A Review of Mental Health Approaches for Rural Communities: Complexities and Opportunities in the Canadian Context

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ABSTRACT

Three mental health approaches with potential relevance to rural Canada were reviewed: telepsychiatry, integrated mental health models, and community-based approaches. These approaches have been evaluated in relation to their cost-effectiveness, comprehensiveness, client-centredness, cultural appropriateness, acceptability, feasibility and fidelity; criteria that may vary amidst rural contexts. Collaborative approaches to care, technologies fully integrated into local health systems, multi-sectoral capacity-building, and further engagement with informal social support networks may be particularly promising strategies in rural communities. More research is required to determine rural mental health pathways among diverse social groups, and further, to establish the acceptability of novel approaches in mental health.

Keywords: mental health; community-based; integrated mental health; telepsychiatry; rural; capacity-building

RÉSUMÉ

Trois modèles de santé mentale qui pourraient être pertinents à la vie rurale au Canada ont été examinées : la télépsychiatrie, les modèles intégrées de la santé mentale, et les approches communautaires. L'évaluation a été basée sur les critères suivants: le rapport coût-efficacité, l'inclusivité des approches et leur centration sur le client, leur prise en compte de l'aspect culturel, leur réalisabilité, acceptabilité et fidélité. Ces critères sont variables en fonction des différents contextes ruraux. Les approches collaboratives et trans-sectorielles du soin, utilisant des technologies entièrement intégrées dans les systèmes de santé locaux et qui développent et renforcent un lien avec les réseaux de soutiens sociaux plus informels sont particulièrement prometteuses dans les communautés rurales. Plus de recherche sera cependant nécessaire pour déterminer les voies d'accès

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à la santé mentale en fonction des diverses populations et d'établir plus amplement l'acceptabilité de nouvelles approches dans le domaine de la santé mentale

Mots clés : santé mentale; approches communautaires; contextes ruraux; approches collaboratives et trans-sectorielles; les modèles intégrées de la santé mentale; la télépsychiatrie

In 2010, the Ministry of Health Services (MHS) jointly with the Ministry of Children and Family Development (MCFD), released a 10-year plan to address mental health and substance use in British Columbia, Canada. Overall, this plan proposed goals to increase population-level and preventative strategies as well as strengthen primary care and community-level approaches. Among community-level indicators identified, the document aimed to: (1) Affect an increase in the provinces' population that experience positive mental health by 10%, and (2) promote greater use of mental health and substance abuse assessments by primary care physicians to benefit an added 20% of the population. This 10-year strategy emphasized the need to address stigma and discrimination, build capacity for early screening and intervention, and develop an integrated systems-level approach (MHS & MCFD, 2010).

In rural communities of British Columbia, implementing this vision has been shaped by unique strengths and challenges that often characterize such areas. Common challenges include decreased resources (Leipert et al., 2012) as well as unique privacy/anonymity considerations (Boydell et al., 2006) that can increase the risk of external stigma (Wong & Regan, 2009) and health care accessibility (Romans, Cohen, & Forte, 2011). In such contexts, mental health systems are likely to involve multiple sectors and social pathways (Jones, Cook, & Wang, 2011) that account for unique relationships to the land, different views of family and community (Hornosty & Wendt, 2010; Keating, Swindle, & Fletcher, 2011; McIlwraith & Dyck, 2002) and different challenges in relation to diverse identities (i.e., ethno-cultural, sexual orientation, gender norms; Pearson et al., 2015; Poon & Saewyc, 2009).

The purpose of this paper is to review current trends in mental health research and service delivery relevant to mental health promotion, mental illness prevention and treatment that relate to the provincial government's 10-year plan. Implications of such programs and developments will be identified, particularly in relation to rural Canada, especially British Columbia. The review first focuses on challenges and complexities in rural mental health care. Then, three approaches with potential relevance to rural Canada will be reviewed: (1) telepsychiatry, (2) integrated mental health models, and (3) community-based approaches.

These three approaches were selected by conducting a preliminary review of existing rural mental health review articles and selecting the most commonly discussed approaches that would also be relevant to rural Canadian contexts. This preliminary review involved: (1) the use of CINAHL, MEDLINE and Google Scholar databases from 2001 to present; (2) search terms such as "rural mental health," "mental health promotion," "mental health," "mental illness"; and (3) a focus on Canadian and rural research. Following this review, I used the same databases and search terms in diverse combinations with the terms "telepsychiatry," "telemedicine," "integrated mental health," "collaborative mental health care," "integrated care," "community-based mental health," "assertive community treatment," "suicide prevention," and "mental illness prevention." Reference lists of emerging articles were also scanned for relevance to the area of focus.

Several definitions of "rural" exist, each serving different analytic purposes (du Plessis, Beshiri, & Bollman, 2002) and capturing different dimensions of rural health practice (Betkus & MacLeod, 2004). For the purposes of this discussion, rural will be defined as a geographical concept characterized by limited metropolitan influence (e.g., not living within a commuting zone of an urban centre) and limited population density (i.e., less than 400 people per square kilometre) and/or a population of less than 10,000 (du Plessis et al., 2002; Betkus & Macleod, 2004). For the sake of clarity, I will use the phrase "rural community" to refer to rural towns, villages, municipalities or related geographic units in which residents can be said to share local resources or services. The term "region" will be used to capture the five geographical zones in British Columbia in which a specific health authority manages and delivers most public health care services. These regions include the Northern, Vancouver Coastal, Vancouver Island, Interior, and Fraser health authorities in addition to the independent province-wide First Nations Health Authority. The Provincial Health Services Authority (PHSA) operates at the provincial level to coordinate and evaluate health services in partnership with health authorities, including complex mental health care. (Morrow et al., 2010).

CHALLENGES & COMPLEXITIES IN RURAL MENTAL HEALTH CARE

Several factors shape the mental health experiences of residents in rural regions. In recent years, policy makers have noted a decline in health service provision capacity in rural communities in British Columbia, with roughly 10% of rural communities deemed "communities in crisis" by virtue of inadequate staffing to provide core health services (Grzybowski & Kornelsen, 2013). Poorer mental health outcomes and increased incidences of suicide have also been documented in rural regions when compared with urban regions throughout the Western World (Institute of Medicine, 2002; Smith, Humphreys, & Wilson, 2008). Further, recent research in Eastern Canada indicates that many rural residents perceive mental health services offered locally as inferior to those offered in urban areas (Hippe et al., 2014). Contributing to the issue of limited mental health services, many rural communities in British Columbia continue to face out-migration of youth, decreasing local capacity for mental health promotion and services (Hanlon & Halseth, 2005). Further, some Canadian mental health workers report receiving little guidance when navigating issues of cultural diversity and a lack of support for their well-being (O'Neil, George, & Sebok, 2013).

Yet narrative and ethnographic research indicates that rural mental health workers and generalists bring strengths to promote mental health and wellness in rural contexts. Among these strengths, a high commitment and personal engagement with their clients, and a strong multidisciplinary and collaborative approach to mental health service delivery has been documented (Leipert et al, 2012; Pannazola & Leipert, 2013). Further, rural communities have unique resources and capacities for mental health resilience, such as a tightly knit network of support and a strong relationship to the natural environment (Hirsch & Cukrowicz, 2014). Nevertheless, rural communities face unique challenges and conditions that impact their mental health and well-being.

First, rural communities continue to face unique challenges accessing mental health care. This has been attributed to limited local mental healthcare services and clinicians in many rural communities resulting in significant travel costs or barriers to accessing appropriate services (Dyck & Hardy, 2013). Research in rural Canada has identified a heightened likelihood of isolation and decreased local resources as pertinent

challenges for the mental health and well-being of rural populations (Leipert & Reutter, 2005). Wait times, limited speciality areas, financial losses, and travel can present an overwhelming challenge to rural residents seeking care (British Columbia Ministry of Health Services, 2007; Boydell et al., 2006).

Complicating healthcare service access in rural communities, is the restructuring of healthcare services; in particular, care coordination based on population aggregates as opposed to community-level contexts. As this type of programming tends to target care towards concentrated groups with the aim of improving economic efficiency, the current healthcare system may disadvantage many rural communities whose economies of scale cannot compete with larger urban centres (Hanlon & Halseth, 2005). Recent rural health advocates have pointed to cutbacks or reductions in health services through processes of "centralization" that have negatively impacted rural BC residents' health care (Fleet, Archambault, Plant, & Poitras, 2013; Hanlon & Halseth, 2005). Such reforms in 2001 in Nelson, a rural town with a population of 9,255, (Statistics Canada, 2011) located in the southeast of the province of BC (the Kootenays) displaced 1,500 patients' care, including those requiring in-patient mental health care. Local clinicians and scholars argue that these changes are linked to lower health outcomes in this region and estimate that roughly 30,000 individuals from surrounding regions are affected (Fleet et al., 2013).

Some research with rural resource towns also illustrate how economic factors shape community health infrastructure. Decreased industrial diversification, economic restructuring, and the original infrastructure of a rural resource town (e.g., designed for young families) can limit local capacity to provide necessary services and supports, particularly for an ageing population (Hanlon & Halseth, 2005). Economic activities practiced in many rural regions, such as fishing, agriculture, forestry, and mining, are associated with heightened occupational hazards and psychosocial risks (Gibson & Klinck, 2009; Pampalon, Martinez, & Hamel, 2006). In addition, poor socio-economic conditions found in many rural conditions is correlated with higher levels of alcohol consumption, psychosocial stress, and decreased physical activity and preventive service use (Nissinen, Berrios, & Puska, 2001; Smith, Humphreys, & Wilson, 2008).

Even in cases where rural communities do have some mental health programming or services, social and cultural dynamics may make it more difficult for rural residents to access these services. Increased perceived risk of external stigma (Wong & Regan, 2007) and/or a lack of anonymity (Boydell et al., 2006), long wait times, and lack of (or perceived lack of) information (Forbes, Morgan, & Janzen, 2006) may hinder local community members from seeking support in rural areas (Ryan-Nicholls & Haggarty, 2007). Further complicating help-seeking behaviours, a collective expectation of self-reliance, independence, and strength prevalent in particular rural groups such as male farmers and women, may make accessing mental health services a difficult option for rural residents (Canadian Agricultural Safety Association, 2005; Leipert & Reutter, 2005; Roy, Tremblay, Oliffe, Jbilou, & Robertson, 2013). Similarly, a romanticization of rural life, or, of the valuing of hardiness, may respectively enable or normalize peer victimization or bullying that can ultimately impact mental health and well-being (Leadbeater, Sukhawathanakul, Smith, Yeung Thompson, Gladstone, & Sklar, 2013). Adding to these complexities, recent research in Canada has found that rural residents may feel that their identities as rural people, women, or, as First Nations or ethno-cultural minorities are devalued (Hippe et al., 2014; Pannazola & Leipert, 2013). Other aspects of rural living may compound these disempowering conditions. For example, decreased anonymity in cases where women are experiencing domestic violence (Dyck, Stickle, & Hardy, 2012), isolation amidst an ageing community, and health service

cutbacks (Ryser & Halseth, 2013), or among First Nations people who report limited access to culturally relevant health services or racism (Wardman, Clement, & Quantz, 2005), may make it that much more difficult for rural residents to seek mental health care.

Given the role of economic, gender, and ethno-cultural inequities shaping the experiences of rural populations, some authors argue that rurality has been wrongfully constructed as an inherent risk factor, as opposed to a factor enabling and exacerbating determinants of health that may be shared by both urban and rural populations (Smith et al., 2008). Smith and colleagues' review of urban and rural health data in Canada, USA, UK, Australia and New Zealand, for instance, found that socio-economic status and indigeneity, by determining health service usage and access, best explained a diversity of poor health outcomes. Further, they found significant intra-rural health differentials both within countries and across countries studied. Nevertheless, while contrasting with New Zealand (little variance), Australia (minimal difference), and Scotland (an inverse relationship), Canadian's life expectancy, particularly for men, was significantly decreased by the level of rurality of residence. Of note, suicide rates among men were positively related to rurality in all above-mentioned countries (Smith et al., 2008).

Analyses such as these emphasize the importance of giving attention to the diversity within, and to the complex pathways that determine health outcomes in rural settings. This approach can help address discrepant definitions of rural (Hippe et al., 2014), leading to greater conceptual clarity when developing rural health knowledge. Such aims are important in order to challenge simplistic dichotomies of rural and urban experiences in the literature that (1) limit understandings of particular health processes (Pesut, McLeod, Hole, & Dalhuisen, 2012), and (2) monolithic construction of rural that may obscure regional diversity and variance that may uniquely determine health outcomes.

RURAL MENTAL HEALTH CARE DEVELOPMENTS

Below, three mental health approaches that have the potential to address the complexities of rural areas will be discussed: telepsychiatry, integrated mental healthcare models, and community-based approaches.

Possibilities and Challenges in Telepsychiatry

Telepsychiatry has been championed as an alternative to "fly-in" care—bringing in specialists from larger centres into rural communities, or "fly-out" care—having patients travel to different communities to receive specialized care (Chow, 2013; Grubaugh, Cain, Elhai, Patrick, & Frueh, 2008). Telepsychiatry programs, which can include consultation with primary care providers as well as direct counselling and treatment, exist throughout all of Canada. While every province and territory offers existing services, their administration varies from universities, hospitals, local health authorities, and provincial/territorial regulatory bodies. Consequently, implications for patients will vary by services and models implemented. Yet evaluations of existing programs indicate that telepsychiatry can effectively reduce waitlists, financial costs, travel costs, and ultimately improve efficiency in mental health care (Chow, 2013; Nouhi, Fayaz-Bakhsh, Mohamadi, & Shafii, 2012). In comparison to all areas of specialized care, it may also be that the majority of telemedicine consultations facilitate access to mental health care. In Ontario for instance, the Ontario

Telemedicine Network reported that 67% of the clinical areas in which they supported access to care was in mental health, with internal medicine following at 11% (2012).

Beyond addressing the immediate issues of access (e.g., wait-lists, travel, scarcity of specialized mental health care), mounting evidence exists (Hilty, Marks, Urness, Yellowlees, & Nesbitt, 2004; Pignatiello et al., 2011; Ruskin et al., 1998; Shore, Savin, Orton, Beals & Manson, 2007) that telepsychiatry programs, specifically videoconferencing, can effectively facilitate staff education and specialty consultation; reduce rural healthcare workers' sense of isolation; better protect patient anonymity, potentially reducing stigma; generate reliable diagnoses; and yield patient and provider satisfaction. Since specialists are able to provide support via distance, they can help prevent unnecessary hospitalization or relocation, which may enable recovery because clients' social support systems remain intact (Lavoie et al., 2010; Pignatiello et al., 2011; Rudnic & Copen, 2013). For First Nations rural and/or remote clients, telepsychiatry can enable the use of local cultural community strengths while also accessing the benefits of specialized care. This may be particularly important for First Nations populations who may face stress navigating Western mental health services that fail to recognize their unique culture (Lavoie, et al., 2010) as well as other systemic barriers, including racism and stigma (Wardman, Clement, & Quantz, 2005; Wexler, White, & Trainor, 2015.

Yet despite the potential that telepsychiatry offers, many authors have cautioned for the need to consider the larger context shaping mental health programming and health services (Lavoie et al., 2010). Given increased economic struggles of many rural communities in Canada (Hanlon & Halseth, 2005; Smith et al., 2008), technological solutions to address staffing issues and related healthcare costs can be perceived as a tremendous threat to local healthcare workers and the community at large. In addition, the technical requirements of telepsychiatry may unwittingly disadvantage communities/groups with little access to technology if such inequities are not anticipated and addressed (Benavides-Vaello, Strode, & Sheeran, 2013). Further reviews indicate that the long-term sustainability, let alone the growth of telepsychiatric programs, remains limited or uncertain across Canada due to short-term funding, continuous administrative changes, and varying compatibility of this service with existing practice patterns (Hailey, Ohinma, & Roine, 2009; Urness, Hailey, Delday, Callanan, & Orlik, 2004). In addition, there is a need for increased community resources and mental health knowledge among primary care physicians (Steele et al., 2012). Thus, there is a growing understanding that in order for telepsychiatry to have a lasting impact on the mental health of rural Canadians, the focus must be to (1) integrate such services into the existing rural health infrastructure (Jennet et al., 2004; Lavoie et al., 2010), and (2) to enhance local health service capacity (Daughton & Greiner, 2012). This view of telepsychiatry, towards strengthening the existing healthcare model, as opposed to an alternative, or add-on service, implies the need for a financial and professional commitment to ensure the viability of such programming. As noted by Pignatiello et al., (2011), telepsychiatry holds much promise, but "… only if a basic level of mental health service is already in place" (p. 23). From a rural planning perspective, telepsychiatry may be most effective when used as a tool to build local capacity, ensure continuity of care, and establish a mental health service mandate.

A Primary Care Approach to Mental Health Care

The need to develop adequate mental health infrastructure that is both realistic and effective in meeting the needs of rural communities has spurred momentum towards approaches that can enable healthcare

workers to jointly address a clients' physical and mental health concerns, that is, an *integrated* approach to mental health care. Integrated mental health care can take many forms, yet one model with an evidence-based track record is a collaborative care model (Roberts, Robinson, Stewart, & Smith, 2009). Collaborative care is the incorporation of mental health services into the delivery of general or primary care services in order to holistically address all of a client's health challenges (e.g., physical, mental; DeSilva, Samele, Saxena, Patel, & Darzi, 2014). Recent research indicates that a collaborative care approach to mental health can enable improvements in service delivery and patient outcomes. Potential benefits include increased accessibility of services, improved continuity of care, decreased social stigma, greater capacity for targeted interventions for marginalized populations, enhanced knowledge and skill level of general practitioners, reduced external system (e.g., justice system) costs, and a greater focus on holistic and patient-centred care (Kelly, Perkins, Fuller, & Parker, 2011; Lorenz, Levey, & Case, 2013; McCabe & MacNee, 2002; Patel et al., 2013). A collaborative care approach to mental health, particularly in primary care, holds great potential to target the most prevalent mental illnesses that are quite often co-occurring with various chronic and acute medical problems. (Kelly et al., 2011; Lorenz et al., 2013; Patel et al., 2013). Various physical health conditions, such as diabetes, arthritis, asthma, angina, as well as chronic conditions at large have been consistently correlated with depression (Moussavi, Chatterji, Verdes, Tandon, Patel, & Ustun, 2007) and more recently, with anxiety (Kelly et al., 2011). By helping improve treatment of mental health conditions, such approaches can also support patients to better manage their physical health and access appropriate medical interventions. Such models may be more efficient and cost-effective, in part because they provide necessary infrastructure to launch prevention programs that jointly address physical and mental illness (Patel et al., 2013).

There is a general consensus that mental health integration is particularly important for enhanced primary care, especially in rural settings (Xierali, Tong, Petterson, Puffer, Phillips, & Bazemore, 2013; McCabe & MacNee, 2002). As the first point-of-care within Canada, primary care workers have the potential to be either gatekeepers or facilitators to appropriate mental health care. Yet little evidence exists to guide the implementation of wide-scale collaborative care models in primary care worldwide (Patel et al., 2013, World Health Organization [WHO], 2008; Armitage, Suter, Oelke, & Adair, 2009). As a result, researchers have recommended the use of highly contextual, adaptable models, responsive to professional (e.g., staff competencies), organizational (e.g., institutional goals) and environmental factors (e.g., local resources; Patel et al., 2013).

Yet certain principles that facilitate mental health integration identified in the literature may be more easily addressed in rural care contexts as opposed to others. Physical infrastructure, including co-location and active communication of clinical processes (Fuller et al., 2011; Kelly et al., 2011; Patel et al., 2013; WHO, 2008) may be quite feasible in rural Canadian environments. Yet the adequate availability of specialist supports and resources, designated mental health coordinators, interdisciplinary networks and organizational linkages, and sufficient budget allocations to establish and maintain integrated care practices (Fuller et al., 2011; Kelly et al., 2011; Patel et al., 2013; WHO, 2008) may be more difficult goals to achieve in a rural context. Complicating opportunities for the integration of mental health in a variety of care contexts are institutional and governance issues at multiple levels (Fuller et al., 2011; WHO, 2008).

While there is some agreement in terms of general principles and guidelines, more local-level strategies for implementation of integrated mental health approaches vary widely. Such approaches may be evaluated by the degree to which primary care partners refer to partner specialists and engage in shared care practices.

Recent research suggests that such practices may be facilitated or hindered by urban or non-urban care factors. In Italy, interdisciplinary staffing and closer linkages to community services in non-urban centres[1] appeared to be linked to higher referral practices; while in urban centres, greater shared care practices were observed (Rucci, Piazza, Menchetti, Berardi, Fioritti, Mimmi, & Fantini, 2012).

Yet the diversity and uniqueness of rural regions, particularly as experienced in the Province of British Columbia, are still largely unaccounted for in such approaches. While there has been little exploration of the unique role of rurality in shaping integrated mental health in primary care, research in low-resource regions may be pertinent to some rural and remote regions in cases in which communities have few specialists and limited healthcare infrastructure. Several studies indicate that many components of collaborative care can be practically and successfully implemented in low-income settings (Ali et al., 2003; Bolton et al., 2003; Patel et al., 2013. These components include self-care support (e.g., patient coaching); care management (side effects, changes, etc.); systematic caseload review, consultation and referral (remotely or in person); a case registry to track patient outcomes; and carrying out interventions based on clinician skill level and standardized care guidelines. Such successes indicate that the integration of mental health into primary care systems can be accomplished even when specialists and financial resources are limited as is the case in many rural Canadian contexts.

It should be noted, however, that the majority of studies of mental health integration in primary care have focused on illnesses such as depression and anxiety (Kelly et al., 2011; Patel et al., 2013). Limited evidence exists, for example, to support the use of an integrated mental health model to address severe and persistent mental illnesses such as psychotic disorders (Kelly et al., 2011; Patel et al., 2013). Evidence of the feasibility of mental health integration should be balanced with an adequate assessment of existing health systems to ensure that weak health infrastructures are not overburdened (Patel et al., 2013). Making modest and specific mental health goals may be one strategy to minimize this risk (WHO, 2008), yet this strategy may increase the gap of some types of mental illnesses that are not addressed by this strategic direction (Patel et al., 2013). A concern of overburdening limited health infrastructures may explain Fuller and colleagues' research in which they found that larger urban centres were more amenable to integrated mental health in primary care (2011). One potential strategy to address this concern could be to build greater multi-sectoral collaboration of both informal and formal community supports and services in rural regions. To illustrate, in a current research project in the rural interior of British Columbia, partnerships with recreational centres, local libraries, and Sikh temples have enabled the necessary grassroots support to develop upstream mental illness prevention interventions (Caxaj & Gill, 2015). Different community mental health approaches are discussed below.

Mental Health Promotion and Illness Prevention: The Role of the Wider Community

It is evident that pathways for mental health in rural settings are uniquely complex. Given the social disparities and complexities determining mental health, some scholars have argued for the reframing of mental health as a public health issue. Such an approach requires coordinated programming to deliver comprehensive resources (e.g., coping, mental health literacy, adequate supports, counselling) for mental

health resilience, illness prevention and mental wellness (Pearson et al., 2015; Waddell, McEwen, Shepherd, Offord, & Hua, 2005).

A popular community-based mental health approach, Assertive Community Treatment (ACT), first developed in 1970 as the Training in Community Living Program (Stein & Test, 1980), continues to be an important approach to mental health delivery in Canada. The first studies evaluating its relevance for rural regions were carried out as early as 1993, and since then, research has strongly established its effectiveness in both urban and rural areas (McDonel et al., 1997; Meyer & Morrissey, 2007; Pope & Harris, 2014). Its uptake has been prompted by the ability of this model to decrease (unnecessary) hospitalization, increase patient satisfaction and retention, and improve housing security (Bond, Drake, Mueser, & Latimer, 2001; Marshall & Lockwood, 2001). Key aspects of the approach include 24 hour availability, intake based on illness severity and/or client complexity (focus on schizopherenia and psychosis in BC), coordinated care, multidisciplinarity, low patient-to-staff ratios, community access, ongoing outreach, client-centredness and support of skills for everyday living (including vocational and social; BC Ministry of Health Services, 2008; Bond et al., 2001; Pope & Harris, 2014). Yet although some research indicates that ACT mental health teams operate similarly across rural and urban contexts (McGrew, Pescosolido, & Wright, 2003), other research indicates that rural mental health teams may have lower fidelity to an ACT model, significantly inhibiting positive health outcomes of such an approach. For instance, a comparative study of urban and rural ACT teams in North Carolina, USA found that rural teams visited clients much less frequently per week. Staff identified long commutes and resident dispersion as a key barrier to carrying out these visits. While lower levels of staff mental health training and higher levels of family support of clients were also noted in the rural settings, it was not clear what role (if any) these factor played in the implementation of this program (Siskind & Wiley-Exley, 2009). In contrast, Pope and Harris found high levels of patient satisfaction among dual-diagnosed patients attributed to high fidelity implementation of an ACT model in rural Newfoundland, Canada (2014). Yet no control or comparison intervention was examined in this investigation. Comparing the implementation of such an intervention across different national contexts poses further questions as to the unique characteristics and policy environment of these very different healthcare systems. Nevertheless, such disparate findings do suggest that low population density may be a factor in successful implementation of an ACT service delivery model.

In order to address program drift and fidelity of the ACT model, the BC Ministry of Health developed standards for ACT service delivery in the province (Pope & Harris, 2014). This document states that a critical mass of healthcare providers is required to ensure the effectiveness of an ACT team. In order to provide 24-hour care, seven days a week (24/7), 11 clinical staff, including five full-time psychiatric nurses are needed. In cases where this staffing is not possible, it is suggested that healthcare workers provide evening and weekend services on a client-by-client basis, and that the ACT team make necessary arrangements to establish 24/7 crisis coverage (BC Ministry of Health Services, 2008). It is not clear what implications these modifications have for mental health outcomes in rural settings. Yet poor staffing and high workload is a factor in mental health worker retention in such programs in rural BC (Cloutier-Fisher, Penning, Zheng, & Druyts, 2006; Cornish et al., 2003). Further, while a focus on schizophrenia/psychosis disorders is an important priority, and low staff-client ratios is an effective treatment strategy, these program traits in turn limit the number of

individuals with mental health challenges who can be served and reached. This may be particularly troubling in rural settings where limited services and infrastructure is available for local residents.

Further, a focus on the most acute and/or severe cases of mental illness does not afford attention to more moderately afflicted individuals, nor does it provide the infrastructure necessary to develop a comprehensive preventative strategy to protect rural communities as a whole. Given the complexities of rural communities, Hirsch and Cukrowicz argue for the need for multi-faceted ecological interventions that account for individual, interpersonal, microsystems, mesosystems and the exosystem (2014). Specific to suicide prevention in rural communities, their review of current literature identified the potential of (1) faith-based and culturally-specific healing modalities responsive to local values; (2) building on typical rural community strengths such as a collectivist nature, informal networks of support, and a connection to the land; and (3) developing initiatives that build a sense of community and engagement (Hirsch & Cukrowicz, 2014). In rural areas, some residents may be more likely to depend on local support networks and social/faith organizations in times of mental strain instead of turning to healthcare professionals. While this may be partly explained by the increased risk of stigma and a decreased awareness of treatment options (Noblin, Cortelyou-Ward, & Cantiello, 2012), this tendency may also reveal unique strengths and capacities among rural areas.

Previous research indicates that the volunteer sector, informal social support networks, and non-health organizations can play an important role in developing comprehensive illness prevention and mental health promotion strategies (O'Neil, George, Koehn, & Shepard, 2013). Given the tendency of rural residents to seek mental health help from less conventional social support systems, mental health strategies that integrate informal networks, local-capacity strategies, and multi-sectoral initiatives may be particularly relevant in these contexts. One potential benefit of such partnerships is that they can provide ground-level insight to develop relevant mental health programming specific to particular communities and regions. For instance, through partnerships with rural First Nations communities, Wexler, White, & Trainor (2015), identified key aspects of a rural First-Nations-centred suicide prevention strategy: (1) a consideration of the colonial legacy and potential risk (e.g., of discrimination, lack of culturally appropriate care) that shape community perspectives of the healthcare system; (2) a movement away from a standardized referral model considering that mental health specialists may not be trusted and/or available; (3) and a more holistic vision with longevity that focuses on prevention and vulnerability beyond crisis management, which ultimately promotes community-building and support. One potential approach that accounts for these considerations is a CARES model. This model involves joint group facilitation by a community leader and a health professional, and promotes the sharing of stories and the building of relationships (Wexler et al., 2015).

A concerted effort to develop community-based, locally driven approaches to mental health may be particularly relevant to developing mental health models that are accessible and appropriate for rural First Nations communities. For instance, a recent study in rural British Columbia found that First Nations community members reported a sense of powerlessness, and a lack of opportunities for meaningful participation to guide mental health services in their community. Factors hindering their participation included increased corporatization of mental health decision-making restricting the consideration of community values; the centralization of health services that further limited channels for local input; and heightened stress among mental health staff and leaders given their inability to adequately advocate for the communities they serve. Such processes resulted in the delivery of mental health approaches strictly adhering to Western biomedical,

individualistic, and short-term treatment models. These approaches were viewed widely as culturally inappropriate and insufficient (Josewski, 2012). As noted by Josewski, these findings indicate the need to address the historical context of such communities, including a legacy of colonialism, and the role of larger economic structures in silencing or facilitating community voices (2012). The political implications of this research may be of relevance to non-Aboriginal rural communities who may face systemic barriers in developing appropriate infrastructure for mental healthcare programming. To illustrate, poorer rural communities similarly face socio-economic limitations that limit recruitment and retention of staff necessary to stimulate economic activity in such regions, these conditions, in turn, perpetuate a cycle of limited social and mental health infrastructure (Ryser & Halseth, 2013). Such conditions necessitate community-based solutions not only to address local priorities, but also to advocate for systemic changes that will enable sustainable solutions for an effective mental health system. The importance of partnerships and attention to social disparities is in keeping with the World Health Organization's recommendations for mental health promotion and illness prevention. In particular, the WHO's 2014 report stipulated the need for an approach to mental health programming that integrates a life-course perspective; is both universal yet proportionate with need; and acting at the level of the individual, the family, the community, the structural, and population levels. This necessitates initiatives across sectors and institutions that can respond to the needs of groups and individuals in their daily life (WHO & Calouste Gulbenkian Foundation, 2014).

Programs that may enable communities to better support the mental health needs of one another may include public mental health literacy campaigns, mental health first aid training, and outreach programs addressing myths and stigma of mentally ill populations in educational settings (Jorm, 2012). Nevertheless, these initiatives must be evaluated in terms of their relevance to rural contexts, and more generally, for their ability to address or overcome inequity factors that may disadvantage particular populations from benefiting from such programs. Further, awareness campaigns or other interventions focused on imparting information need to be considered with caution because they have often not been established as effective methods to improve mental health outcomes or self-care behaviours. Further, in some cases, regulatory or policy restrictions may show more promise in curbing behavior linked to poorer mental health outcomes (Stockwell et al., 2012).

Given the limited resources and infrastructure of some underserved regions, and the continued to need to address the broad scope of mental health challenges and issues faced by the general population, Kazdin and Rabbit (2013) make the case for more novel models for mental health delivery. These models include: (1) task-shifting (e.g., delivery of mental health interventions to generalists and lay counsellors); (2) disruptive innovation approaches that enable client-driven services through technological advancements; (3) the use of mental health programming in unconventional settings (such as shopping malls, beauty salons, etc.) by trained lay staff (e.g., community health workers, estheticians); (4) lifestyle change coaching and education; and (5) the use of social media to build networks of support and outreach. These approaches show great promise to reach greater numbers; develop capacity; be scaled up; and be implemented affordably, feasibly, and with flexibility across a variety of settings (Kazdin & Rabbit, 2013). Some of these models may be particularly appropriate for reaching individuals with subclinical levels of stress or mental health symptoms, enabling greater mental health literacy, and a more robust mental illness prevention strategy.

Nevertheless, such approaches require greater evaluation to better gage the implications they pose for mental illness treatment or mental health promotion, particularly in rural settings. One important consideration

relates to the acceptability of novel approaches for unique rural communities and how they compare to the preferences of individuals seeking mental health treatment or information since some research in rural Manitoba, Canada indicates that residents prefer private and more conventional channels to access mental health information (e.g., spouse, physician, individual counselling, books; Dyck & Tiessen, 2012). In fact, activities or resources such as face-to-face support groups, telephone counselling, computer-based treatment, or internet-discussion forums were much less popular among those surveyed in this study. This suggests that newer mental health models, although promising, may require further exposure or validation before certain rural populations will express interest in such approaches (Dyck & Tiessen, 2012).

SUMMARY AND IMPLICATIONS

Rural pathways for mental health prevention, treatment, and promotion are shaped by unique challenges, strengths, and complexities. Common barriers to access services, risk of stigma, a limited workforce, and economic restructuring are compounded by cultural and/or gendered inequities, socio-economic conditions, and occupational vulnerabilities that impact mental health help-seeking and outcomes. Yet rural communities have many strengths that healthcare leaders can build upon to improve mental health and well-being in such areas. The strong role of support networks, faith-based organizations, and a relationship to the land in particular, may reveal important mechanisms for mental health resilience in rural spaces.

Telepsychiatry and the integration of mental health care into primary care settings and a diversity of community-based approaches have great potential to improve the mental health and well-being of rural populations in British Columbia. Both telepsychiatry and integrated mental health models have been established as models that can improve both the quality, accessibility, and cost-effectiveness of mental health services. And further, both have the potential to build upon general healthcare providers' skills, to support them to initiate mental health interventions to better serve the local population. While some early research has shown that telepsychiatry programs can be implemented in a culturally safe manner in the Canadian context, no research has evaluated the benefit or perceived acceptability of such programs among immigrant or refugee populations. Researchers can work with university and organizational partners providing this service to implement and assess telepsychiatric programs specific to these populations. Given that the success of such programming among First Nations seems to hinge upon the ability to incorporate local cultural strengths and prevent relocation, it is necessary for researchers to assess the potential of telepsychiatric programs to build upon existing social support networks available for immigrant and refugee populations.

In rural contexts with limited access to specialists and other mental health resources, researchers can develop and evaluate multi-sectoral partnerships that incorporate principles of integrated mental health into their programming. Such research can help develop policies and practices that are capacity- and longevity-oriented. Evaluating both the process of establishing such partnerships as well as the success of this type of programming can help decision-makers assess their community's readiness, and further, choose from interventions that they feel are most likely to be successful given their particular rural contexts.

Community-based approaches are perhaps the most appropriate strategy to help enhance local capacity, building on community strengths towards positive mental health. Approaches such as ACT can also help ensure continuity of care and a comprehensive approach for the most vulnerable mentally ill patients—assuming

that appropriate supports are in place in rural contexts to carry out such programs with high fidelity. While all three approaches discussed hold potential to address stigma and discrimination, community-based approaches may be best equipped to engage with the local histories, inequities, and capacities that uniquely shape the mental health experiences of particular regions.

To illustrate, researchers can help support community-based mental health interventions by working in partnership with community leaders to assess the geographic, cultural, social, and economic factors that may influence the success of such initiatives. Further, they can help plan an approach that builds on potential strengths of rural communities by (1) incorporating informal support networks; (2) building partnerships with cultural and faith-based organizations; (3) engaging in flexible frameworks that account for local knowledge(s) and democratize decision-making. Such approaches can help build locally-relevant mental health interventions that are feasible, sustainable, and culturally-relevant. Lastly, researchers can work with local health service providers and decision-makers to explore a diversity of mechanisms for mental health service delivery including task-shifting, peer support groups, and technological or social media programming. An important area requiring further research in this regard, however, is an evaluation of the acceptability of such approaches in comparison to more established approaches such as individual counselling, print resources and spousal support. Ultimately, rural Canadian mental health research, policy and practice must both account for the social, economic and political nuances of such contexts and reflect the cultural richness and resilience of such communities.

NOTE

1. The researchers have not further defined what is meant by "non-urban." It is assumed that they are referring to rural although it is not clear to what the definition by provided in this manuscript is consistent with this term.

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