Behavioral Health Care of the Agricultural Population: A Brief History*

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Abstract: *Historically, the behavioral health of the agricultural population has been affected by their economic well being. Sufficient research now exists to recognize the agricultural population as a health disparity group. A pattern of environmental, cultural, and economic factors unique to the agricultural community suggests a higher risk for health disparity among persons engaged in agriculture. This article traces the development of specialized behavioral healthcare services designed for the agricultural population. Gradually over the past few years a new field, agricultural behavioral health, has emerged.*

The land means everything to farmers. Ownership of a family farm is the triumphant result of the struggles of multiple generations of immigrants to America. Losing the family farm is the ultimate loss—bringing shame to the generation that has let down their forebears and dashing their successors' dreams. Farming has always been a stressful occupation because many of the factors that affect agricultural production are largely beyond the control of the producers, such as weather, disease, government policy, and changing supply/demand. The emotional well being of family farmers and ranchers is intimately intertwined with these changes.

Development of behavioral healthcare services specific to the agricultural population generally has accompanied periods of economic difficulty for farmers, ranchers, and farm laborers, such as the Great Depression of the 1930s and the Farm Crisis of the 1980s. The development of rural social work and the federal Works Progress Administration were responses to the great numbers of unemployed, displaced, and emotionally distressed rural people, who mainly were unable to continue farming or working in farming-related industries during the Great Depression. Similarly, the Farm Crisis of the 1980s contributed to a suicide rate among male farmers and ranchers that was nearly four times as high as the national average and led to a rash of homicides (e.g., shootings of farm lenders) and social protests (e.g., rallies at farm auctions), making the news on a daily basis. One response to the 1980s crisis was the institution, in a number of agricultural-based states, of telephone hotlines to provide confidential and free supportive counseling for farm and rural callers (e.g., Iowa Concern Hotline, Kansas Rural Family Helpline, Nebraska Rural Response Hotline, Wisconsin Farm Center). The hotlines employed trained telephone responders familiar with agriculture who referred callers, as necessary, to various forms of assistance such as mediation and professional mental health services.

Concurrent with the initiation of farm crisis telephone services in the 1980s, leaders in several states developed specialized behavioral health counseling services for farmers and ranchers. The Farm Resource Center in Illinois, described by Hannan (1998), employed trained outreach workers familiar with farming to visit farmers and their families in their homes. The outreach workers provided crisis counseling and connected farmers with other types of supports such as

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legal assistance and financial advice. The University of Wisconsin Extension offered stress management workshops, farm family communication seminars, intergenerational farm transfer sessions, and organized farm family support groups (Williams, 1998). Section 1440 of the Food Security Act of 1985, as amended in the 1987 Farm Crisis Recovery Act, enabled eight states (i.e., Iowa, Kansas, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, and Rhode Island) to provide a variety of crisis services to farmers and their families (Rosmann, 1993). Some states employed trained outreach workers and community educators familiar with agriculture to offer crisis counseling at farmers' homes and in community workshops. Other states made professional counseling and/or job retraining available. Barrett (1987) described many of the mental health and social programs that began in response to the Farm Crisis of the 1980s in her book, *Mending a Broken Heartland: Community Response to the Farm Crisis*.

The National Association for Rural Mental Health (NARMH) evolved from a summer study program on rural mental health at the University of Wisconsin–Madison, which was established in 1973 by Victor I. Howery through the University of Wisconsin Extension with support from the National Institute of Mental Health (NIMH). NARMH brought together professional mental health and addictions providers, state and federal healthcare planners, clergy, employees of state university extension programs, and other persons interested in the behavioral health of rural populations. The NARMH annual conferences and its publications—*Rural Community Mental Health* (now the *Journal of Rural Mental Health*); *Party-Line;* and position papers—served as forums for discussions and exchanges of information among persons concerned about the behavioral healthcare of agricultural producers, workers, and their families.

University Extension staffs in agricultural states also were instrumental in the provision of behavioral health responses to the Farm Crisis. State extension staffs in agricultural states organized farm crisis workshops, offered farm financial analyses (e.g., FINPAK, a farm business analysis program; CHAPS, a cowherd analysis program system; and SWAP, a swineherd analysis program), distributed literature, and instigated economic development efforts to improve the financial circumstance of agricultural populations and their communities.

The Farm Crisis of the 1980s also boosted the development of agricultural occupational safety and health programs throughout the country as well as the field of agromedicine (Donham & Thelin, 2006). The National Farm Medicine Center at Marshfield, Wisconsin, was established in 1988 and the North American Agromedicine Consortium was founded that same year. Two new journals, *Journal of Agricultural Safety and Health* and the *Journal of Agromedicine*, were initiated in the early 1990s. University-based research and training programs in agricultural medicine and health sprang up in agricultural areas around the country. A number of non-university-based agricultural safety and health programs and organizations (e.g., AgriSafe Network, Farm Safety 4 Just Kids, and AgrAbility) formed to prevent farming-related injuries, illnesses and fatalities, and to rehabilitate injured farm people. Behavioral health components were included, but behavioral health perils did not receive the financial support or research that agromedicine received. Behavioral healthcare of the agricultural population was—and still is—the least understood and least funded component of agricultural occupational safety and health.

The field of agricultural behavioral health is emerging slowly, however. Agricultural behavioral health practices are now integrated into the roles of AgriSafe nurses who operate specialized agricultural health clinics in the eleven states that comprise the AgriSafe Network. Other work is occurring at the Texas A&M University and at Colorado State University to define essential training for agricultural behavioral health therapists (Peterson, 2007). The Sowing the Seeds of Hope Program was designed and initiated in 1999 by the Wisconsin Office of Rural Health and the Wisconsin Primary Healthcare Association to respond to the behavioral healthcare needs of farm families in seven states (Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin). Since 2001, AgriWellness, Inc., a nonprofit organization, has administered the Sowing the Seeds of Hope Program and broadened the range of behavioral health supports, especially following disasters. The Sowing the Seeds of Hope Program uses telephone hotlines in the seven states to link farm and ranch callers with a variety of supports and professional behavioral health services. This program was named as a best practice model in *Rural Healthy People 2010: A Companion Document to Healthy People 2010* (Gamm, Hutchison, Dabney, & Dorsey, 2003) and cited in the National Rural Health Association compendium of model programs, *Hope in the Face of Challenge: Innovations in Rural Healthcare* (Rowley, 2004). Three recently published books about agricultural healthcare include chapters devoted to the behavioral health of the agricultural population: *Agricultural Medicine: Occupational and Environmental Health for the Health Professions* (Donham & Thelin, 2006); *Agricultural Medicine: A Practical Guide* (Lessenger, 2006), which includes a chapter by Hovey and Seligman entitled "The Mental Health of Agricultural Workers"); and *Partners in Agricultural Health* (Duerst, 2003), including a chapter by Rosmann entitled "Agricultural Behavioral Health: In Critical Need." A biannual conference, "The Clock is Ticking for Rural America: A Behavioral Health and Safety Conference," has convened three times (see www.agriwellness.org). It succeeds in bringing together professionals, state and federal planners, researchers, and behavioral healthcare consumers from around the United States and several foreign countries.

Factors that hamper the effective delivery of behavioral health services to the agricultural population are changing slowly. Farm people tend to be self-reliant and avoid seeking behavioral healthcare even when needed (Hoyt, Conger, Valde & Weihs, 1997; Rost, Smith, & Taylor, 1993; Roy, 2001). Lack of agricultural behavioral healthcare providers in rural areas who understand the culture of people engaged in farming and ranching is a serious contributing factor (Eberhardt, Ingram, Makuc, Pamuk, Freid, Harper, et al, 2001; Hartley, Bird, & Dempsey, 1999; Hartley, Ziller, Loux, Gale, Lambert & Yousefian, 2007). Difficulty affording adequate healthcare insurance adversely impacts the agricultural population. This is especially a problem among younger farmers, farmers who do not qualify for Medicare, racial and ethnic minorities, or persons who do not have outside employers to provide health insurance (University of Wisconsin, 2002; Ricketts, 2004; Gamm, 2004; Lottero, Pryor, Rukavina, Prottas, & Knudson, 2007). The Access Project (Lottero et al., 2007) found that about 20 percent of their farm and ranch respondents in seven states had outstanding debt resulting from medical bills. These factors, when combined, led Hartley (2004) to conclude that the rural agricultural population should be recognized as a health disparity group because a pattern of environmental, cultural,

and economic factors exists that is unique to the agricultural community and that leads to a higher risk for health problems while reducing access to healthcare services, especially behavioral healthcare.

Specific research attention is beginning to be paid to the behavioral health of the agricultural population. To illustrate, one of the best established research findings is the connection between cholinesterase-inhibiting pesticides, such as organophosphates and carbamates, and depressive behavior, including suicide (Keifer & Firestone, 2007; Reigart & Roberts, 1999; Stallones, 2007). Research documents behavioral health conditions of samples of farmers (e.g., DeArmond, Stallones, Chen, & Sintek, 2006; McSparron, 2005; Rosmann & Delworth, 1990), ranchers (e.g., Carson, Araquistain, Ide, Quoss, & Weigel, 1994), and migrant farm workers (e.g., Hovey & Magaña 2000). These studies generally report links between economic stress and compromised behavioral health. There are no nationwide comprehensive evaluations of the behavioral health of the agricultural population. Most comprehensive evaluations (e.g., Hartley, 2007, Mojtabai, 2005, 2006; Singh & Siahpush, 2002) include agricultural people in the larger rural populations. The surveys point to specific enhanced behavioral health risks of the agricultural subset, such as stress-related mental health conditions and including suicide. Indeed, the suicide rate of male farmers is about twice that of males in general (Gunderson, Donner, Nashold, Salkowicz, Sperry & Wittman, 1993).

Together, the research findings based on agricultural population samples and available trends from comprehensive evaluations of rural people in which the agricultural population is embedded, suggest that farmers and ranchers are relatively free of long-term debilitating behavioral health conditions, such as schizophrenia, personality disorders, and chronic addictions. Persons with serious chronic behavioral health issues usually are not able to farm successfully and have been gradually eliminated from the farm population over multiple generations. About two thirds of the agricultural population in the United States are well functioning persons whose behavioral health waxes and wanes in response to the amount of stress they experience. The other third exhibit one or more serious behavioral health conditions such as depression and/or substance addiction. Long-term exposure to multiple stressors wears down coping capacities and results in a build-up of difficulties. The types of difficulties manifested by the agricultural population include the following, listed in the order of their frequency of occurrence: breakdown of interpersonal relationships (divorce, parent-child problems, and abusive relationships), adjustment disorders that are time-limited and recede when stress remits, depression, anxiety, and addictive disorders. Substance abuse often accompanies mental health conditions as a co-occurring disorder. All these problems usually respond well to therapeutic interventions, such as counseling, psychotropic medication, and other forms of social support. Culturally appropriate services enhance positive treatment outcomes. Specific ethnic minorities, such as rural Hispanic males, and persons who lack adequate social support networks are particularly likely to exhibit behavioral health conditions. As might be expected, the risk of psychological injuries, especially suicide, is similar to the risk of physical health injuries and illnesses: the chances of these undesired events increases with age, economic stress, and exposure to too many distressing events at once. If there is a general conclusion that can be reached, it is that there is a somewhat enhanced likelihood that the agricultural population will

experience greater behavioral health perils in comparison to the nonagricultural population. Thus, culturally appropriate behavioral health supports are needed for the agricultural population.

Conclusion

Where is the field of agricultural behavioral health headed? A number of directions appear to be emerging. First, there is momentum to develop a culturally competent agricultural behavioral healthcare workforce. Recently, Madsen (2007) and Swanson (2007) wrote editorials that called for specialized training of agricultural safety and health professionals, including behavioral health therapists. As yet, there are no graduate schools training agricultural behavioral health therapists or even a textbook or curriculum in the field, but efforts by the AgriSafe Network and the Cooperative Extension programs at Texas A&M University and Colorado State University are moving in that direction. The Saskatchewan Farm Stress Unit and the Manitoba Farm and Rural Stress Line have developed extensive manuals to train their telephone responders how to appropriately respond to calls from the agricultural and rural populations in their respective provinces. AgriWellness, Inc. is working to compile a textbook and curriculum in agricultural behavioral health. It has been suggested that a National Center for Agricultural Behavioral Health should be created to conduct research and train professional providers of agricultural mental health services (Rosmann, 2002). These efforts blend with a federal initiative by the Substance Abuse and Mental Health Services Administration to develop a culturally competent behavioral health workforce.

Second, there appears to be developing recognition that the agricultural population is a health disparity group that warrants access to affordable, culturally appropriate behavioral healthcare services that are accessible at times and places conducive to their use (Peterson, 2007; Peck, 2005). The 2007 Farm Bill authorizes a Farm and Ranch Stress Assistance Network, which will function like an Employee Assistance Plan for the agricultural population (Rosmann, 2007). When implemented, the agricultural population nationwide will be able to access services by calling statewide toll-free telephone hotlines operating 24/7. The hotlines will arrange for several free outpatient mental health and/or addictions treatment sessions with a trained agricultural behavioral health specialist. This provision signals a philosophical shift in the United States Department of Agriculture to include care of agricultural producers themselves as well as the resources used in agriculture and crop subsidization.

A third trend is the development of research proposals to examine agricultural behavioral health as an evidence-based best practice. One study is underway at AgriWellness, Inc., with assistance from the University of Iowa and Iowa State University, to undertake a comprehensive evaluation of farm crisis services consisting of a telephone hotline that can connect callers with follow-up behavioral health services.

Agricultural behavioral health’s future is promising.

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Biography

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