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# **Contemporary Mental Health Care in Rural Areas: Challenges and Strategies**

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*Abstract.* Mental health care and illness prevention present distinct challenges in rural areas with limited resources. This paper examines rural-specific mental health care concerns and uses a public health prevention model to discuss the most current and prolific strategies to address these issues. The unique role of the social work profession in implementing these strategies is highlighted.

Keywords: rural social work, mental health, prevention

Access to effective mental health treatment, including mental illness prevention, is critical for addressing the health needs of rural people. Rural communities have unique circumstances related to providing and accessing this care. While mental wellbeing and the circumstances precipitating the need for mental health care in rural areas are in many ways similar to non-rural areas, options for prevention and professional treatment, are generally much more limited.

The social work profession is uniquely well-suited to: (a) Address the logistical challenges of providing mental health care in rural communities through policy and planning; (b) Provide direct care and preventative services; and (c) Engage with and elicit strengths inherent in rural communities which undergird the entire process (Scales et al., 2013). Although fewer people live in rural areas than at other times in U.S. history, there is still a significant need for social workers in these places. Social work's holistic focus on macro level structural issues, mezzo level issues related to individual functioning within groups and communities, and micro level issues related to how individuals experience emotional wellbeing and illness are all critical components of adequate mental health care and prevention. Additionally, a generalist focus highlights the importance of culturally competent practices that respect the complexities of rural life (Berg-Weber, 2019; NASW, 2018-2020).

This paper will examine the factors necessitating professional mental health care in rural areas, the availability and accessibility of care and prevention measures, and the role of social workers in proposed solutions and service innovations. A public health model will be utilized and its congruence with social work philosophy and application will be discussed.

#### The Need for Mental Health Care Treatment and Prevention Strategies in Rural Areas

Mental illness is a critical public health issue due not only to the impact on the general wellbeing of the individuals, but also due to its relationship with other concerns such as deteriorated family functioning, decreased workforce participation, and increased health care costs. Addressing mental health is clearly not an optional activity for a fully functional society, and the Centers for Disease Control recommend increased and ongoing attention to the epidemiology of mental illness in the United States (Reeves et al., 2011).

Public health researchers have suggested that current U.S. health policy places too strong an emphasis on access to medical services and too little on economic and social causes of health vulnerability and disparities. An extremely small proportion of U.S. health spending goes to primary and secondary health prevention while the large majority goes to direct medical services (Lantz et al., 2007). Emphasizing these concerns, a public health model closely aligns with social work philosophy, stressing a simultaneous focus on individual wellbeing and structural justice issues impacting the wellbeing of individuals, groups, and communities (Reamer, 2018). In the context of rural areas, Ginsberg (2014) noted that although the ubiquity of the Internet has greatly increased access to resources such as entertainment, social networking, and consumer shopping options, economic disadvantages and access to health care remain problematic; both have a serious impact on emotional wellness.

Sources are inconclusive about whether mental illness is more prevalent in rural areas, but it is estimated that approximately half of U.S. adults will experience mental illness sometime during their lives (Reeves et al., 2011). Rural, nonelderly adults are more likely than urban counterparts to identify their mental health status as fair or poor, less likely to receive office-based mental health care, and more likely to be treated for mental health issues with medication than other forms of mental health care (Ziller et al., 2010).

Recent research indicates that rates of suicide are consistently higher in rural areas for both sexes, all age groups, and all racial/ethnic groups with the exception of non-Hispanic whites whose suicide rates were highest in metropolitan counties (Breslau et al., 2014; Centers for Disease Control and Prevention, n.d.; Hirsch & Cukrowicz, 2014; Rubin, R., 2017; Rural Health Research Gateway, 2017; Smalley et al., 2010). Factors contributing to increased suicide risk in rural areas include: (a) Social isolation due to geography or status in a group whose identity may be marginalized in rural areas such as LGBTQ youth and racial/ethnic minorities; (b) Lack of access to behavioral health services; (c) Poverty; and (d) Stigma around mental illness and/or help-seeking behavior in general (Crosby, 2012; Hirsch & Cukrowicz, 2014; Smalley et al., 2012).

Research on adverse childhood experiences (ACEs) has identified that over 50% of rural residents have experienced at least one ACE. Approximately 10-15% have very high ACE exposure, having experienced four or more of these events in their lifetime. Items measured in the ACE score include various types of adversities children may experience such as the experiences of physical, verbal, and sexual abuse, physical and emotional neglect, a parent experiencing mental illness or substance abuse, domestic violence in the family, and separation from a parent due to divorce, incarceration, or parental abandonment. Research indicates that the greater the ACE exposure, the more likely an individual is to experience poor health outcomes in the areas of general health, mental health, and activity limitation (Chanlongbutra et al., 2018; Edwards et al., 2003; Talbot et al., 2016). These health outcomes have obvious implications for all levels of social work practice as poor health in individuals erodes the effective functioning of groups and communities large and small.

Finally, problems associated with opioid use have hit rural parts of America particularly hard. Addressing this is all the more complicated in rural areas where there is limited availability of mental health care and care for substance use disorders (Hancock et al., 2017). Abuse of both

prescription and illicit opioids is cited as one of the most significant public health threats currently facing the United States, and recent data indicate that while illicit drug use rates are reportedly lower in rural areas, the rate of drug overdose deaths in rural areas has surpassed that of urban areas. The biggest increases in opioid related injury and mortality in recent years were in the largely rural states of Kentucky, West Virginia, Alaska, and Oklahoma. It has been suggested that lower use rates and higher mortality rates may be explained by complicating factors such as longer transit times for EMS and inadequate access to naloxone, which is used to treat drug overdose (Keyes et al., 2014; Mack et al., 2017). Improving access to mental health care in rural communities may be a key strategy for reducing drug use disorders, as mental health problems are among the strongest predictors of illicit drug use (Borders, 2017).

# Availability and Accessibility

While research on mental health prevention in rural areas is limited, evidence indicates that interventions focusing on the prevention of mental illness are of potential economic benefit to society (Zechmeister et al., 2008). One major barrier to sufficient mental health care in rural areas is the proportionate dearth of rural behavioral health providers and service options. Nationwide data indicate that clinically trained social workers compile the largest group of mental health practitioners; there are more clinically trained social workers than psychiatrists, psychologists, and psychiatric nurses combined (NASW, n.d.). Data compiled on the availability of behavioral health workers for the Rural Health Research Center indicated that while 65% of rural counties had some access to clinical social workers, only about 30% had access to medication prescribers specially trained in mental health (e.g. psychiatrists or psychiatric nurse practitioners). Additionally, 17% of rural communities lacked any type of behavioral health provider, and approximately 62% of designated Mental Health Professional Shortage Areas were in rural areas as of June, 2019 (Larson et al., 2016; Rural Health Research Gateway, 2017; U.S. Department of Health and Human Services, 2019).

It is important to note that although almost 80% of rural communities technically have some type of professional behavioral health provider, waiting lists may be so long that care is available in theory but not in practice. Furthermore, it is important to consider the availability of adequacy of ancillary services (such as clinical supervision and psychiatric medication management) to which rural behavioral health workers and their clients have access. These present serious concerns for risk management and providing competent and adequate services.

A lack of behavioral health providers in rural places may be caused by a variety of issues. There are limited opportunities for professional collaboration, limited to non-existent referral options if there is a conflict of interest or the need for a specialized service, and challenges with finding appropriately licensed elder clinicians to provide professional supervision. Additionally, behavioral health providers in rural areas may face low pay, find the cultural and social amenities available in rural areas to be less appealing than those in suburban and urban areas, and have difficulty maintaining professional boundaries, avoiding dual relationships, and maintaining confidentiality in small, isolated communities (Berg-Weber, 2019; Brownlee et al., 2012; Jensen & Mendenhall, 2018; Mohatt et al., 2006). Related to the lack of specialized behavioral health services, participants in one study discussed concerns that primary care practitioners in rural areas, forced to address both physical and emotional health issues but lacking truly appropriate

training in mental health care, may require unnecessary hospitalizations or prescribe psychotropic medication that may be inappropriate due to misdiagnosis (Robinson et al., 2012).

A second issue affecting accessibility of services is physical distance between mental health consumers and service facilities and the related financial burdens of transportation and lost wages when taking time off for appointments. Reduced funding for social service programs has required agencies to do more with less, hence the creation of larger geographic service regions and the closure of smaller, rural satellite offices or mobile units with services diverted to larger, centralized offices. Lewis et al. (2013) pointed out that this has essentially eliminated services for many in rural areas as access is no longer feasible due to transportation and financial issues.

Many psychiatric medication prescribers require that persons under their care also be monitored by a therapist or case manager who is authorized by insurance payer sources to spend more time with mental health consumers. From a practice standpoint, this represents sound care as it provides more support to the consumer than an often necessarily short and infrequent visit with a prescriber. Additionally, it provides an added layer of oversight in managing potential crises. Social workers commonly function in these intermediary roles and are well equipped to assist consumers in communicating with prescribers and coordinating appointments (Allen, 2012). For rural consumers, however, the requirement of engaging with an additional provider could also pose an added barrier to care as it may necessitate more travel expense, time off work, and financial responsibility for copays or coinsurance costs (Centers for Disease Control and Prevention, n.d.).

Although the number of Americans with health care coverage has increased significantly with the implementation of the Affordable Care Act, and mental health parity law dictates that insurance companies cannot place lower limits on behavioral health care coverage or have higher copays, the law still exempts businesses with fewer than 50 employees; this may disproportionately affect rural areas. Therefore, as more Americans may be insured, those in rural areas in particular may still face high and unaffordable copays and deductibles for mental health care (Ziller et al., 2010). Participants in one study of mental health consumers and their families noted that the combination of direct care costs (copays, coinsurance, and deductibles), transportation, and medication created significant obstacles to care (Robinson et al., 2012).

Finally, low social acceptability of utilizing behavioral health services in rural areas may emerge from concerns over lack of anonymity when receiving services, stigma associated with mental illness, cultural values emphasizing self-sufficiency and privacy, and a mistrust of formal treatment among certain marginalized populations (Centers for Disease Control and Prevention, n.d.; Haynes et al., 2017). Shame resulting from the stigma of mental health problems has been found to negatively impact help-seeking behavior, including both acknowledging there are problems and seeking formal services (Robinson et al., 2012; Smalley et al., 2010).

These issues may be compounded for certain groups. For example, rural older adults may have limited information about mental health in general, may see seeking professional mental health care as a sign of weakness or personal failure, and may even fear loss of independence if they seek care (Smalley et al., 2010). Research on mental health service utilization among rural

older adults is sparse, but it has been estimated that approximately 30% of older adults in rural areas who need mental health care receive no mental health care at all (Gatz, 1995). Additionally, suicide rates in rural areas are highest for individuals aged 65 and over, and researchers have suggested this is linked to geographic distance from mental health care, stigma around seeking help, poor quality mental health services, and access to firearms (Fiske et al., 2005). A related issue for prescribers treating older adults is the necessity of understanding nuances of geriatric medicine, in which many rural primary care providers or even behavioral health providers have no specialized training. Older adults' bodies metabolize medication differently and they may experience mental health symptoms caused or exacerbated by physical ailments (Smalley et al., 2010).

Another group more prone to avoid formal mental health care is rural African Americans. One study of African Americans living in the southern United States found that this group is less likely than other racial/ethnic groups to receive formal mental health care but also more likely to experience mental health related disability. Mistrust and fear of treatment are cited as specific barriers to service for this group. Addressing their access to behavioral health care necessitates acknowledging the history and impact of structural oppression (Haynes et al., 2017) and taking proactive steps to provide culturally sensitive and appropriate care.

A literature search related to preventative mental health measures or strategies to promote emotional wellness in rural areas in the U.S. yields little beyond a few studies related to reduction of youth suicide prevention (Schmidt et al., 2014) and recidivism in the juvenile justice system (Tolan et al., 1987). Research related to treating mental illness in rural areas is more prolific yet still limited. One finding is that rural residents often rely more on medications than psychotherapy in treating mental health issues and also rely more on primary care providers than on mental health practitioners for treatment (Fortney, 2010; Ziller et al., 2010). This may be due to inadequate numbers of behavioral health providers, challenges with access, or even mistrust of the system. Data suggest that having fewer behavioral health providers available may mean that people in rural areas delay seeking care until they are more ill, making them more likely to seek care for mental health/substance use care in emergency room settings (Rural Health Research Gateway, 2017; Schroeder & Leigh-Peterson, 2017).

#### **Proposed Solutions and Innovations**

Creativity and innovation are key strategies in addressing the widespread unavailability and inaccessibility of specialized mental health care in rural areas. While individuals in rural areas have many distinct characteristics from their counterparts living in more densely populated areas, their need for appropriate and accessible mental health services is no less critical. Rural social work experts stress the importance of focusing on the resilience and strengths of rural communities where informal networks such as family groups and churches often fill in when formal social services are absent (Daley & Avant, 2014; Davis, 2014). Using a strengths approach to utilize and embed natural helping networks in formal mental health services is both pragmatic in stretching limited resources and also likely to increase the credibility of formal resources among rural residents. Effectively addressing mental health care needs in these areas also necessitates focus not only on the provision of services after individuals meet criteria for mental illness, but also prevention strategies that reinforce individual functioning, resilience, and health. Identifying and incorporating natural strengths within rural communities such as strong sense of community, more intimate interpersonal relationships among residents, well-developed natural helping networks, and emphasis on personal resiliency and self-sufficiency are also vital elements to proposed solutions (Daley & Avant, 2014). Social workers are ethically mandated and adept at drawing on natural strengths, further underscoring their critical role in rural community mental health care.

A public health model emphasizing primary, secondary, and tertiary prevention is a useful framework for evaluating strategies to address mental health care in rural areas as well as for identifying gaps in services. This model fits well with social work values and vision as it takes a proactive approach to address problems before they occur, and when problems are unavoidable, minimizing their negative impact on individual, group, and societal functioning. Both models also place significant focus on structural justice issues impacting wellbeing and human rights (Berg-Weber, 2019; Gostin & Powers, 2006; Solomon et al., 2016).

Although current mental health policy focuses much less on prevention than treatment, there are signs that this focus is shifting. Pollack (2011) discussed the impact of the Affordable Care Act on promoting a prevention agenda through requiring coverage for routine preventative care and allocating funding for prevention efforts in specific areas such as diabetes, HIV, and violence prevention. Another indicator of focus on prevention is the increasing awareness and discussion of the impact of Adverse Childhood Experiences (ACEs) in professional realms; there seems to be a growing "a-ha" moment wherein the dots are being connected between poor health outcomes, early traumatic experiences, and proposed solutions for how we prevent those experiences from occurring in the first place. A general overview of three levels of prevention will be followed by specific examples of each type currently being applied or proposed in rural mental health settings.

# **Primary Prevention**

Primary prevention strategies focus on preventing disease, illness, or injury before it occurs. This may include policies, legislation, and publicly provided education on health topics (Institute for Work and Health, 2015). Primary prevention in mental health settings would include efforts to improve community members' knowledge about mental health and wellbeing, reduce exposure to emotional stressors and Adverse Childhood Experiences (ACEs), and strengthen the ability of families to function. Concomitant with focus specifically on mental health factors, primary prevention efforts for rural mental health should also incorporate attention to social justice factors such as the availability of sustainable-wage jobs, affordable housing and childcare, freedom from environmental hazards, and identifying and eliminating the effects of all forms of oppression (e.g. racism, sexism, classism, xenophobia, heterosexism, ableism, etc.). The field of social work is uniquely positioned to address such issues among human behavior professions given our holistic and multi-tiered approach and our ethical orientation (NASW, 2017).

# **Secondary Prevention**

Secondary prevention strategies focus on reducing the impact of an illness or injury that has already occurred. This is facilitated by using early detection and screening measures, empowering those affected with education and skill development to reduce recurrence of the illness or injury, and using direct care to help individuals return to their original level of functioning prior to the precipitating event, illness, or injury. In the context of mental health, this would be implemented through such endeavors as mental health screenings, educational programs that teach and encourage self-care, and services assisting individuals recovering from acute emotional illness or trauma (Institute for Work and Health, 2015).

# **Tertiary Prevention**

Tertiary prevention strategies are used to help people manage long-term health issues such as chronic mental illness. The goal in this type of prevention is to improve individual functioning and thus quality of life (Institute for Work and Health, 2015). Tertiary services are often what comes to mind when one thinks generally of mental health care and may include such services as outpatient psychological counseling, psychiatric medication and management, case management, support groups such as Alcoholics Anonymous and Narcotics Anonymous, and acute services such as psychiatric hospitalization, partial hospitalization, and intensive outpatient services.

Tertiary prevention is generally the focus when gaps in rural mental health services are considered. Data pointing to shortages of mental health providers generally presuppose the provision of acute mental health care such as outpatient and inpatient counseling, crisis management, psychiatric medication management, case management, and related mental health services. While primary and secondary prevention are also critical functions of the U.S. community mental health system, it may be argued that these functions often fall by the wayside due to budget concerns that prioritize acute care, the impracticality of delivering preventative services to entire communities, and limitations in availability of evidenced-based options as well as clinicians to provide them (Ebert et al., 2017).

#### **Primary, Secondary, and Tertiary Prevention Applications**

As noted, a public health model focusing on the various stages of prevention is helpful in conceptualizing the range of mental health resources available in the rural United States and fits well with social work's approach, methods, and values. A selection of the most current, commonly available prevention strategies will be reviewed. Each would utilize a skill set social workers are uniquely prepared for in their specialized education.

#### Integrating with Existing Systems

Integrating mental health care with existing systems in rural areas such as primary care services, schools, and churches is a strategy suggested in the literature addressing prevention at each level (Centers for Disease Control and Prevention, n.d.; Hoeft et al., 2018; Jensen & Mendenhall, 2018; Smalley et al., 2010). Advantages to integrating mental health care (e.g.

direct services or psychoeducation) within these systems is that each is commonly utilized in rural settings, and each may be regarded with less suspicion and more social legitimacy than services focusing solely on mental health.

At the primary prevention level, schools, churches, and primary care offices in rural areas would be excellent distribution points for providing the public with information about emotional health and wellness. Basic psychoeducational information such as the warning signs of depression, breathing strategies to manage anxiety, and the impact of diet and exercise on emotional wellbeing are examples of topics on which basic information could be easily disseminated. Social workers would be uniquely suited to provide such education and equip other community partners such as clergy, school personnel, law enforcement officers, aging service providers, etc. to provide such information as well.

At the secondary level, general mental health, substance use, and Adverse Childhood Experiences (ACE) screenings completed as a routine part of adult physicals or well child visits hold much promise for raising awareness and early detection of mental health problems. Early intervention would logically seem to yield better long-term outcomes for all areas of health, although more research is needed in this area (McKelvey et al., 2017). Social workers would be ideal to partner with other health professionals to educate and raise awareness about the critical nature of early detection of childhood trauma, substance abuse, and mental health problems.

At the tertiary level, systematically preparing rural primary care providers with appropriate information and tools to help consumers/patients manage mental health would better equip them for care they already provide as de factor mental health providers. Primary care providers in all areas of the United States provide a significant amount of, if not most, mental health care, and this is especially true in rural areas where specialized resources are scarce. Research from a project piloting mental health education for primary care providers treating children in rural areas indicated success in improving both the prevalence of providers addressing mental health and of increasing their use of psychoeducation in practice. The use of mental health screening and psychoeducation in general medical practice is perhaps vitally important in rural areas, but it doesn't just happen; practitioners have to be educated and equipped (Cheng et al., 2017). Social workers are uniquely suited to help connect PCPs with necessary psychoeducational content and community resource information as well as drawing attention to social and environmental barriers that often affect overall health outcomes (Allen, 2012).

Rural areas are also faced with fewer community resources such as transportation, affordable housing options, and sustainable-wage jobs. This relative shortage of resources creates barriers in meeting basic needs for individuals in rural areas. Difficulty meeting basic needs may have a negative impact on emotional wellbeing and provide further complication to accessing or benefiting from conventional mental health services (Williams et al., 2015). Integrating mental health and primary health care in rural areas addresses these circumstances, and social workers are uniquely equipped and positioned to help rural individuals access available resources, advocate for their mental health needs with primary care providers when specialized services are unavailable, provide culturally competent information and interventions to both consumers and providers of health care, and address macro level issues such as

increasing community resources through awareness of need and advocacy at all levels of government.

The direct provision of mental health care in school-based settings is increasingly common and may take a variety of forms. Behavioral health providers may be employed directly by school systems or maybe brought in through CHMC/school partnerships (Pfeiffer & Reddy, 1998). School-based care may be conceptualized as secondary or tertiary prevention in that it aims to identify, treat, and equip students to manage mental health symptoms and illness with as little disruption to functioning as possible. Even in areas that may have behavioral health practitioners in schools, increased training and resources for school personnel to help students effectively manage emotional health issues such as ADHD, depression, anxiety, and the effects of trauma would benefit students and school personnel if it reduced occurrences of mental health issues interfering with learning. Research has indicated that school social workers are unique among school-based counselors in the amount of time they spend practicing not only with the individual child but also with families, communities, and teachers (O'Brien et al., 2011). This practice orientation as well as the social work skill set is and should continue to be vitally useful in mental health prevention efforts in rural school settings.

The use of educational programs aimed at increasing mental health awareness in the school is a related endeavor focusing more on primary and secondary prevention. Suicide prevention programs are one example of this strategy that has been used in rural areas, and social workers may lead the charge in improving and refining such programs for maximum efficacy (Schmidt et al., 2014). In a systematic review of research on mental health awareness programs in the U.S., Salerno (2016) concluded that such programs improved mental health knowledge, attitudes, and help-seeking behavior among adolescents. There is no known research specifically examining the efficacy of such programs in rural areas, but this would be an important topic for further research. Additionally, it would also be important to ensure that mental health awareness curricula are culturally relevant and accessible in diverse rural areas.

Mental health care integrated with faith communities commonly takes the form of pastoral counseling, psychoeducation, and the sponsorship of support groups such as Alcoholics Anonymous and Narcotics Anonymous. Research has also demonstrated the effectiveness of faith communities partnering with academic communities and governmental entities to promote and disseminate emergency mental health care in disaster situations (McCabe et al., 2014). The specific application of mental health care in rural faith-based settings is another area where more research is needed to evaluate efficacy and feasibility.

African Americans are a specific population that may be more likely to access care for mental health needs through churches than through formal mental health providers, although more research is needed to assess how well this addresses health needs and disparities in mental health care for this population (Hankerson & Weissman, 2012; Murry et al., 2011). Research has also indicated the possible role of the church in promoting mental health care among Korean Americans (Yang, 2016), and there may be multiple populations that would benefit from partnerships between health providers and faith communities. Further research for understanding of the use and effectiveness of such partnerships in rural areas is in order.

A case study by Lewis et al. (2013) serves as a model of prevention-focused collaboration and details one rural community's answer to homelessness. Community leaders identified that there were no accessible resources for families experiencing homelessness so a coalition of local churches organized to provide physical shelter and meals, a day center (where people could shower, do laundry, and apply for jobs), transportation services, and family activities. As part of the coalition, the local school system began to provide full-service supports for families which included such resources as tutoring, free meals, adult education programs for parents, in-school health screenings, and school-based mental health services. The authors stressed the critical and integral role that social workers played and were uniquely suited for in creating and implementing this model; they provided and coordinated tangible services, they oversaw volunteer recruitment and work, and they raised community awareness about rural barriers to services (e.g. transportation), social justice issues (e.g. lack of equitable representation in governance for vulnerable populations), and ethical issues related to confidentiality.

# Mental Health First Aid

Mental Health First Aid (MHFA) is a psychoeducational program that provides participants with information about basic mental health concepts and skills to help them interact effectively with other individuals showing signs of emotional crisis. This program would be best categorized as a secondary prevention strategy as its goal is to intervene during and acute behavioral health crisis. The program emphasizes assessing risk, supporting individuals in emotional crisis, and helping link individuals to appropriate professional services (Frequently Asked Questions, n.d.). One significant benefit of MHFA is its adaptability to diverse populations; although rural communities share the quality of being sparsely populated, their cultures are wide-ranging and varied. Recent studies have demonstrated the adaptability of MHFA for use with Latinx, Asian, and First Nation populations in the United States (Crooks et al., 2018; Lee & Tokmic, 2019).

Research on the application of MHFA in rural areas in the United States is quite limited, but recent findings indicate that the program shows promise for addressing limitations in service by empowering trainees to provide peer-based help, stimulating initiatives to expand behavioral health services, and reduce stigma related to mental illness. One limitation of this strategy is that a key component of the training is equipping MHFA trainees to help connect those in need with necessary professional services. In some rural areas, the lack of these services may decrease the program's overall effectiveness (Talbot et al., 2017). Social workers in rural areas would be very well suited to provide MHFA and be equipped as MHFA trainers given their preparation in crisis management, focus on cultural competence, and skill in providing competent and effective direct services.

# Telehealth and Internet and Mobile Based Interventions (IMI)

Telehealth refers to health care that is provided with consumer and provider being in different physical locations and may utilize technologies such as video, telephone, and computers (Hilty et al., 2013). Internet and Mobile Based Interventions (IMI) refers a range of technologies that may include or expand upon video, telephone, and computer technology and also include newer technologies such as web-based applications, interactive self-help lessons, email, virtual

reality simulation, electronic games, and phone apps that monitor health behavior (Ebert et al., 2017). Both Telehealth and IMI strategies have been successfully applied in rural areas where face-to-face service resources are limited, and both have the capacity to serve at all levels of prevention.

Telehealth services are typically used as secondary or tertiary care for early detection of mental health problems and/or management of long-term mental illness. Telehealth has existed as a form of mental health care since the 1950s, and numerous outcome studies indicate overall effectiveness in diagnosing and assessing conditions, applicability across populations and settings, and consumer satisfaction (Hilty et al., 2013). In rural areas, telehealth is often used to link clients with psychiatrists, psychiatric nurse practitioners or physician assistants, and counselors such as clinical social workers. These links may occur in settings such as community mental health center offices, hospitals, doctor's offices, prisons, long-term care/assisted living facilities, or increasingly, in the consumer's own home, as cyber security measures improve and HIPPA compliant software developed especially for healthcare providers becomes available (Bashur et al., 2016).

Telehealth has been lauded for its ability to provide culturally sensitive and competent care. For example, individuals whose first language is not English may be linked to providers or translators with whom they can more easily communicate, and specific populations such as children, the elderly, or minority populations may access providers more knowledgeable in specialized care for their cohort (Bashur et al., 2016). Improvements in technology are addressing some of the critiques of early telehealth measures such as cost prohibitive equipment and poor internet connectivity (Wade et al., 2010). Most of the remaining limitations of telehealth are obstacles shared with conventional face-to-face care such as low reimbursement rates for providers, deficits in mental health provider workforce and retention of providers, high rates of un-insurance or under-insurance, and high no-show rates when care is accessed through a facility (Lambert et al., 2016).

While Telehealth interventions involving video or phone-based conferencing take place in real time, IMIs rely more heavily on time independent contact between consumer and provider. IMIs may be used as all levels of prevention. For example, health monitoring apps may serve as primary prevention, self-help lessons may aid in early prevention and management of mental health problems as secondary prevention, and virtual reality technology may serve as tertiary prevention using exposure therapy to lessen the impact of long-term anxiety disorders. IMIs may incorporate varying levels of human support; formats such as health monitoring apps involve no direct human contact between consumer and a provider while other formats may utilize formats referred to as "guided self-help" wherein consumers review and apply psychoeducational self-help material and receive feedback from a coach on progress through email or video chat (Ebert et al., 2017). The primary barrier of using technologies such as IMIs would be accessibility for those with limited knowledge or access to technology. While handheld smart devices may be ubiquitous even in rural parts of the United States, the use of IMs may be limited in certain populations such as young children, people in poverty, and older adults who have limited knowledge of or access to technology (Handley et al., 2015). A qualitative study evaluating the impact of communication technologies on social workers in rural Canada indicated that technological innovations have indeed influenced social work practice. Social workers in the study reported regular use of technology for email, client data management software, case consultation and supervision, and researching information for clients on topics ranging from clinical information to employment options. Participants reported less frequent use of technology for telemedicine and telepsychiatry. The study concluded that technology has contributed significantly to increasing access to resources in rural areas but has not significantly impacted other rural-specific issues such as boundary issues related to dual relationships, anonymity, and confidentiality. One other interesting point highlighted in the study is the concern that an urban-centric bias may encroach on rural social work practice as increased technologies allow greater access to, and possibly reliance on, specialist-based practice rather than community-based generalist practice (Brownlee et al., 2010).

# Measures to Address Opioid Abuse

Much attention is given to what is commonly referred to as the "opioid epidemic" in the United States, and it has been established that this public health concern has hit rural communities particularly hard. Death by overdose and impairment in individual and family functioning are some of the most negative and significant impacts of nonmedical opioid abuse. Research indicates that opioid abuse has been particularly prevalent in rural areas due to such factors as higher rates of prescription (in some areas linked to the proliferation of physically labor-intensive work which leads to increased injury and chronic pain), closer kinship networks that lead to faster diffusion of opioids (sharing medication among kin), and out-migration of upwardly mobile young adults from rural areas leaving behind a population disproportionately affected by risk factors such as poverty, trauma history, economic dependency, and high unemployment (Keyes et al., 2014).

In addition to higher rates of opioid abuse, rural areas also face significantly reduced access to care (Hancock et al., 2017) and various strategies have been suggested and implemented to address this public health crisis. At the primary prevention level, strategies include increasing public education and awareness about opioid use and addiction and reducing stigma related to care seeking. One may also argue that legislation seeking to hold pharmaceutical companies accountable for aggressive marketing tactics and laws that require doctors and pharmacists to run prescription reports before controlled substances are dispensed also constitute efforts at primary prevention.

Secondary prevention strategies for opioid use include the aforementioned efforts to integrate attention to substance use within primary health care. Examples include: universal screening for substance use, use of telehealth and other technologies to provide care in areas with a lack of specialized care, and relapse prevention efforts such as increasing support for users following incarceration, completion of drug rehabilitation programs, and overdose (Flaherty et al., 2018; Trust for America's Health, 2018).

Tertiary prevention efforts in opioid use management focus heavily on Medication Assisted Treatment (MAT), which has been shown to reduce both the rate of illicit drug use and accidental overdose. MAT options include the use of Methadone, buprenorphine, and naltrexone. Controversy exists around the use of MAT as some see it as substituting one form of addiction for another. Rural advocates have suggested that access to MAT services tend to be inaccessible to rural dwellers, and one policy recommendation from the literature is increasing the availability of MAT in all rural areas, promoting better education of health care professionals around MAT usage, utilizing telemedicine to promote specialized consultation on MAT services for general practitioners in rural settings, and increasing research on treating opioid use in rural settings (Hancock et al., 2017).

Social workers are and will continue to be instrumental in all levels of prevention around opioid and other forms of substance abuse. As direct service providers, they are well-equipped to provide holistic services to individuals coping with opioid use issues and assist them in accessing necessary supports. Social workers may serve as case managers and prevention specialists, helping educate people about opioid use and navigate the service system when addressing problems related to use. Social workers will also have a continued role in providing therapeutic services such as psychotherapy and psychoeducation in group and individual settings. Finally, social workers are poised to offer informed opinions about how public policy may best address the needs of rural residents regarding substance use issues (Vaughn & Perron, 2013).

#### Conclusion

Promoting emotional wellbeing in rural areas necessitates more than a medical approach of providing psychiatric and counseling services. Addressing the challenges of providing care for those already entrenched in mental illness and substance use disorders extends beyond finding creative ways to provide specialized behavioral health services. True emotional wellbeing is contingent also upon socioeconomic, sociocultural, and personal factors such as trauma history. The field of social work is uniquely positioned to address the complex factors at play in the provision of mental health care in rural areas through the use of systems theory and its embedded focus on effectively coordinating with various entities such as medical, school, faith-based organizations, etc. Social workers understand the importance of cultural competence and the requisite need to adapt prevention and intervention approaches to diverse rural populations. Social workers are well-versed in the resource challenges facing rural residents, adept at helping individuals and communities utilize their own strengths for problem solving, and well-equipped to provide a range of direct services such as clinical mental health care and case management.

One of the major strengths of our ever- expanding technology is that it is becoming increasingly easier to educate people already embedded in rural areas to become social workers at both the bachelor's and master's levels. Ginsberg (2014) pointed out that with the expansion of online social work education options social work education is no longer as "place bound", and expanded accessibility of social work education to more people in rural areas offers a potential remedy to the shortage of behavioral health providers in those areas.

The future of effective mental health care in rural settings seems simultaneously contingent upon: (a) Increasing the integration of mental health care into primary care settings, schools, and faith based organizations; (b) Increasing the use of creative services such as telehealth and technology-based services such as IMIs; (c) Flexibly responding to changing and emerging public health issues such as the current opioid crisis with strategies tailored to rural

areas; and (d) Addressing and evolving innovative ways to improve socioeconomic opportunity and infrastructure in rural communities. The field and profession of social work is positioned and prepared to take up these tasks.

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