

**Final report to the Alcohol Education and Rehabilitation Foundation**

**30 June 2007**

***“A prospective study of substance misuse and of a community-driven preventive measure in remote Aboriginal communities”***

Investigators:

Kate Conigrave

Alan Clough

Project Officer:

Kylie Lee

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### ***“A prospective study of substance misuse and of a community-driven preventive measure in remote Aboriginal communities”***

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Funding for this project commenced in July 2004. Hence this report represents thirty-five months of project activity.

### **Project overview**

This project consists of two arms looking at substance misuse in three Aboriginal communities in Arnhem Land, Northern Territory. One is a prospective evaluation of a community-driven preventive youth initiative established to prevent substance misuse and increase respect for culture and older people among young people. The second is an examination of patterns of substance use and related problematic mental health effects.

### **Evaluation of the Youth Development Unit**

The Youth Development Unit provided a range of preventive (training, recreational and cultural) activities within a community development framework to all young people in the community as well as case management for young offenders referred for juvenile diversion.

Indigenous young people in Australia remain one of the most disadvantaged and vulnerable groups. Community-driven preventive initiatives offer enhanced youth resilience and connectedness in remote Aboriginal communities and alternatives to substance use. Methods of operation, community acceptability, perceived impact and likely ability to meet goals were assessed. Data included community, staff and stakeholder interviews and observation. School attendance, youth apprehension rates and information on levels of substance use were compared two years before and after the initiative was implemented. Interviewees reported increased youth training and recreational opportunities, increased communication between local agencies, overall satisfaction with program delivery and optimism it could achieve its goals.

Suggested improvements included even more training, cultural programs and other activities and employment of more community-based Indigenous staff. The importance of key staff, involvement of a respected Indigenous staff member, and community engagement were noted as likely contributors to its success.

In our previous report we provided a copy of a paper about the preventive component submitted for publication. This paper has since been revised and accepted for publication in *Drug and Alcohol Review* in May 2007 (see attached).

We have also submitted for publication a report describing the juvenile diversion activities of the Youth Development Unit using the available data (client assessment records, staff interviews, juvenile court appearances and apprehensions data from the NT Police). This paper was submitted to *Drug and Alcohol Review* in March 2007 and is currently under review (see attached).

#### *Community feedback:*

Community feedback meetings were completed in March 2006, however we continue to liaise with the Youth Development Unit staff and the Juvenile Diversion Unit (Darwin), their primary funding agency, to assist with their re-funding efforts. These re-funding efforts are not only targeted at the Youth Development Unit evaluated as part of this grant, but to all 8 Youth Development Units located in remote communities across the Northern Territory.

### **Five year follow up study of Indigenous substance misuse patterns**

#### *Data collection and analysis:*

We conducted a five year follow up (2005-06) of substance misuse in a cohort of 262 individuals (Clough et al) in three Aboriginal communities. One hundred and six (106) structured interviews were conducted (October 2005, February-March 2006 and June 2006) with Indigenous community members aged 13-42 (as of 2005). This represents an interview follow up rate of 82%. In addition to interviews, medical records were audited (87% follow up) and substance misuse status of respondents was also reported by health workers and key community informants (100% follow-up).

Interviews from the five year follow up show cannabis users reporting less cannabis use compared with the three year follow up (2004) and that reduction is reported to be largely due to successful supply control by the local police. In addition to this, 70% of users reported an intention to quit or cut down, but said that they did not know how. Just under a third (30%) of users had quit in the last 12 months. Users also reported less drug substitution with petrol and less incidents of violence by cannabis users to people or property when cannabis supplies run out, with many engaging instead in alternative productive activities (e.g. hunting, fishing, tidying up around the house, taking kids to the river). However, feedback from interviewees and key stakeholders suggests that further influxes of cannabis in these communities would be likely to result in a rise in cannabis use and related harms.

A primary focus of the analysis to date has been an exploration of the associations between cannabis and depressive symptoms for all 106 respondents of the five-year follow up. A modified Patient Health Questionnaire-9 depression module (PHQ9-modified) with items that enquire into presence of depressive symptoms was included in the five year follow up interview (2005-06). Logistic regression analyses were used to investigate cross-sectional associations between the PHQ9-modified raw scores and cannabis use (frequency and amount).

After controlling for other factors (age, sex, current alcohol and tobacco use and a history of petrol sniffing), the daily/heaviest users were 4 times more likely than everyone else (never/former/irregular-lighter users) to report moderate to high depressive scores (PHQ9-modified, score  $\geq 6$ ) (OR = 4.12, 95%CI = 1.27-13.40, P = 0.02). Stratifying by sex, the association remained in females (OR = 5.70, 95%CI = 1.04-31.10, P = 0.04) after controlling for other factors (age, current tobacco and alcohol use, history of petrol sniffing and current employment).

Depression is of major interest in Aboriginal communities, given the high rates of suicide in some communities. This is the first study of its kind, to examine cannabis and depressive symptoms in an Indigenous setting. A paper is currently under preparation for publication which we propose to send to the British Medical Journal. Further research is needed to clarify the strength and direction of the association between cannabis and depression in this context.

### *Community feedback:*

With the help of additional funding from the NH&MRC and led by a team of nine Indigenous researchers resident in the study communities, a community feedback project was initiated from July-November 2006 to develop resources to communicate findings from baseline, recent (3 year) follow up and current (five year) follow-up back to study communities in this remote Indigenous setting. Three resources (a book, a DVD with English subtitles and a poster) have since been developed and endorsed by communities and broad community dissemination of these resources will occur with the study communities and local service providers from May 2007. A focus of these feedback resources has been to identify and employ commonly understood local Indigenous concepts to communicate levels of substance use and related harms. This included finding local Indigenous concepts to describe the sample age and levels of cannabis use. Feedback from Indigenous community residents and local agencies across all three communities indicates the very positive reception to the locally-drawn pictures used in describing cannabis prevalence. Many also remarked about the importance of providing communities with this kind of information in an appealing format using *“our ways of describing things”*.

### *Scientific reporting:*

Two presentations were made at the 2006 Australasian Professional Society on Alcohol and Drugs national conference held in Cairns by Ms Kylie Lee, Ms Muriel Jaragba (researcher and Aboriginal Mental Health worker) and Ms Helen Numamurdiridi (researcher and community member):

- a) Mental health and cannabis use in three Arnhem Land communities (Lee and Jaragba)
- b) Community feedback about our research findings: amarda use in three communities in Arnhem Land (Lee, Jaragba and Numamurdiridi)

A copy of the poster developed to explain the feedback process to the study communities was presented to Prof Ian Webster at the above-mentioned APSAD conference. Permission is currently being sought from the local Land Council for wider dissemination of these materials.

*Other long-term benefits from the project:*

The skill base of community researchers has been greatly enhanced with nine Indigenous researchers employed with AERF funds to work on the five-year follow up of substance misuse in these communities. These resources have enabled the study communities to meaningfully access the results of health research translated using local Indigenous concepts and language for the very first time.

As a result of interest generated from the current project, additional funding has been gained by the local Land Council, with our support, to monitor substance use in a nearby Aboriginal community. We have received National Illicit Drug Strategy funding (Dept. of Health and Ageing) to support this project, a large allocation of which will go towards continuing to employ the Indigenous researchers (“Indigenous cessation workers address heavy cannabis use in Numbulwar, Northern Territory”, National Illicit Drug Strategy, Department of Health and Ageing).

Ms KS Kylie Lee has coordinated the current AERF projects since July 2005. Ms Lee is now enrolled as a PhD student (James Cook University) and has successfully obtained an NH&MRC scholarship to continue her work on substance misuse in these remote Aboriginal communities (“Training Scholarship for Indigenous Australian Health Research, Grant number: 431533”).

A/Prof Conigrave and A/Prof Clough have been invited to continue to support the Anindilyakwa Land Council in providing support to ongoing health improvements.

As a result of her association with the communities from these projects, the Anindilyakwa Land Council supported A/Prof Conigrave’s tender to evaluate the successful alcohol management system operating in this region (“Evaluation of Groote Eylandt Alcohol Management System, Grant number: NO6-0049”). As a result of A/Prof Conigrave’s involvement in Aboriginal health research and education funded by AERF, she has been appointed to the Royal Australian College of Physician’s Aboriginal and Torres Strait Islander Health committee and the National Drug Research Institute’s Steering Group for research into enhancing research of alcohol problems in Indigenous Australia.

**Enclosures:**

*Financial statements*

**Appendices:**

1. *Paper about the prevention component of the Youth Development Unit, accepted for publication to 'Drug and Alcohol Review', May 2007*
2. *Paper about the Juvenile Diversion component of the Youth Development Unit, submitted for publication to 'Drug and Alcohol Review', March 2007*