicated problems related to extended travel time. Whereas an urban family member might be able to spare an hour to attend a therapy session, the same commitment for a rural family member could require three or more hours including travel time. Such a commitment often entails complex work scheduling and child care arrangements, particularly when the sessions are offered only during working hours. As a result, family members of rural residents might be less able to participate in treatment and are therefore less prepared for the changes in family dynamics recovery requires.

Access to Professional Support

Availability of Professionals

Rural residents are significantly less likely than urban residents to receive an array of health and social services. In particular, they are less likely to receive mental health services of any kind, leading Hauenstein et al. (2006) to conclude, "Reported mental health deteriorates as the level of rurality increases" (p. 169). Because people with SUD often have comorbid health problems, the limited availability of health service options in rural areas compared to urban areas could affect the recovery even of those who do receive SUD treatment. Rural areas have far fewer mental health facilities than needed, which limits the ability of those recovering from SUD to seek treatment for conditions (e.g., posttraumatic stress) that increase the chance of relapse. Merwin, Snyder, and Katz (2006) found that urban counties were 3.4 times more likely than rural counties to have a community mental health center. For instance, a prescription opiate addict with posttraumatic stress disorder living in Bridgeport, Nebraska (population 1,545) would have to travel 32 miles one way to the nearest mental health treatment facility (<http://findtreatment.samhsa.gov/MHTreatmentLocator/>).

The implications of the lack of professional resources are profound. Patients with SUDs need addiction-specific treatment, but they contend simultaneously with a constellation of physical, psychological, relational, financial, and legal problems related to their alcohol or drug use. Supplementing addiction treatment with case management and social services significantly improves outcomes on both substance use and life functioning measures (De Vet et al., 2013; Vanderplasschen, Wolf, Rapp, & Broekaert, 2007). In their examination of unmet needs for comprehensive services, Pringle, Emptage, and Hubbard (2006) singled out rural residents as "particularly disadvantaged" within a system that routinely fails to meet the needs of those seeking recovery. Although their study focused on an outpatient SUD treatment population, the problem is likely worse for rural residents who have been discharged from treatment and are in need of ongoing mental health and social services.

Diversity of Professionals

This barrier is a consequence of the overall lack of mental health and social service professionals in rural counties but is qualitatively distinct because it emphasizes that having access to a professional does not guarantee a beneficial outcome. Influencing the effectiveness of professional counseling is the therapeutic alliance (Horvath & Luborsky, 1993; Martin, Garske, & Davis, 2000), and professionals vary widely in their personal characteristics and ability to foster such an alliance with clients (Ackerman & Hilsenroth, 2003). Clients might even have better outcomes when they can choose a therapist similar to them in gender or ethnicity (Cabral & Smith, 2011; Wintersteen, Mensinger, & Diamond, 2005). In any of these instances, urban residents are far more likely to have alternatives, whereas rural residents might be fortunate to have even a single professional mental health worker in the entire county, much less someone knowledgeable about co-occurring disorders.

Training of Professionals

Professionals with advanced training in substance abuse treatment and co-occurring disorders tend to cluster in metropolitan areas. Thomas, Ellis, Konrad, Holzer, and Morrissey (2009) found rurality to be one of the two best predictors of unmet mental health needs. For example, a 2012 survey found 62 of Nebraska's 93 counties did not have even a part-time licensed alcohol or drug counselor (Nguyen et al., 2013). Social workers are likely to be the only mental health professionals in a rural county and they are often overwhelmed by the demands placed on them. Moreover, they might also be less able to remain current on developments in the field. Coaching and individual feedback are the more effective ways to disseminate evidence-based practices (Miller, Sorensen, Selzer, & Brigham, 2006), but these approaches are less likely available to rural mental health professionals than to their urban counterparts.

Access to Peer Support Groups

To this point, this analysis has focused on access to professional services, but many substance-dependent individuals are able to recover without professional help (Miller, 1998), including the majority of those with alcohol dependence (Cunningham, 1999). Whether or not individuals attempt recovery through formal treatment, research has provided ample evidence that social support for recovery is significantly and negatively correlated with relapse (Beattie, 2001; Hunter-Reel, McCrady, & Hildebrandt, 2009) and is particularly important for rural residents (Letvak, 2002). Professional treatment itself can be perceived as stigmatizing (Luoma et al., 2007), and such stigma might influence treatment seeking in rural areas (Fortney & Booth, 2001).

Although family support for recovery is valuable, family members vary in their willingness and ability to provide support (Rotunda, Scherer, & Imm, 1995) and family support alone is usually insufficient for recovery (Groh, Jason, Davis, Olson, & Ferrari, 2007). An additional ready source of social support in many communities consists of 12-step groups like Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). Such resources can serve as an alternative or supplement to professional help. Kelly, Magill, and Stout's (2009) review of the literature concluded AA is as effective as other interventions, including formal treatment. It might be particularly helpful when family members are unsupportive of recovery (Groh, Jason, & Keys, 2008). Rural residents, however, face at least five barriers not routinely faced by urban residents when seeking access to 12-step or other peer support groups.

Distance to Meetings

Twelve-step and other peer support group meetings are sustained by volunteers and require few resources. Nevertheless, smaller communities are less likely than larger ones to have a critical mass of recovering individuals with the commitment to sustain a meeting. As a result, individuals in rural communities often must travel some distance to a meeting. For example, a person with an alcohol dependence in Macon, Mississippi (population 2,719) would need to travel 40 miles to Starkville, Mississippi, for the nearest AA meeting. Furthermore, the same transportation deficiencies that hinder treatment attendance often pertain: lack of public transportation, lack of a vehicle, and lack of a valid driver's license.

Number of Meetings

Even smaller metropolitan areas often support AA groups and clubhouses that host multiple meetings every week at various times that accommodate the schedules of members. For example, Starkville, Mississippi, (population 23,926) has three AA groups offering 12 meetings per week. At least one meeting takes place every weekday and meetings are scheduled in the morning, at noon, after work, and in the evening. A recovering alcoholic in Starkville, therefore, should be able to find at least one or two hour-long meetings each week that can accommodate her schedule. Yet, 21 miles away in West Point, Mississippi, (population 11,221) a recovering alcoholic has only three AA meetings to choose from: Tuesday and Thursday at noon and Friday night.

The result of fewer meetings is that erstwhile AA members must fit their work, family, and child care schedule to attend meetings whenever they are offered, instead of finding a meeting that fits their schedule. Moreover, travel requires extra time and expense. For example, the Starkville AA member can attend a meeting across town in barely an hour, whereas travel time will require a two-hour commitment from the West Point member and nearly a three-hour commitment from the Macon member.

Recovery Program Diversity

Treatment centers that embrace the disease model often promote the idea that the phenomenon of addiction is largely the same, regardless of the substance on which clients are dependent. Their clients often leave treatment believing “an addiction is an addiction” and therefore might feel free to attend any available 12-step group. Although many individual AA meetings are welcoming to anyone with an addictive disorder, AA has long maintained that its traditions restrict membership to those struggling with alcoholism (Alcoholics Anonymous, 1953, 1958). These traditions continue to be reinforced by anecdotal reports of drug-using individuals who identify themselves as “addicts” at an AA meeting and are then asked to leave the meeting (Carmona, 2012). These reports contribute to the hesitation that those with a history of dependence on other substances feel about attending AA, and this is particularly relevant in rural communities with few, if any, non-AA or non-12-step support group meetings, such as spirituality-free SMART Recovery, self-control-based Moderation Management, or the Christian ministry Celebrate Recovery.

Maine, with many rural areas, illustrates the point. Recognizing the value and appeal of peer support groups for its citizens, Maine’s Office of Substance Abuse and Mental Health Services (2014) publishes a guide, available online, listing such meetings in the entire state. Of 23 pages of meeting listings, more than half consist of AA meetings, whereas all the NA meetings in the state nearly fit on a single page. Of the seven Cocaine Anonymous meetings in the state, six take place in Portland, Maine’s largest city. Portland also hosts the state’s single Crystal Meth Anonymous meeting, even though rural residents abuse methamphetamine at nearly twice the rate of urban residents (Lambert, Gale, & Hartley, 2008). Maine has three SMART Recovery meetings, but one is in Portland and another is in Augusta, the capital. Nineteen faith-based recovery programs are listed, and only two of them are in Portland, suggesting churches in rural areas are a somewhat more accessible recovery resource, although the evidence base for church-based recovery initia-

tives is lacking. In short, many rural individuals do not have access to non-AA peer support meetings or end up in AA meetings where they might not feel welcomed or comfortable.

Meeting Diversity

Rural residents are not only restricted in the type of peer-support recovery programs available to them, but rural communities are less likely to provide specialized 12-step meetings common in urban communities. Some meetings are designed to enhance trust and peer support among attendees and are designated specifically for men or women, for lesbians and gays, or those who speak other languages. In addition, meeting formats vary to enhance the individual's comfort and meeting experience and are designated as using a discussion format, a reading/study format, a featured speaker format, a meditation format, and so on (Fewell & Spiegel, 2014). Rural residents simply have less variety to choose from.

Sponsorship Options

One of the mechanisms by which 12-step groups cultivate recovery is through adaptive social network changes (Kelly et al., 2009). Establishing face-to-face relationships with others supportive of recovery is a key element to establishing a sober lifestyle. Perhaps the most important relationship within a 12-step fellowship is with the sponsor, a member dedicated to helping another member maintain sobriety. In AA, 81% of members have a sponsor (Alcoholics Anonymous, 2012). Fellowships have various recommendations for sponsor selection (Alcoholics Anonymous, 2005; Narcotics Anonymous, 2004), with the overall aim of matching a member with someone who is reliable, has healthy long-term recovery, and can maintain appropriate boundaries. The larger groups and meetings in urban areas offer a variety of sponsor options, but in rural meetings with perhaps four or five members, no one might meet the requisite criteria. For instance, due to potential boundary issues, heterosexual males would be discouraged from sponsoring females, but a newly sober female in a rural area might find only men at the nearest meeting.

The families of substance-dependent rural residents face similar challenges to those of their recovering loved one. Nar-Anon is far less likely to hold meetings in rural areas than is Al-Anon, and even Al-Anon is unlikely to have many rural meetings and its fellowship is not diverse (Young & Timko, 2015). This lack of family support could indirectly and disproportionately hinder the recovery of substance-dependent rural residents.

Barriers to Confidentiality

The final community-level barriers to recovery relate to the expectation for confidentiality. Even when rural and urban residents have similar individual privacy needs and perceptions of the stigma of addiction, rural residents might logically deduce that details of their substance use and recovery efforts are more likely to become known to others. In rural areas, social networks are usually denser than they are in urban areas, meaning those people an individual knows are more likely to also know one another. Further, rural residents' social networks are more likely to include family members (Fischer, 1982). Because those people in a rural area who know a recovering individual are more likely bound by ties of

kinship and common relationships, they could simultaneously be more motivated to monitor behaviors and to share such information with each other. Even without kinship ties, neighbors in rural areas might be easier to identify and monitor because there are fewer of them than in urban areas. In short, the types of relationships more common in rural areas could make confidentiality more difficult to maintain.

Professional Relationships

One confidentiality-related barrier to recovery is that rural residents might feel less assured that their treatment seeking will remain private. Even when treatment professionals abide by federally mandated privacy regulations, barriers could persist. For instance, a rural resident who attends an out-of-town inpatient treatment program might be more conspicuous in his or her absence from the community than an urban resident who attends the same program. For those seeking professional care locally, confidentiality might be more problematic than distant inpatient care. Jeffrey and Reeve (1978) noted that in small communities health care workers often share limited building space with other professionals whose clients might recognize those entering or exiting the substance abuse or mental health facility. In small towns, parked vehicles owned by individuals seeking treatment could be nearly as familiar as their drivers. Further, in rural areas the clinicians might be more likely to share family or social ties with the (prospective) client, making disclosures uncomfortable. Barriers like these could underlie findings that confidentiality is a chief concern of rural residents seeking professional treatment for SUD (Davis, 2009; Fortney et al., 2004).

Support Group Member Relationships

Urban peer support group members have more opportunity of finding meetings attended by people unfamiliar to them, which can facilitate anonymity when sharing painful experiences or even illegal activities. Whether the (perceived) likelihood of negative repercussions from sensitive disclosures is greater in rural or urban settings is not known. However, disclosures to other AA members, both inside and outside of meetings, have been used in criminal prosecutions (Coleman, 2005; Reed, 1996; Weiner, 1995).

Another concern about disclosure in rural meetings is a potential consequence of the aforementioned reticence to disclose. One way peer support groups help recovering members is through establishing new and healthy relationships with people who will reinforce healthy behaviors. In AA, the friendship network is more likely than the family network to change in positive ways as a consequence of the recovery program (Groh et al., 2008). In rural areas, the presence in meetings of family members and acquaintances could compromise the opportunity for a recovering individual to form new and healthier social ties, given the centrality of self-disclosure to the formation of new relationships. Future research should investigate whether meeting attendees in rural areas are less disclosive than in urban areas and whether such reticence affects recovery.

Social and Community Relationships

A final barrier to recovery is the perception that social and community relationships could be strained if (or when) an individual's problem or treatment seeking becomes known.

Rost, Smith, and Taylor (1993) found rural residents seeking treatment for depression attach more stigma to treatment seeking than do their urban counterparts. Further, rural at-risk drinkers are more likely to perceive stigma from others when they have closer relational ties in the community (Fortney et al., 2004). In rural areas, community members might include local law enforcement and employers and employees of the individual in need of recovery. Thus, disclosures of help seeking could risk significant legal and financial consequences. Following sexual secrets, addiction is the second-most common taboo secret, defined as a secret stigmatized by both family and community (Brown-Smith, 1998; Mason, 1993). Therefore, the revelation of an addiction problem could profoundly change not only the addict-community relationship, but also the family-community and addict-family relationships. Because some of those changes might be both negative and irreparable, avoiding professional or support group help might serve to avoid disclosure of the problem—at least temporarily. Alternatively, Hall and Skinner (2012) found that when a substance use problem was well known to a rural community, recovery could be undermined because the individual struggles to live down a past well known to everyone. Closer family and community ties and the greater likelihood of disclosure could therefore hinder help seeking more among rural than among urban residents.

Discussion

The foregoing analysis identified 14 barriers to recovery from substance dependence more likely faced by residents of rural communities than urban residents. Enumerating these barriers is an important step toward raising awareness among treatment professionals and researchers. Social workers and other treatment professionals should remain sensitive to the impediments associated with both distance from resources and density of the local population.

Awareness of these potential barriers should lead to collaborative problem solving to help clients overcome them and achieve long-term recovery. In addition to awareness, several developments could mitigate the impact of these problems and bear monitoring. First, a profusion of telehealth interventions are in various stages of development and implementation to foster recovery in help-seeking clients (Young, 2012). Although access to electronic communication is a requirement, these interventions could vastly expand the number, diversity, and quality of professional and support group resources available to rural residents, while preserving a measure of confidentiality.

Second, the coming years might bring needed investment in substance abuse and mental health services for rural residents (Talbot, Coburn, Croll, & Ziller, 2013). In particular, the federal Mental Health Parity and Addiction Equity Act, the provisions of which are enhanced by the Affordable Care Act (ACA), will affect many more people in the coming months, removing several cost-related barriers to care for rural residents. Greater access to one-on-one therapeutic interventions, in particular, could benefit rural residents reluctant to engage in a support group format. Mobile health units providing substitution medications or mental health assessment could also help to overcome distance barriers.

In their in-depth examination of the Affordable Care Act's implications for SUD treatment, Tai and Volkow (2013) identified three ways the ACA could enhance long-term outcomes for patients. The first is integrated primary and SUD care based on a chronic care model. The second is the adoption of health information technologies that will facilitate integrated care. The third is the increased reliance on social workers and other nonphysician health care workers that a chronic care model necessitates. The authors' discussion includes an example in which a case manager refers a patient to a support group as an element of the care coordination. Each of these three developments is potentially more beneficial for rural than for urban residents. Together they could address the majority of barriers to recovery we identify in this article.

Third, intensive referral interventions are proving effective in reducing relapse rates among clients leaving professional substance abuse treatment (Timko & DeBenedetti, 2007). Intensive referral involves a more deliberate effort to educate clients on the effectiveness of peer support groups, to facilitate both attendance and involvement with a support group, and to follow up with clients so that they continue to develop a recovery-supportive social network during their transition to a home environment. We are currently collecting data on an adaptation of intensive referral tailored to treatment clients returning to rural areas.

Finally, as research continues, other creative solutions might present themselves. White, Kelly, and Roth (2012) discussed various options outside of professional treatment and 12-step support group traditions. They specifically mentioned the recovery advocacy movement, an initiative supported by diverse organizations and individuals to promote SUD recovery on multiple fronts, including advances in policy, culture, awareness, education, and research. The movement largely relies on recovery community organizations (RCOs) to engage in grassroots outreach and organizing. Given the low population density, some of those RCOs such as recovery community centers, recovery homes, recovery industries, and recovery schools, would not likely emerge in rural areas. On the other hand, churches remain central institutions in rural areas and many of them now host their own addiction support groups, such as Celebrate Recovery. Communities that sustain these groups are candidates for recovery ministries that reflect the multifaceted character of other RCOs, legitimating and sustaining recovery as a social and cultural identity.

More research is needed on the effectiveness of these and other approaches. Research is particularly needed to compare recovery rates using various treatment approaches, types of professionals, and support groups, controlling for distance to resources, population density, and social network density. Although many rural individuals make heroic efforts to overcome the barriers we identified and achieve recovery, minimizing those barriers promises to make recovery attainable for far more rural residents.

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