



## The need for relapse prevention strategies in Top End remote indigenous mental health

Tricia Nagel

*Consultant Psychiatrist, Top End Mental Health Services, Casuarina, Northern Territory, Australia  
Chief Investigator, AIMHI NT, Menzies School of Health Research, Darwin, Northern Territory, Australia  
Senior Lecturer, Flinders University, South Australia*

### Abstract

The Australian Integrated Mental Health Initiative in the Northern Territory (AIMHI NT) is one site of a National Health and Medical Research Council (NHMRC) Strategic Partnership initiative seeking to improve remote indigenous mental health outcomes – in a context of increasing hospital admissions and high readmission rates. Remote indigenous mental health service delivery faces challenges of isolation, staff recruitment and retention, and cultural, language and literacy issues. AIMHI NT explored the challenges of mental health service delivery and relapse prevention in Top End remote Aboriginal communities through semi-structured interviews with General Practitioners, nurses, and Aboriginal Mental Health Workers. AIMHI NT sought views from a range of different practitioners and health centres, representing each of the three Top End regions - Katherine, East Arnhem and Darwin Rural. Remote service providers reported low levels of confidence in indigenous mental health assessment, and little formal training in mental health. They reported high rates of relapse of mental illness and high rates of comorbidity, but few relapse prevention activities and relapse prevention tools. The development of relapse prevention activities in primary care requires support and change at all levels – community, consumers and carers, service providers, health system, and health policy. AIMHI NT is engaged in a range of activities promoting relapse prevention in remote NT health centres, and has developed a care plan and care plan training package for remote service providers.

### Keywords

*remote, indigenous, relapse prevention, mental health, care plan package*

---

### Background

Northern Territory Hospital data show progressively increasing rates of admission to hospital of indigenous people since 1993 (Nagel, 2005a). Meanwhile indigenous community mental health indicators such as substance use and self-harm behaviour are also rising (Clough, Cairney, D'abbs et al., 2004; ShuQin Li, Measey & Parker,

2004). Eighty four percent of indigenous mental health admissions in the Top End in 2002–2003 fell into one of three categories – psychosis, depression or substance related mental disorder. The emergency re-admission rate in the same year was 23% (Nagel, 2005a). In other words nearly a quarter of those admitted were readmitted within 28 days. These figures do not simply reflect the high

---

**Contact:** Dr T. Nagel, Top End Mental Health Service, PO Box 40596 Casuarina, Northern Territory, Australia 0811  
[Trish.nagel@nt.gov.au](mailto:Trish.nagel@nt.gov.au)

**Citation:** Nagel, T. (2006). The need for relapse prevention strategies in Top End remote indigenous mental health. *Australian e-Journal for the Advancement of Mental Health* 5(1) [www.auseinet.com/journal/vol5iss1/nagel.pdf](http://www.auseinet.com/journal/vol5iss1/nagel.pdf)

**Published by:** *Australian Network for Promotion, Prevention and Early Intervention for Mental Health (Auseinet)* –  
[www.auseinet.com/journal](http://www.auseinet.com/journal)

Received 29 August 2005; Revised 6 May 2006; Accepted 8 May 2006

rates of comorbid illness in indigenous people, or the limited access to specialist services – they highlight the recurring nature of mental illnesses such as psychosis and depression. Depression is as disabling as congestive heart failure, and its relapsing nature accounts for one of the highest levels of disease burden of any condition (Murray & Lopez, 1996). Top End Aboriginal people with mental illness are vulnerable to poor treatment outcomes through high rates of comorbid substance misuse, especially alcohol and marijuana (Nagel, 2005a; Teesson & Burns, 2001). This vulnerability is exacerbated by poor physical health, social disadvantage, and an enormous burden of grief and loss through physical illness, suicide, homicide, and incarceration (Australian Bureau of Statistics, 2000; Emotional and Social Wellbeing Working Party, 2003). Outcomes are also limited by the multiple challenges of distance, access to services, and cultural diversity (Bailey, Siciliano, Dane et al., 2002; Sheldon, 2001).

Identification of early warning signs and risk factor recognition are key recommendations of a number of recent national and international mental health reports (Commonwealth Department of Health and Aged Care, 2000; World Health Organization, 2001) and are the underlying premise of the chronic disease self-management movement (Bodenheimer, Lorig, Holman & Grumbach, 2002). The literature shows that targeted prevention strategies such as psychoeducation, family education, recognition of early warning signs, compliance prompts, and assertive outreach are effective in improving mental health outcomes – yet practice still lags behind this evidence (Falloon, Coverdale, Laidlaw et al., 1998; Pekkala & Merinder, 2002). Furthermore, whilst there is growing awareness that significant improvement or full recovery from mental illness is possible, relapse prevention strategies are often not in place in specialist services – much less at remote primary care level.

AIMHI NT, in partnership with the Department of Health and Community Services, is the Northern Territory site of a major NHMRC Strategic Partnership initiative that began implementing a framework of research activities in mid 2003. AIMHI NT employs two indigenous research officers and has been consulting with indigenous organisations since it commenced in June 2003. In the first year of the project AIMHI NT established base line measures, combining qualitative and

quantitative measures. Admission and evacuation data showed increasing rates of hospitalisation of Top End Aboriginal people for mental illness over the last decade (Nagel, 2005a). This paper reviews the findings from the base line remote service provider (RSP) survey.

## **Method**

### *Snapshot of the services available*

The target population of mental health services in the Top End is 153,000 people. This encompasses larger urban centres such as Darwin and Katherine, and more than 100 small remote communities and small towns. Primary care services to remote communities are delivered through 40 community health centres, usually staffed by nurses and Aboriginal Health Workers, and a local or visiting medical practitioner. Regional mental health services visit the larger communities 4 to 6 weekly. Twelve communities have local Aboriginal Mental Health Workers.

### *Procedure*

The nature of current services was explored through semi-structured interviews with remote General Practitioners, nurses, and Aboriginal Mental Health Workers (see Table 1). The sampling strategy sought a range of views from different practitioners, and from a range of different clinics across the Top End. Seventy percent of Top End health centres are represented in the survey. Four researchers conducted 41 interviews between December 2003 and July 2004. Qualitative data in each interview was coded according to themes. The computer program SPSS was used to facilitate analysis. Some of the findings are presented below.

## **Results**

RSPs reported low levels of confidence and training in mental health – despite generally being experienced in remote health, and despite generally providing services to a large number of clients (see Table 1). RSPs adopted different processes for assessment, usually preferring an Aboriginal Mental Health Worker or health worker to be present, and to assess clients at home or sitting outside rather than in the clinic setting.

**Table 1. Telephone survey of Top End remote service providers: Assessment**

<b>Respondents</b>	<b>n</b>	<b>%</b>
Psychiatric nurses	6	14.6
Aboriginal Mental Health Workers	9	22.0
Remote GPs or District Medical Officers	7	17.1
Remote Clinic Nurses	15	36.5
Unknown	4	9.8
<i>Total</i>	<i>41</i>	<i>100.0</i>
<b>Training and experience in indigenous mental health?</b>		
No formal training in mental health	17	41.5
Providing services to more than 20 clients	12	30.0
More than 5 years experience with indigenous mental health clients	17	41.5
<b>Confidence in assessment and treatment of indigenous mental illness?</b>		
Not at all confident	5	12.2
Slightly	12	29.3
Somewhat	9	22.0
Fairly	8	19.5
Very	7	17.1
<b>Assessment and treatment of remote indigenous clients?</b>		
Family member involved in development of treatment plan	35	85.4
Adopt different process for assessment of indigenous clients	32	84.2
Clients are usually prescribed oral atypical antipsychotics	36	87.8
Usually prescribed depot antipsychotic medication	34	82.9
Compliance seen as a barrier to prescription of oral medication	34	87.2
Confidence and knowledge of medication seen as a barrier to prescription	17	43.6
<b>Common causes of relapse of remote indigenous clients with mental illness?</b>		
Non compliance	34	82.9
-Alcohol misuse	34	85.0
-Marijuana misuse	40	97.6
-Petrol	20	48.8
-Kava	13	33.3
-Amphetamines	4	10.5
Lack of understanding of treatments	23	57.5
Physical Illness	15	36.6
Life events or cultural events	29	70.7

**Table 2. Telephone survey of Top End remote service providers: Treatment**

<b>Information about mental illness given to remote indigenous clients?</b>	<b>n</b>	<b>%</b>
Via pamphlets	12	30.0
Via flip charts	6	14.6
Via video	5	12.5
Via booklet	8	20.0
<b>Information about mental health services given to indigenous clients?</b>		
Via pamphlet	12	30.0
Via flip charts	2	5.0
Via video	5	12.5
Via booklet	8	20.0
<b>Treatment and relapse prevention</b>		
Early warning signs of relapse usually identified	26	65.0
Early warning signs of relapse usually recorded in file	13	32.5
Care Plans usually developed	11	27.5
Barriers to linking with other services: Time	23	63.9
Barriers to linking with other services: Availability	34	87.2
Barriers to linking with other services: Knowledge of other services	22	64.7
<b>Other services involved in treatment plans?</b>		
Alcohol and drug services	27	65.8
Corrections, police, legal services	5	12.2
Domestic violence services	2	5.0
Counselling services	4	9.8
Accommodation services	2	5.0
Traditional healers consulted by clients	26	63.4

They recognised that their clients relapsed frequently – the most likely causes were reported as non-compliance, substance misuse, cultural and life events, lack of understanding of illness, and physical illness. The most common substances misused were reported as alcohol and marijuana.

Education about illness and treatment was given verbally, but few audiovisual or cross-cultural education resources were available (see Table 2). This lack is particularly notable given that English is usually a second language, and that poor understanding of illness was reported to be a common cause of relapse. Other relapse prevention activities such as care planning, documentation of early warning signs, and involvement of other services in care were infrequent. Multiple barriers to prescription of oral antipsychotic medication were described – and high rates of use of classic (old style) depot medication were reported. RSPs reported a range of different descriptive terms for mental illness (Box 1).

**BOX 1.**

**Terms for mental illness reported by remote service providers**

Bad spirit, weak spirit, sick in the head, head is busy, stones in head, heavy feeling in head, bad heads, bow and arrow in his head out of place, fuzzy in the head, sickness in head, voices in the head, silly in the head, mad one, spaghetti brain.

## Discussion

In overview, the RSPs were sensitive to cross cultural issues, aware of risk factors for relapse, aware of high rates of comorbidity, and using a range of medications - and were thus well prepared for acute assessment and biological treatment. On the other hand, the RSPs were not well prepared for prevention and early intervention activities, or psychosocial interventions. Care planning, recording early warning signs, engaging other services, and culturally appropriate psychoeducation did not score highly. Looking at the broader context, the tools for these activities and interventions are also not available. There is no formal mental health care plan document available across the Top End, there were no Top End indigenous mental health promotion or education resources, counselling and other services are often not accessible, and there are no best practice guidelines for indigenous mental health in primary care. The Central Australian Rural

Practitioners Association (CARPA) manual ([www.carpa.org.au/fmanual.htm](http://www.carpa.org.au/fmanual.htm)) provides best practice guidelines for Northern Territory remote health centres - however it provides no guidance for management of chronic mental illness, focusing instead on acute management and psychiatric emergencies. It is therefore not surprising that acute care is the focus of RSPs in their practice. There is a clear need for tools, training, and organisational change.

## Directions for change

AIMHI NT, in partnership with the Department of Health and Community Services, has commenced work on a range of strategies to address relapse prevention in the remote context. The policy-related strategies include linking of mental health into the preventable chronic disease strategy of the Northern Territory, establishment of consistent recall systems, development of best practice guidelines, development of culturally appropriate outcome measurement, and workforce development. AIMHI NT is also engaged in community-level activities addressing relapse prevention. The project has developed a care plan package which incorporates a story telling approach, self-management principles, information about triggers, early warning signs, medication, and crisis planning - and is collaborative with family, elders, and traditional healers (Nagel, 2005b).

The evaluation of the care plan packages is of particular importance. Given the limited organisational support for mental health care in the remote primary care setting, there are shortcomings to an outcomes-based evaluation process. We cannot expect to have best outcomes in a setting in which best practice has not yet been introduced, and in which there is little systemic support for best practice activity. It is more relevant to establish best practice guidelines, and to evaluate the delivery of best practice services and the organisational context in which they are delivered. The AIMHI care plan packages will be evaluated over the next three years in the course of two separate projects - using both an outcomes-based approach and assessment of service delivery and the organisational context.

## Acknowledgements

The AIMHI research team wishes to thank all of the service providers who contributed their time to this survey – nurses, Aboriginal Mental Health Workers, and doctors. We also express gratitude to AIMHI working party members, the Steering Committee, and the indigenous reference group for ongoing support and advice, to Hope Rigby for assistance with data analysis, and to the associate investigators and interviewers – Jenni Judd, Pat Bradley, Carolyn Thompson and Robert Mills. Department of Health and Community Services, the NHMRC, the Cooperative Research Centre for Aboriginal Health and the Alcohol Education and Rehabilitation Foundation support AIMHI NT.

## References

Australian Bureau of Statistics (2000). *Causes of Death, Australia* (Cat. No. 3303.0). Canberra: Australian Bureau of Statistics.

Bailey, R., Siciliano, F., Dane, G., Bevan, L., Paradies, Y., & Carson, B. (2002). *Atlas of Health Related Infrastructure in Discrete Indigenous Communities*. Melbourne: ATSIC.

Bodenheimer, T., Lorig, K., Holman, H. & Grumbach, K. (2002). Patient self-management of chronic disease in primary care. *Journal of the American Medical Association*, 288(19), 2469-2475.

Clough, A.R., Cairney, S., D'abbs, P., Parker, R., Maruff, P., Gray, D., & O'Reilly, B. (2004). Measuring exposure to cannabis use and other substance use in remote Indigenous populations in northern Australia: Evaluation of a 'community epidemiology' approach using proxy respondents. *Addiction Research & Theory*, 12(3), 261-274.

Commonwealth Department of Health and Aged Care (2000). *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health*. Canberra: Commonwealth Department of Health and Aged Care.

Emotional and Social Wellbeing Working Party (2003). *NT Aboriginal Emotional and Social Wellbeing*

*Strategic Plan*. Northern Territory Aboriginal Health Forum.

Falloon, I., Coverdale, J.H., Laidlaw, T.M., Merry, S., Kydd, R.R. & Morosini, P. (1998). Early intervention for schizophrenic disorders: Implementing optimal treatment strategies in routine clinical services. *The British Journal of Psychiatry*, 172 (Suppl 33), 33-38.

Murray, C.J.L. & Lopez, A.D. (1996). *The Global Burden of Disease*. Cambridge: Harvard University Press.

Nagel, T. (2005a). *AIMHI NT 2003 Base Line Measures Discussion Paper One*. Darwin: Menzies School of Health Research, Charles Darwin University.

Nagel, T. (2005b). *Summary of the Development of the Australian Integrated Mental Health Initiative NT (AIMHI NT) Care Plan Training Package*. Darwin: Menzies School of Health Research, Charles Darwin University.

Pekkala, E. & Merinder, L. (2002). Psycho education for schizophrenia. *Cochrane Database of Systematic Reviews, Issue 2*.

[www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD002831/frame.html](http://www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD002831/frame.html)

Sheldon, M. (2001). Psychiatric assessment in remote Aboriginal communities. *Australian & New Zealand Journal of Psychiatry*, 35(4), 435-442.

ShuQin Li, Measey, M. & Parker, R. (2004). *Suicide in the Northern Territory 1981-2002*. Darwin: Department of Health and Community Services.

Teesson, M. & Burns, L. (Eds.) (2001). *National Comorbidity Project*. Canberra: Commonwealth Department of Health and Ageing.

World Health Organization (2001). *World Health Report, Mental Health: New Understanding, New Hopes*. Switzerland, World Health Organization.