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MENTAL HEALTH AND MENTAL DISORDERS—A RURAL CHALLENGE: A LITERATURE REVIEW

by Larry Gamm, Sarah Stone, and Stephanie Pittman

SCOPE OF PROBLEM

- A survey of state and local rural health leaders finds mental health and mental disorders to be the fourth most often identified rural health priority.[43]
- Mental health is one of the 10 "leading health indicators" selected through a process led by an interagency workgroup within the U.S. Department of Health and Human Services.[44]
- Psychoses is virtually tied with cancer as the fourth most frequently first-listed diagnoses for hospital discharges nationally.[45]
- The suicide rate among rural males is higher than among their urban counterparts across all four regions of the nation.[20]
- Among 1,253 smaller rural counties with populations of 2,500 to 20,000, nearly three-fourths of these rural counties lack a psychiatrist, and 95 percent lack a child psychiatrist.[16]
- Access to mental health care and concerns for suicide, stress, depression, and anxiety disorders were identified as major rural health concerns among state offices of rural health.[46]

GOALS AND OBJECTIVES

One Healthy People 2010 goal is to "improve mental health and ensure access to appropriate, quality mental health services."[5] This review addresses the Healthy People 2010 mental health and mental illness goal—improve mental health and ensure access to appropriate, quality mental health services emphasizing access to treatment by mental health providers in rural areas. This review addresses this Healthy People 2010 goal and three of the objectives associated with the goal:

- 18-6. Primary care screening and assessment.
- 18-7. Treatment for children with mental health problems.
- 18-9. Treatment for adults with mental disorders.

Mental disorders affect approximately one-half of the population over a lifetime[1] and are among the most impairing of chronic diseases.[2, 3] Healthy People 2010 distinguishes among several related terms in examining mental health:

- *Mental health* is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. Mental health is indispensable to personal well being, family and interpersonal relationships, and contribution to community or society.

Mental disorders affect approximately one-half of the population over a lifetime[1] and are among the most impairing of chronic diseases.[2, 3]

- *Mental disorders* are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof), which are associated with distress and/or impaired functioning and spawn a host of human problems that may include disability, pain, or death.
- *Mental illness* is the term that refers collectively to all diagnosable mental disorders.[5]
- *Mental disorders* include three major categories of mental illness:
  - *Schizophrenia* will affect more than 2 million people per year in the U.S.[47]
  - *Affective disorders* (major depression and manic depressive illness) are the leading cause of disability among adults in developed

nations such as the U.S. (World Health Organization), and high rates of suicide are associated with these mood disorders.[48]

- *Anxiety disorders* (panic disorder, obsessive-compulsive disorder, posttraumatic stress disorder, and phobia) are more common than other mental disorders, affecting as many as 19 million people in the U.S. each year.[49]

General labels attached to mental illness considered severe or serious are:

- *Serious mental illness (SMI)* is a diagnosable mental disorder found in persons aged 18 years and older that is so long lasting and severe that it seriously interferes with a person's ability to take part in major life activities.
- *Serious emotional disturbance (SED)* is a diagnosable mental disorder found in persons from birth to age 18 years that is so severe and long lasting that it seriously interferes with functioning in family, school, community, or other major life activities.[5]

IDENTIFIED BY PEOPLE LIVING IN RURAL AREAS AS A HIGH PRIORITY HEALTH ISSUE FOR THEM

Mental health and mental disorders were identified as the fourth highest ranking rural health concern among 28 functional areas.[4]

According to the Rural Healthy People 2010 survey, mental health and mental disorders were identified as the fourth highest ranking rural health concern among 28 functional areas identified by Healthy People 2010.[4] In this nationwide survey, 37 percent of the state and local rural health leaders responding selected mental health and mental disorder as one of their top rural health priorities, after access, oral health, and diabetes. There was substantial agreement on the rural priority status of mental health relative to all other Healthy People 2010 functional areas. Although mental health ranked in 12th place among most often identified priorities by local public health officials, it ranked among the top five most frequently selected priorities among state health leaders, and leaders of rural community health centers and clinics and rural hospitals. In fact, state health leaders and leaders of rural community health centers and clinics were significantly more likely than local public health officials and rural hospital leaders to identify mental health as a priority.[43] Mental health was ranked in the top five priorities across all four regions of the country, but the Northeast and West regions were significantly more likely than the Midwest or South to nominate this focus area as a priority.[43]

PREVALENCE AND DISPARITIES IN RURAL AREAS

Mental disorders are widespread in urban and rural areas alike and affect approximately 20 percent of the population in a given year.[6, 7]

Mental disorders are widespread in urban and rural areas alike and affect approximately 20 percent of the population in a given year.[6, 7] An estimated 20 percent of children and adolescents age 9 to 17,[8] and as many as 25 percent of those 65 years and older[9] suffer from mental illness each year. Approximately one-half of the population experiences a mental disorder over a lifetime.[1] Mental illness is often a contributor to and/or a consequence of disabilities or other serious health-related conditions among the nation's most vulnerable populations such as the homeless, alcohol or substance abusers, and abusing families.[19] Compared to other chronic diseases, mental disorders strike earlier, often in the period extending from the teens to the mid-twenties.[7] Of those who experience a mental disorder, only a minority report treatment in the preceding year.[10]

The prevalence of lifetime and recent mental disorders appear to be similar in rural and urban areas.[6, 11, 12] However, rural residents with mental illness may be less likely than their urban counterparts to define

themselves as needing care.[13, 50] They are less likely, too, to report three or more recent mental disorders.[6]

There is evidence of higher suicide rates, a standard indicator of mental illness, in rural areas particularly among adult males and children.[12, 20] There also are more suicide attempts among depressed adults in rural areas than in urban areas.[21]

Utilization

Under-utilization of mental health services has been identified as a feature of mental health in most settings.[10] Recent reviews find substantial evidence that utilization of mental health services is lower in rural than in urban areas.[13, 33, 42]

The use of outpatient mental health services is frequently found to be lower in rural areas than in urban areas.[23, 31, 32, 34] In a three-year study of inpatient and outpatient Medicaid claims in Maine, rural Medicaid beneficiaries are less likely than urban ones to have an outpatient mental health visit in a year's time; those with visits have fewer mental health visits per year, and rural disparities in inpatient visits are even more pronounced.[32] Similar underutilization is found in a study of a commercially insured population in Maine.[51] Nonetheless, degree of unmet treatment need for SMI may be lower in rural areas. According to one recent national study, rural residents with SMI are more likely than urban dwellers and young adults to have their treatment needs met.[35]

Numerous studies associate poverty, age, and minority status with a low, or a lower, likelihood of receiving mental health care.[13] Blacks and rural residents underutilize mental health services and seek help later.[15] The difference in utilization between blacks and whites may reflect cultural differences in dealing with mental illness.[14] Rural African Americans often perceive the mental health system as representing the dominant culture.[15]

Elderly adults may face particular challenges in accessing mental health services. Although an estimated 15 to 25 percent of non-institutionalized elderly suffer from mental disorders, only 2 to 4 percent of mental health professional's practice time is spent with elderly clients. Unfavorable reimbursement and patient perception of provider reluctance are among possible reasons for such apparent underservice of the elderly.[17] The nursing home picture appears even less favorable to mental health treatment for the elderly. Although two-thirds of elderly nursing home residents suffer from a mental disorder, less than 5 percent receive a mental health treatment within a one month period.[52]

Children and Adolescents

Nationally, an estimated 20 percent of children and adolescents, similar to rates among adults, suffer from emotional and behavioral disorders. About 11 percent of children experience significant functional impairment; 5 percent of children experience extreme functional impairment, and 10-15 percent of children and adolescents have symptoms of depression at any one time. Among youths nine to 17 years of age, 9 to 13 percent suffer from serious emotional disturbances, conditions affecting their daily functioning.[7, 48, 53, 54] A study based on a 1990-1992 nationwide survey found that the most youthful age group considered, those age 15 to 24, are most likely to report not receiving minimally adequate treatment for serious mental illness.[55]

A recent study notes several articles over the past decade that report that rural youth receive fewer mental health services than urban youth.[42] Rural children are likely to be disadvantaged in mental health treatment, especially for serious emotional disturbances. Rural areas are most disadvantaged in meeting the needs of children with serious mental health problems because of the relative lack of psychiatrists, and especially child psychiatrists, in rural areas.[16]

The Great Smoky Mountains Study of Youth found that rural children with mental illness receive mental health care from a variety of sources, and rural children are less likely to use these services. Typically, children with mild mental health problems are served by a loose network of family physicians, school counselors, mental health workers, and child protective caseworkers.[56, 57] A study of rural teens in

a Mississippi River Delta county finds that youth who experience depressive symptoms report relatively fewer visits to physicians' offices but more visits to emergency rooms, public health clinics, and school-based clinics. Such utilization patterns suggest the need for better linkages among ambulatory settings and mental health providers.[58]

IMPACT OF THE CONDITION ON MORTALITY

The impact of mental health and mental disorders on mortality in rural areas appears in several forms. Suicide was the fourth leading cause of death among children aged 10-14 in 1999, climbing to third for ages 15-24 and to a high rank of second leading cause of death for ages 25-34. It drops to the fourth leading cause among the 35-44 age group, to the sixth leading cause of death among the 45-54, and to eighth rank among the 55-64 age group, after which it is no longer ranked in the top 10 leading causes of death for older groups.[59]

Higher suicide rates are found in rural areas, particularly among adult males and children.[12, 20]

Higher suicide rates are found in rural areas, particularly among adult males and children.[12, 20] For adult males, this is most pronounced in the less populated nonmetropolitan counties, without a city of 10,000 or more.[20] Suicide rates increase with age and are a serious problem among the elderly; the rates are highest among white-American males aged 65 years and older.[60]

The presence of more than one mental disorder is a major risk factor for suicide.[61] Major depression combined with alcohol abuse, for example, presents a serious added risk.[62] An Arkansas study finds that rural individuals suffering from bipolar disorders report higher rates of suicide attempts than their urban counterparts.[23] In addition to mood disorders such as depression and bipolar disorder, unwillingness to seek help because of the stigma attached to mental illness and barriers to accessing mental health treatment are also major risk factors for suicide.[60]

There is evidence, too, that depression, anxiety, and other psychosocial factors contribute to progression and outcomes associated with chronic illnesses, such as heart disease and cancer.[22] One study, for example, links depression to early mortality among first heart attack survivors.[63]

IMPACT OF THE CONDITION ON MORBIDITY

Depression is an important cause of morbidity and a frequent co-morbidity for other illnesses. According to a report from the U.S. Surgeon General,[18] depression is the leading cause of disability in the United States.[64] For example, depression in elderly patients is frequently seen as a co-morbidity to other acute or chronic illnesses. The highest prevalences of depression (percentages varying with methodologies) are seen in patients with stroke (25 to 48 percent), coronary artery disease (8 to 44 percent), cancer (1 to 40 percent), Parkinson's disease (4 to 90 percent), and Alzheimer's disease (20 to 40 percent).[65] A review of clinical epidemiologic surveys reports that untreated mental disorders can complicate the treatment of physical disorders,[7] possibly leading to death.

One study finds the threshold for admission to the Arkansas State Hospital system, as measured by violence and destructive behavior, is higher for patients from rural areas. Lack of adequate mental health services in rural areas may delay entry into the mental health system until behavior is more serious. Also, substance abuse among the rural mentally ill was associated with particularly high rates of violence.[66]

No differences in one year symptom outcomes are observed in studies comparing rural and urban people with depression.[21] Worse symptom outcomes among those with more serious mental illness, however, are observed in rural areas, especially with co-occurring substance abuse.[24]

CONTRIBUTOR TO MANY OTHER HEALTH PROBLEMS

Mental disorders are important co-morbidities of physical illness and contributors to suicide, and they

affect the financial capacity to effectively address other health problems. Studies of depression treatment impact on costs for treating physical problems underscore important medical and cost effects for rural areas. Among persons in nonmetropolitan areas, a $1.00 increase in the costs of depression treatment is associated with a $1.42 reduction in the costs of treating physical problems. In contrast, no cost-offset effects can be observed in depressed metropolitan populations.[67] Both reductions in work disability and possible reductions in health care costs are associated with depression treatment in primary care clinics in the Seattle area.[68] A meta-analysis of dozens of studies finds that the coordination of outpatient psychotherapy with inpatient and/or outpatient medical treatment is frequently found to contribute to reductions in health care costs.[69]

Another study of patients in three rural primary care clinics finds that psychological distress, more than severity of chronic medical illness, accounts for functional impairment among primary care patients.[70] Such impairment can extend to the ability to hold a job and retain health benefits.

Mental illness can seriously undermine the employment participation of the rural workforce. Among all illnesses and health behaviors, mental disorders are identified as one of the leading contributors to disability and associated disease burden, defined as years of life lost to premature death and weakened by disability.[3, 18] Days and dollars of lost productivity or avoidable expensive hospitalizations are clearly identifiable with untreated depression.[39]

BARRIERS

Three principal factors have been presented as contributing to the problem of mental illness in rural settings:

- limited access to specialty mental health providers;
- lack of sufficient mental health training, expertise, and coordination among health care providers located in rural settings; and
- limited utilization of available mental health services because of stigma or limited awareness of mental disorders.

Supply of Mental Health Providers

The provision of mental health services in rural areas is often dependent upon a small collection of formal and informal care providers—possibly one or two specialty mental health providers, primary care physicians, rural hospital and nursing home staff, school counselors, social workers, counselors, ministers, law enforcement personnel, criminal justice workers, self-help groups, family members, and friends.[13, 15] Probably the greatest difference in mental services in rural and urban areas is the availability of and accessibility to specialty mental health services. And, although the supply of specialty mental health professionals shows substantial growth in the number of mental health specialists nationwide during the 1990s, the increase is minimal in rural areas.[28]

There is evidence of an insufficiency of both mental health infrastructure and supply of professionals in rural areas. Twenty percent of non-metro counties lack mental health services; the same is true in only 5 percent of metro counties. Non-metro counties have, on average, less than two specialty mental health organizations, while metro counties report an average in excess of 13 mental health organizations.[12, 28] Moreover, fewer rural hospitals than urban ones offer inpatient psychiatric services.[12]

By federal definition of mental health professional shortages, rural areas disproportionately suffer from a shortage of mental health providers.[71] In 1999, 87 percent of the 1,669 Mental Health Professional Shortage Areas (MHPSAs) in the United States were in non-metropolitan counties and home to over 30 million people.[29]

There is relatively low availability of mental health providers in rural areas, and an even lower

availability of specialized providers such as psychiatrists and child psychiatrists in the most rural counties. The same directional disparity for the least populated counties exists, although at a lesser magnitude, for psychologists and social workers.[16] One Arkansas study, for example, reports 7.2, 5.0, and 3.9 times more psychiatrists, social workers, and psychologists per capita, respectively, in metropolitan than in non-metropolitan counties.[23] Another study from the same state finds more than 10 times as many of both medical providers and mental health specialists within 30 miles of urban individuals with depression compared to these providers within 30 miles of their rural counterparts.[39]

Among 1,253 small rural counties with populations of 2,500 to 20,000, nearly three-fourths of these rural counties lack a psychiatrist, and 95 percent lack a child psychiatrist. Only about half of these counties have a master's level or doctoral level psychologist or social worker working in health settings who are resident within their boundaries. According to presence and volume measures, only availability of physicians appears to present some degree of parity between the small rural counties and the other counties with more than 20,000 population. However, over one-third of the most rural counties, those with less than 2,500 population, do not have a family practice physician.[16] This finding suggests that approximately one third of these smallest rural counties may not have any health professionals available to address mental health needs, and a large percentage of small counties may have no immediate available choice for professional mental health services beyond the local physician.

The scarcity of providers may require great travel distances for patients. Distance to providers may account, in part, for the greater difficulties among rural adults than urban adults in remaining engaged in outpatient care over time. Greater travel distance to outpatient services, a feature of rural settings, is associated with fewer mental health visits by adults and with a lesser likelihood of receiving care in accordance with treatment guidelines.[30]

Role of Primary Care Professionals

Rural people are more likely than urban ones to use primary care practitioners for mental health needs.[36] This is especially true of the poor,[32] the elderly,[72] minorities,[73] problem drinkers,[74] and the seriously mentally ill.[23, 34]

Physicians who practice in rural and frontier areas play an even larger role in mental health care than their urban counterparts.[36] This may be attributed to the scarcity of mental health professionals[11] and the stigma-associated reluctance with seeing a mental health professional.[37, 38]

Treatment of mental illness by primary care practitioners, however, faces a number of practice and professional constraints such as:

- insufficient mental health training in medical school or residency;[32, 36]
- limited time for additional education required for managing challenging cases;[39]
- insufficient skills in mental health;[32]
- failure to detect a mental disorder;[75]
- heavy patient case load;[32, 36]
- short visits for patients;[36]
- lack of time for counseling and related therapies; and[36]
- lack of specialized backup.[39]

Even when specialized mental health professionals are available for possible referrals, there appear to be a number of obstacles to primary care physicians making such referrals:

- idiosyncratic standards regarding when to refer patients to a mental health specialist;[36]
- stigma and concerns about the patients' acceptance of the diagnoses and future impact on insurability;[40]
- patient reluctance to use mental health providers;[76]

- lack of available specialist services;[32, 76]
- long waiting times for appointments;[76, 77]
- primary care physicians' bad experiences with psychiatrists;[36]
- lack of communication from referral mental health specialist inhibits physician's ability of followup;[76]
- disagreement with psychiatrists' concern for confidentiality impeding necessary information sharing to enable the referring physician to work with patient; and[36]
- primary care physicians' distrust or dislike of psychiatrists.[36]

Primary care physicians, according to some researchers, may deliberately underdiagnose mental illness. Rural family physicians may readily detect depression but may be reluctant to make formal diagnoses because of stigma, doubts about the patient's acceptance of a mental disorder diagnosis, or a concern for the patient's future insurability.[40, 41] Evidence suggests that coding of patient visits may be adjusted in some instances to allow for reimbursement for care that would not be reimbursable to the provider in question if the more accurate code were recorded.[41]

Among primary care providers, nurse practitioners and physician assistants, according to one study, are less like than primary care physicians to see patients with depression, to prescribe antidepressants, or to treat such patients without referral.[76] The increased prevalence of these non-physician primary care providers in rural areas, therefore, may not translate into significantly greater mental health treatment resources.

A shortage of mental health providers in rural areas is viewed as both a detriment to coordination of mental health services and an advantage in providers knowing one another and the patient.[36] Coordination of mental health care is seriously undermined by rural provider shortages, resulting in gaps in essential services or distances separating the providers serving the same rural client. However, in the rural setting, coordination may benefit from the fact that the doctors, counselors, social workers, and law enforcement personnel may be personally acquainted.[78]

Role of Perception and Recognition

A lack of anonymity in rural communities and the perceived social stigma associated with mental illness may prevent seeking of treatment.[26, 42] Regardless of reference to depression treatment by the general medical sector or specialty mental health sector, a recent study finds that rural individuals perceive less anonymity than do urban ones in such treatment.[39] There is evidence, too, that rural persons suffering from mental disorders may be less likely than their urban counterparts to perceive a need for mental health care.[13]

Rural people with depression may also perceive less availability of and accessibility to specialty mental health treatment and less accessibility to mental health treatment in the general medical sector.[39] Those with more symptoms of depression are more likely to hold stigmatized views of mental health services.[26] This stigma associated with seeking mental health treatment is frequently identified as a more serious barrier to care for rural residents than for urban ones.[26, 42] However, another study finds no such differences.[39] Still another study finds rural people with serious SMI less often giving stigma as a reason for not seeking care than urban residents.[35] While stigma is less often cited in the latter study, rural residents are more likely than nonrural dwellers to report several reasons (e.g., financial concerns, desire to solve problem on their own)[35] for not seeking treatment for SMI.

KNOWN CAUSES OF THE CONDITION OR PROBLEM SO EFFECTIVE INTERVENTIONS OR SOLUTIONS CAN BE IDENTIFIED

Although relatively little is known about the causes of mental illness, a number of factors may contribute to mental disorders, to their consequences, or to failure to adequately treat the disorders. Stress is frequently associated with the appearance of mental

disorders such as anxiety and depression. Stresses associated with economic hardship, e.g., the farm crisis of the 1980s or loss of a major employer, can affect the mental health of rural populations.[25, 26] A study finding depression more widespread in farming communities during farm crises and failures suggests that providers should respond to such crises on individual and community levels.[25] Stressful life events along with mental disorders and substance abuse disorders are among the risk factors for suicide.[27]

PROPOSED SOLUTIONS OR INTERVENTIONS THAT ARE FEASIBLE IN RURAL COMMUNITIES

A number of solutions to the rural undersupply of mental health professionals have been proposed and attempted. Among these are:

- identification of shortages and facilities,
- dependence on managed behavioral health care programs to attract mental health professionals,
- improved training and recruitment of rural mental health professionals,
- greater reliance upon primary care practitioners for mental health care,
- improved linkages between PCPs and mental health specialists, and
- increased outreach and informal support.

Access and Facilities

Seeking designation as a MHPSA in order to attract mental health professionals to rural areas can be advanced by making information on current supplies and locations of mental health professionals more complete, accurate, and available. A careful analysis of MHPSA measurement issues and mental health manpower needs has resulted in numerous recommendations to meet information needs and to otherwise address related credentialing, licensing, and other mental health manpower responses.[29]

Several types of local health centers are key players in mental health. Community mental health centers (CMHCs) remain an important source of mental health services in many rural areas. A recent study suggests that their services to the poor may be advanced by regulatory and financing changes promoting ties with primary care providers and health networks.[32] Similarly, increased availability of non-doctoral level psychologists and social workers, supported by appropriate licensure and reimbursement provisions, could enhance CMHC staffing.[32] Some Medicaid Managed Behavioral Healthcare (MMBH) arrangements have been creative in including CMHCs in networks of providers, and some CMHCs and primary care providers have been effective in sharing scarce mental health professionals.

Community Health Centers (CHCs) or Federally Qualified Health Centers (FQHCs) have been called upon to help meet mental health services needs among the rural poor. At least one study[79] of seven CHC sites in rural and urban underserved areas contracting with managed care suggests that mental health services may fair less well with such arrangements. Specifically, panel restrictions imposed by an HMO may require switching to new and unfamiliar mental health providers who are often geographically inaccessible to the center's Medicaid population.

Telehealth, in various rural settings, plays a role in mental health service delivery. The term telehealth encompasses the terms of telemedicine, telemental health, or telepsychiatry. Positive experiences are being reported from recent experiences with telepsychiatry, with direct psychiatric encounters.[80, 81] A recent study suggests that both providers and clients value the additional interpersonal connection that video-conferencing provides and that relatively inexpensive video-telephone-based approaches can support this connection.[82] At the same time a number of telemental health networks have been successful over a number of years, networks have variously included direct psychiatric encounters, training, crisis response, medication management, and/or other components associated with admission, commitment, or discharge activities.[83] More

generally, telehealth remains an important option for providing training, consultation, and support to rural primary care providers in the face of continued rural shortages of mental health specialty providers.[23]

Managed Behavioral Health Care

A number of government organizations and other employers contract with Managed Behavorial Healthcare Organizations (MBHOs) for mental health services that are carved out, or handled, by a health plan that is distinct from the health plan covering medical services. A study of a switch to a managed behavioral health care carve out for Maine state employees and their dependents reports that such a change can produce utilization benefits for both urban and rural participants. The switch finds significant increases in penetration, i.e., numbers using mental health services, and in the numbers of mental health visits by participants. Rural penetration rates and numbers of visits are significantly lower than urban rates both before and after the carve-out. A significant increase in the number of mental health visits to primary care physicians is credited to the managed behavioral health care organization's acceptance of service by primary care physicians.[84]

Medicaid Managed Behavioral Healthcare Organizations (MMBHOs) that carve-out mental health benefits from other health benefits have been expected to produce benefits for rural areas. That is, MMBHOs were to reduce costs, reduce use of inpatient mental health care, increase reliance on outpatient care, direct more patients to mental health specialty providers, make mental health providers more available to rural areas, and manage providers in rural areas.[85, 86] Although MMBHOs appear to shift more patients to outpatient care, their record on providing more specialty mental health providers to rural areas or managing providers in rural areas is quite mixed. Montana is a case of where lack of specialty providers in rural areas led to failure of an MMBHO directed at shifting patients to specialty providers.[87] There are numerous reports of the inability of MMBHOs to constrain the behaviors of the scarce rural providers because of the lack of alternative providers.

MMBHOs have faced even more challenges in serving the mental health needs of rural children. Many Medicaid children suffer from serious emotional disturbances for which outpatient care, the strength of MMBHOs, may be ill-suited.[54] Based on a few states' MMBHO experiences with children with serious emotional disturbances, rural areas may not have the needed services, and funding may be insufficient to provide for the needed support services, as in New Mexico. Or, expanded services to children may contribute to MMBHO failure to adequately contain costs, as in North Carolina. Both of these states have recently terminated their MMBHO programs.[85] These examples and terminations of MMBHO programs in several other states point to challenges and uncertainties faced by state MMBHOs.

MMBHO solutions may be more successful where they capitalize on existing strong linkages between primary care and specialty mental health providers (and do not underestimate the daunting task of building linkages where such relations have been strained). Success may be found, too, in allowing for different delivery system arrangements in different regions, especially allowing for participation of a mix of county and other public and nonprofit provider organizations and professionals in the delivery of rural mental health services.[85, 88]

Training and Coordination

The Ad Hoc Rural Mental Health Provider Work Group[89] has outlined a number of major recommendations to enhance the supply and effectiveness of rural mental health professionals:

- Develop rural health focused didactic and experiential training for mental health graduate students.
- Recruit rural-connected individuals into graduate training programs in the mental health disciplines.
- Increase training-related placement of mental health students in rural areas to increase the supply and effectiveness of rural mental health providers and improve consumer access.

- Incorporate training support activities for behavioral health services into area health education centers.
- Provide federal and state funds to train rural mental health professionals.

There is recognition that the primary care physician is a major source of mental health care in rural areas.[32, 90, 91] Also, there is some evidence to support confidence in mental health treatment provided by primary care physicians.[13, 39] A number of researchers, however, indicate concerns about deficiencies of primary care providers in treating the mentally ill.[41, 77, 92-94] One study of primary care treatment of depression found evidence of little follow-up of patients during acute phase treatment as is called for in depression treatment guidelines. The result of such low-intensity treatment left two-thirds of the patients either with several symptoms with some danger of relapse or with persistent depression despite treatment.[95] Proposals to strengthen the ability of the PCP to provide mental health services include improving the competency of primary care providers through clinical practice guidelines, utilization of screening instruments, and creating greater contact of PCPs with mental health professionals via a variety of linkages.[36]

Integrated treatment addressing psychological health with physical health in patients may advance both cost and quality objectives in the system of care. The coordination of mental health services with primary health care has frequently been found to contribute to reductions in health care costs.[69] Integration of mental health services into a primary care organization requires attentiveness to the views of communities, professionals, and patients regarding stigma, confidentiality, and preferred treatment modalities. Of professional and organizational import, too, are implications for documentation, billing, and finances of the primary care organization.[96]

Improving the link between primary care providers and mental health specialists is of major interest among authorities on rural mental health.[32, 37, 97-99] One study identifies four models linking primary care providers and mental health professionals based upon the examination of 53 primary care organizations in 22 states:[100]

- diversification—primary care organization or physician hires mental health personnel to offer services at the primary care site;
- linkage—primary care organization enables mental health personnel independent of the primary care organization to offer services at the primary care site;
- referral—arrangements for patients of primary care providers to use off-site mental health providers; and
- enhancement—additional training for primary care providers to diagnose and treat mental health patients.

Outreach and Informal Support

Interventions aimed at outreach and increasing perceived need for help among the mentally ill may be very important.[13] Policies and programs are advocated to increase awareness of existing mental health services.[13] Advertising[101] and general outreach and education can play a part. Interventions to increase anonymity and acceptance of evidence-based treatment in rural America are advocated, as well.[13] Increased attention to cultural competence in the presentation of care in rural setting and to important sub-populations within rural settings must be part of such interventions.[102]

Transportation support may address isolation, poverty, distance barriers to professional resources, and lower utilization in rural areas. Transportation has long been a problem in accessing mental health services, especially among the rural and poor and remains so today even among those in Medicaid managed behavioral health care programs.[54]

The shortage of mental health providers in rural areas is often compounded by the lack of less formalized, but not unimportant, sources of support. Often missing, for example, is consumer and family advocacy for mental health that is often present in

urban settings.[18] Also missing in many rural settings are coordinated efforts such as Assertive Community Treatment (ACT) teams that rely on both numbers of patients and numerous local resources for their success.[103]

Informal caregivers among family, friends, or neighbors and natural helpers, such as local ministers or local sheriffs who are called upon in time of need or crisis, may be important resources in rural communities. Paraprofessionals in the form of parish nurses or promotores, for example, may be critical to linking clients with mental health service providers. The role of paraprofessionals may be critical in building relationships between local healers and mental health and medical professionals in some ethnic settings (e.g., among Native Americans). Programs that target informal caregivers, natural helpers, and paraprofessionals may be of particular importance in improving access to appropriate mental health services in many rural areas.

The informal social network, smaller and tighter in many rural areas, may reduce anonymity for the person who needs mental health services. At the same time, however, a strong and supportive social network can move those who need help to seek it, and support them in that quest. Significant benefit might result from targeting this larger audience to identify mental illness and to help the mentally ill to recognize their illness and to seek help.

COMMUNITY MODELS KNOWN TO WORK

See the Models for Practice section in Volume 1 for a catalog of models.

SUMMARY AND CONCLUSIONS

Mental health and mental disorders are serious problems in rural areas. These problems are reflected in the frequent failure to identify such conditions early on, lack of access to mental health professionals to treat such conditions, and the tremendous consequences of mental illness for treatment of physical illnesses and for day-to-day life. Mental health needs occur among men, women, and children of all ages, ethnic groups, and social backgrounds. Some of these groups appear particularly disadvantaged in rural areas in gaining necessary treatment. Among these groups experiencing rural disparities are children, the poor, the elderly, and African Americans and other minority groups.

These problems are reflected in the frequent failure to identify such conditions early on, lack of access to mental health professionals to treat such conditions, and the tremendous consequences of mental illness for treatment of physical illnesses and for day-to-day life.

Concerns regarding anonymity, treatment, and stigma associated with SMI may be more pronounced among some rural populations. These factors, combined with the existence of stressful occupations, and a lack of knowledge of mental illness symptoms or treatments may reduce utilization of mental health care. The continuing shortage of mental health professionals in rural areas creates serious access problems. It is all the more important, therefore, that rural primary care practitioners receive continuing training in mental health diagnosis and treatment. Similarly, ongoing attention to coordination between physicians, mental health specialists, and other formal and informal sources of mental health support is all the more critical to rural areas.

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