

Remoteness and issues in mental health care: experience from rural Australia

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The island continent of Australia is the sixth largest country in the world (approximately 8 million square kilometres), larger in size than Western Europe, yet low in population density. 70% of the 20 million people are concentrated in capital cities and major metropolitan areas, mainly in urban coastal regions. This is in contrast to countries with vast rural populations such as India and China. The remaining six million (30%) people are scattered inland in areas referred as rural, the bush, the out-back, and in remote areas often difficult to access and provide mental health care.

Problems of distance and communication have led to inequities in health provision to rural and remote Australians, many of whom are Aboriginals and Torres Strait Islanders. The majority of health service providers are concentrated in the large cities and it is difficult for remote communities to recruit and retain health practitioners. The Aboriginal and Torres Strait Islander population suffer a morbidity and mortality rate that is far higher than that for other Australians. In addressing these health inequities, rural and remote mental health is emerging as a national priority in Australia with lessons for other countries with considerable remote populations. This editorial focuses on issues relating to remoteness and mental health care in these areas, based on impressions from rural and remote Australia.

Why should we consider remote populations as conceptually 'special'? Remote communities in Australia have small groups of people, vast areas; changing socio-economic situations; unpredictable ecological issues (fire, drought, flood, salinity); lack of facilities; out-migration (i.e. younger people move to larger towns in

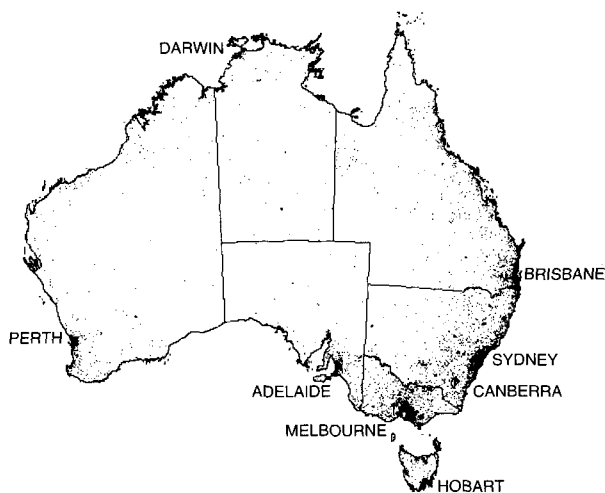


Figure 1. - *The distribution of population in Australia (Australian Bureau of Statistics, 2003a).*

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Declaration of Interest: none declared.

search for education and jobs) and public infrastructure reductions such as bank closures impact on the living conditions of a rural community in profound ways.

There is a lack of conceptual clarity in regard to non-metropolitan or regional parts of Australia. Words such as rural, remote, and regional are often used interchangeably and vaguely. Graeme Hugo (2002) suggests that "Much of the present confusion stems from an attempt to combine into single classification two distinctly different conceptual elements: urban and rural and accessibility/remoteness". An area can be both urban and remote, hence classifications have focused on the dimensions of urban/ruralness and degrees of remoteness.

In Australia the *Accessibility/Remoteness Index of Australia* (ARIA) is the preferred system used to describe a community's level of remoteness. It is suggested that the degree of geographic 'remoteness' measured by ARIA is a better indicator of disadvantage than subjective labels such as 'rural'. ARIA currently defines five categories of remoteness based on road distance to service centres: highly accessible; accessible; moderately accessible; remote; very remote (Commonwealth Department of Health and Ageing, 2003).

There is considerable inequity in the overall health of remotely based Australians on many indicators. The difference is particularly notable on measures of injury mortality, homicide and suicide, diabetes and coronary heart disease. Rural people appear to engage in risky health practices and have been found to consume relatively more alcohol and have high levels of tobacco use (Australian Institute of Health and Welfare, 2002).

The *National Survey of Mental Health and Wellbeing of Adults* (Australian Bureau of Statistics, 1997) identified mental health as a significant health issue in Australia with approximately 17.7%, or almost 1 in 5 people suffering from a mental disorder in a 12 months period. Subsequently, in Australia mental health is identified as one of the six national health priority areas alongside asthma, cancer; cardiovascular; diabetes; and injury and poisoning (Australian Institute of Health and Welfare, 2002). The limitations of the national survey are that important groups in the Australian population (i.e. rural, remote and Indigenous) could not be included (Henderson, 2002; Whiteford, 2000). Even though survey findings on the distribution and determinants of mental health and well-being in remote populations are not available, the problems seem enormous when extrapolating the findings of this survey. Jablensky *et al.* (1999) further reiterated that there is a serious lack of, and a need for, community-based rehabilitation programs. These are the findings that emerged from the study on *People*

Living with Psychotic Illness and have considerable relevance for remotely based populations.

There are a number of special populations in remote Australia needing targeted interventions: comorbid mental and substance use disorders; suicide; indigenous mental health; farming communities.

COMORBID MENTAL HEALTH AND SUBSTANCE USE DISORDERS

Comorbidity is a complex issue in remote areas causing considerable distress for the individual and creating significant challenges to comprehensive care. Prevalence estimates vary, depending on the diagnostic criteria utilised, but of particular relevance is the co-occurrence of depression and anxiety with alcohol misuse. Rural/remote males and females aged 20-29 are twice as likely to consume alcohol in harmful quantities (Commonwealth Department of Health and Family Services, 1997). In some Indigenous communities the use of inhalants is a concern and the inhalation of petrol is a dangerous pastime for Aboriginal youth (aged about 8 to 20) of both sexes in parts of Central Australia and Arnhem Land (Bryce *et al.*, 1992).

Early detection of concurrent alcoholism and social anxiety disorders are vital in planning effective intervention. Adolescents with co-morbid psychiatric and poly-substance use disorders are challenging the mental health service system in both the utilization rates and costs of services. Dependent heroin users in remote areas have limited continuity of care, as service infrastructure is minimal. Estimating dependent heroin use in remote settings is difficult and challenging given the illegal and stigmatised behaviour, underreporting and the realities of a floating population. As stated by Hall *et al.* (2000): "There is no widely accepted gold standard method for estimating the size of the hidden population of dependent heroin users". Interventions for drug dependence in remote areas need preventive strategies for ethanol, nicotine, cannabinoids, amphetamines and opioids. The focus for implementation should be in the community through primary care workers, with inputs from consumers and carers and other agencies providing care and support.

SUICIDE

Tragically there were 2,320 suicides (equivalent to a crude rate of 11.8 per 100,000 population) registered in 2002 in Australia (Australian Bureau of Statistics, 2003b), and again rural communities in Australia appear

to be disproportionately afflicted by this phenomenon.

Despite yearly fluctuations, from 1988 to 1998, rural and remote communities recorded the highest rate of suicide in Australia with 17 per 100,000, compared to 13 deaths per 100,000 persons in urban areas (Australian Bureau of Statistics, 2000). The most risk prone in these communities is young males.

Suicide in rural areas depends on several factors including social aspects and lifestyle choices. Alcohol use and drugs are major concerns. There is also a high level of gun ownership in rural areas (Wainer & Chesters, 2000) which may contribute to the lethality of suicide attempts in rural Australia.

INDIGENOUS MENTAL HEALTH

The Indigenous population of Australia is relatively small, at 410,003 or around 2% of the total population (Australian Bureau of Statistics, 2001). However, a large percentage of Indigenous people are concentrated in remote areas, around 40% compared to 1% in major cities (Australian Institute of Health and Welfare, 2002).

Indigenous health is poor with a life expectancy at birth of 20 years lower than that of the non-Indigenous population. The Indigenous population of remote Australia substantially contributes to the notable health differential between rural and urban areas on measures of mortality for homicide, suicide, diabetes and coronary heart disease (Australian Institute of Health and Welfare, 1998).

There is dearth of data on mental health of Indigenous people in remote Australia. However, a study of Indigenous hospitalisations 1998-99 found that the rate of hospitalisation for mental disorders due to psychoactive substance use and organic disorders was comparatively three times higher, and the rate for psychotic disorders was twice as high. There were over twice as many deaths associated with mental disorders among Indigenous people and death from suicide was three times more for Indigenous males and twice the number for Indigenous females (Australian Institute of Health and Welfare, 2002).

Culturally sensitive multidisciplinary interventions that are acceptable and effective need to be planned. Indigenous needs, service use and community management are diverse and service providers need to take on board their intrinsic strengths and social supports. Aboriginal children and youth would benefit from a spectrum of interventions including prevention, capacity building and rehabilitation. The concept of mental health

and illness has cultural variations and interventions with the guidance and support from indigenous community Elders will have increased acceptance and hence be more effective. Indigenous people do not routinely attend GP settings let alone specialist mental health services. Therefore, providing more services is not the panacea to rural mental health. Without service engagement there can be no service.

FARMING COMMUNITIES

In the last 25 years, the number of farms in Australia has declined by 25%. The human face of this restructuring is very disturbing (Larson, 2002). Many are forced to seek off-farm employment, rely on paid labour, and constantly face financial uncertainties. The off-farm income of farming women has increased from 24% in 1984 to 68% in 1998 (Australian Agriculture, 1997). The changing profile of the lifestyle of the farmer, the restructuring of farming business, the impact on the family structure and dynamics have a role in the mental health and well-being of farmers in remote areas.

People living in regional communities have particular risk factors related to isolation and exposure to environmental hazards such as drought, flood and fire. The impact of a recent severe drought in Australia has put enormous financial stress on farming families which can precipitate anxiety, depression, family breakdown, grief and anger (Commonwealth Department of Health and Aged Care, 2000).

A study on Australian Farming 1988-1997, using descriptive and linear regression analysis of aggregated mortality data suggested that male farm managers and agricultural labourers have higher suicide rates particularly in the later years of their life. Firearms prefigure as the most common method of suicide, despite decreases in this method in the wider rural population (Page & Fragar, 2002). This supports findings by studies in the UK on farming suicides and methods (Malmberg *et al.*, 1999; Hawton *et al.*, 1998).

MODELS OF CARE AND PLANNING SERVICES

There are several models of care in remote areas that need documentation and evaluation in terms of efficacy. Two such models are, the growing impact of Telepsychiatry, and the other is the transportation of acutely Psychotic patients that are remotely based. Further evaluation is needed on the range of services for

child and adolescent problems and the management of psychogeriatric issues in remote areas. These important subpopulations need continuity of care and a multidisciplinary approach. As suggested by Judd & Humphreys (2001): "A variety of approaches are needed to improve access to mental health care". Policy makers would benefit immensely from an evaluation of what service models have not been effective.

Workforce issues have always remained a challenge, as it is difficult to attract and retain mental health experts in rural and remote areas. There are about 4% of Psychiatrists, 12% of practicing Psychologists, and 30% Mental Health Nurses practicing in rural and remote areas (McEwin, 1997; Fraser *et al.*, 2001; Australian Institute of Health and Welfare, 2003).

The generalist primary care worker is the key resource at the grass root level of mental health care in remote areas. Majority of Australians who seek treatment for mental health problems receive it from a General Practitioner (Fraser *et al.*, 2001), with Depression being the fourth most commonly managed health problem (Australian Institute of Health and Welfare, 2002). Unfortunately, General Practice is also underrepresented in rural and remote Australia with approximately 4,247 (21%) of primary care practitioners working in rural areas and approximately 469 (2%) in remote areas (Australian Institute of Health and Welfare, 2003).

As a result of these workforce shortages waiting lists are long, staff spend long hours travelling, referral criteria to specialist services often, by necessity, focus on acute or severe mental health problems. As a result people with chronic depression, anxiety, stress and relationship problems frequently slip through the net and their needs remain unmet. In remote communities, where no GPs are present, registered Nurses and Aboriginal health workers are the first avenue for the provision of a limited range of services. Professions and support groups who play a vital role in remote mental health care are: generalist and community nurses, social workers, occupational therapists, government and non-government agencies, consumer support groups, teachers and clergy.

It may be appropriate to test out strengths and weaknesses of service models for those with mental illness in remote populations, using the *Mental Health Matrix model of Input, Process and Outcome* (Thornicroft & Tansella, 1999). This could help explain why clinical interventions of proven efficacy have not been implemented on a widespread basis (the gap between efficacy and effectiveness). In planning better mental health care for remote populations, targeting illness prevention; mental health inequities and continuity of care are vital.

Greater investment in prevention and community resilience in regard to disadvantaged groups need to recognise the limitations of primary health care infrastructure in remote areas. Service models that cover a 'Life Span' approach, identify the needs of consumers and carers, and provide a spectrum of interventions that are evidence-based must be implemented and evaluated (Raphael, 2000).

In recent times there has been a concerted effort made in Australia to improve rural and remote health and many positive steps have been made. There has been an expansion in the use of Telepsychiatry video-conferencing to remote areas for both clinical consultations and education, and the piloting of a number of innovative, collaborative models of care which allow the workload to be distributed between GPs, Nurses and allied health. Two such models include the provision of Clinical Psychology services in rural General Practice settings (Vines *et al.*, 2002), and the registration of Nurse Practitioners to provide a higher level of care particularly in isolated areas. There are also highly skilled Mental Health Nurses who are able to handle the continuity of care in those with Schizophrenia and Psychoses and the Australian Royal Flying Doctors service has been providing services for transport and acute management of psychiatric emergencies for many years.

This discussion has covered a number of key issues in Australian remote mental health. It is clear that a remote town is by no means a homogenous entity; each community has its own culture, population make-up, and social infrastructure which make working in remote areas a complex and challenging endeavour. Access to mental health care is a major concern. Geographical isolation, the lack of specialized services, and the changing demography in remote areas create barriers to good mental health care. Innovations in mental health service delivery could utilise the protective forces of possible strong social capital and social integration that exists in many remote communities. Intersectorial collaboration with GPs, Primary health care workers, and population based approaches in intervention would improve mental health and wellbeing in difficult to access remote populations.

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