Using Rapid Assessment Methodology to examine injecting drug use in an Aboriginal Community

A collaborative project conducted by the Aboriginal Drug and Alcohol Council (ADAC), the Lower Murray Nungas Club (LMNC), and the National Centre for Education and Training on Addiction (NCETA)

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Cover illustration (With thanks) Nellie Rankin

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The Project Team contributed to the research with knowledge and experience in the disciplines of psychology, nursing, public health, social work, anthropology, Aboriginal health, and expertise and experience in research methodology. Team members also provided valuable expertise in local and community based knowledge, providing information and guidance about the patterns and prevalence of injecting drug use in the Lower Murray region, with knowledge about, and the ability to contact injecting drug users, community members and service providers in the region.

The National Centre for Education and Training on Addiction was established in 1991 under the Australian Research Council's National Key Centre Program, and is a cooperative venture of the Flinders University of South Australia and the Drug and Alcohol Services Council (SA)

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A significant number of other people contributed to this research in some way, and we would like to also extend our thanks to them: Greg Fowler, Sandra Manning, Troy Hodgkiss, Geoff Roberts, Kim Hargreaves, Geoff, Cheryl Frencham, Nellie Rankin, Andrew P, Bernie Gelston, Catherine McGregor, Mark Christie, Tony, Bob Braithwaite and Darlene Addy for their valued assistance at various stages of the research, and especially those who I am unable to name (by request, or in order to protect their identity). We would also like to thank members of NCETA (especially Kyle Dyer) and EDU (DASC) for their comments on earlier drafts of this report. Appreciation is also extended to Drug and Alcohol Services Council (SA) for additional time involved in the production of the final report, and the opportunity to disseminate information resulting from the research at a State and National level.

EXECUTIVE SUMMARY

This work constitutes the final report of the research project entitled 'Using Rapid Assessment Methodology to Examine Injecting Drug Use in an Aboriginal Community', prepared for the Aboriginal Drug and Alcohol Council (ADAC).

The Aboriginal Drug and Alcohol Council (ADAC) and The Lower Murray Nungas Club (LMNC) approached The National Centre for Education and Training on Addiction (NCETA) for their assistance in investigating the prevalence and problems associated with injecting drug use in a semi-rural Aboriginal Community. The project team utilised Rapid Assessment Methodology (RAM) (Vincent and Allsop 1996) to conduct this research. This methodology was successfully utilised to examine the hazardous and harmful use of amphetamines in metropolitan and rural regions of South Australia (Vincent and Shoobridge 1997).

The overall aims of this project were:

- to use Rapid Assessment Methodology (RAM) to examine the impact of, and harms associated with, injecting drug use in a semi-rural Aboriginal community

- to assess the viability of adapting this methodology for use among Aboriginal communities, by Aboriginal people.

The objectives of the project were to:

- identify risk taking behaviour associated with injecting drug use (IDU) (such as sharing needles) among injecting drug users in the Lower Murray region to assess practices and perceptions about the spread of blood-borne virus (BBV) (eg. HIV and hepatitis C).

- to examine the patterns of injecting drug use and related harms in the Lower Murray region of South Australia

- to identify other issues of concern raised by members of the community, that arose out of the research process

- to determine if RAM are a valuable tool in conducting research in Aboriginal communities.

Utilising the principles of Rapid Assessment Methodology, the project was conducted in two phases.

The first phase of the research, or consultancy phase, included discussing the issues related to injecting drug use with 70 people, who through their work or through personal experience had contact with Aboriginal people who injected drugs. These people represented the members of the health, welfare and legal professions, and the general community.

The second or survey phase involved talking to 25 injecting drug users of Aboriginal descent, who lived in and around the Lower Murray region. The third phase involved presenting the research findings to the community.

Summary of Phase 1:

Consultant Interviews and Indicator Data

The aims of this phase were to elicit information pertaining to knowledge about the transmission of blood borne disease (HIV, HBV, or hepatitis B virus, and HCV, or hepatitis C virus), among injecting drugs users, and among members of the general community. The 70 participants were also consulted about what they perceived to be the health, social and legal implications of injecting drug use in the region, and to describe how existing services responded to the harms associated with IDU. These consultants were also asked to consider strategies for improving the delivery of appropriate services for injecting drug users and their families in the region.

During the consultancy phase of the project, quantitative indicator data were obtained from a range of sources, including clinical services (eg. DASC client services) Needle Exchange Programs (NEP's), hospital admission statistics, and the Australian Bureau of Statistics. These data were used to validate information obtained in the consultancy and survey interviews.

The primary concerns raised by the consultants during the first or consultancy phase included;

Drug use

- Consultants agreed that IDU contributed to poor health, social and legal outcomes for those members of the Aboriginal community who injected, and their families, in the Lower Murray region.

- Consultants believed that other consequences associated with IDU, such as the risks associated with injecting behaviour, such as the transmission of BBV, assault, violence, and potential for suicidal behaviour, required immediate attention. These issues needed to be addressed at the local level.

- However, consultants generally perceived that IDU was a less salient problem when compared with relatively widespread use of alcohol and yarndi (marijuana).

- Consultants described that in their experience, alcohol contributed to drug related health problems, and resulted in more frequent hospitalisations than the use of other drugs. The health and social consequences associated with the use of alcohol were considered to be more widespread, although comparable in their severity, to problems directly related to IDU.

- Consultants considered that yarndi (marijuana) use was relatively extensive within the community, and comparable to alcohol and IDU, in terms of the effects on the health, social and welfare problems experienced by Aboriginal people in the region.

- Consultants commented that the ***combination*** of the use of alcohol and yarndi (among Aboriginal ***and*** non-Aboriginal people) significantly contributed to a range of poor health and social outcomes, and contributed to acts of aggression or violence to a greater extent than when either drug was used alone.

- Consultants believed there was considerable problematic use of prescription medication (such as benzodiazepines and codeine) among Aboriginal people in the region.

Risk behaviour

- Consultants believed that some injecting drug users continued to share needles and syringes despite knowledge of the risks associated with sharing. Consultants described how the Aboriginal cultural concept of ‘sharing’ belongings included sharing injecting equipment, and this belief prohibited some users from practising safer injecting practices.

- Consultants stated that although Aboriginal people and youth had an understanding of the concept of ‘safe sex’, it was infrequently practised by Aboriginal people. Consultants stated that because much of the information about ‘safer sex’ was both developed and delivered by non-Aboriginal people, the information had little applicability or relevance for Aboriginal people.

- Intoxication with drugs, alcohol, or a combination of both, were perceived to increase the risk of suicide among injecting drug users and other members of the community.

- Intoxication was also believed to contribute to death by accidental overdose.

Other problems

- Grief and loss were identified as major themes for this community.

- Gambling (pokie machines) were identified as an additional problem faced by Aboriginal people in the region.

- Consultants were concerned that a lack of support services for people released from prison frequently meant that ex-detainees returned to their pre-prison environment, and consequently, many returned to their pre-prison drug use patterns and lifestyle. Apart from the social and legal consequences of reinstatement of drug using patterns, these people were considered to be at considerable risk of overdose because of a reduction in tolerance to drugs and alcohol.

- Few services were available to respond specifically to the health needs of men.

Service Provision

- Although most of the available health and alcohol and other drug (AOD) related services were perceived as generally adequate for people with alcohol-related problems, consultants believed that few services effectively catered for the needs of injecting drug users.

- Consultants described difficulties in reconciling more traditional support for abstinence-based philosophies, with the relatively newer practice of harm minimisation strategies, such as needle exchange. Different messages from different sections of the community led to considerable confusion about the most suitable treatment options for people affected by IDU.

- Controversy surrounded perceptions of adequate levels of staff training in the local drug and alcohol agencies. Consultants frequently debated the benefits and disadvantages of having staff who had personal AOD experience and few or no formal qualifications, versus those who had achieved recognised qualifications in the field but who had limited personal AOD experience.

- Only a few service providers were perceived to have knowledge about illicit or injecting drug use.

- Consultants also described the need for culturally appropriate drug and alcohol services (services designed and managed by the indigenous community, such as withdrawal management, support and needle exchange services) for Aboriginal people in the region.

Summary of Phase 2:

Survey of Injecting Drug Users of Aboriginal descent

In the second phase of the research, the qualitative information obtained from the consultants was combined with the indicator data. This information assisted the development of a more formal questionnaire designed to survey injecting drug users. Because of limited information and a dearth of previous research about injecting drug use among Aboriginal people, a questionnaire developed by Larson (1995) and her colleagues[1] was adapted, to provide some comparative data. The questionnaire contained structured and open-ended questions. The Alcohol Audit (WHO, 1989) was included in this study to assess alcohol consumption and related problems, and the Severity of Dependence Scale (SDS) (Gossop, Darke, Griffiths, Hand, Powis, Hall and Strang 1995) was also utilised to provide indicators of dependence for those using amphetamines or heroin.

The survey aimed to obtain demographic information, a drug use history and descriptions of current patterns of drug use. It also elicited information about IV risk-taking behaviour, other drugs used, physical and psychological health indicators, aspects of social functioning, and identified some of the social context of the participants' use. Questions were also posed about sexual risk-taking behaviour, illegal activities, history of incarceration, and the users' previous experiences with drug treatment services, or harm reduction interventions. Users were asked to describe how to reduce some of the harms associated with injecting drug use, and whether there were other things the researchers should know in relation to injecting drug use.

Twenty five injecting drug users of Aboriginal descent participated in this phase. The information obtained in this phase is summarised below.

Demographic Information

- Twenty five participants (19 males and 6 females) with a median age of 30 years (range=19-42 years) participated in individual interviews. Most (84%) identified as Ngarrindjeri, and 92% identified as heterosexual. All participants had lived in the Lower Murray region for some time in the past 2 years, and all had injected drugs on at least one occasion in the last 12 months.

- Most participants (88%) received some form of government benefit. Three participants (12%) were engaged in full-time employment.

- Eight participants (32%) were interviewed in prison.

- Seventy two per cent (n=18) of participants estimated their income in the previous year as below $15 000. Two participants (8%) earned more than $40 000 in the last 12 months.

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[1] Larson (1995) "A survey of indigenous injecting drug users" , Australian Centre for International and Tropical Health and

- Eighty per cent (n=20) of the participants had left school by the age of 16 years. However, 22% of participants had obtained further education or training since leaving school. More than half (52%) had achieved a minimum educational standard of Year 10, 16% (n=4) had completed Year 11, and 8% (n=2) had completed Year 12.

- Ten participants (40%) held university or trade qualifications.

Drug use

- Polydrug use was common, with participants reporting having used a mean of 5.9 classes of drugs (S.D.=2.4; range=1-10) in the last 12 months, and had injected a mean of 2 drug classes (S.D.=1; range 1-4) in the last 12 months.

- Tobacco (96%), yarndi (marijuana) (88%), amphetamines (76%) and alcohol (72%) were the drugs most commonly used in the last 12 months.

- Yarndi was the primary drug of choice for 36% of participants, while others stated a first preference for heroin (36%), tobacco (16%), amphetamines (8%) or alcohol (4%).

- Amphetamines had been used by 96% of participants in the past, and 76% in the last 12 months. Heroin had been used by 88% of participants in the past, and 68% in the last 12 months.

Patterns of injecting behaviour

- Participants were a median age of 17 years (range=13-32 yrs) on the first occasion they injected, and had participated in injecting activity for a median of 12 years (range 1-25).

- Amphetamines were the first drug injected by the majority of participants (48%), although the use of heroin (32%), morphine (12%), cocaine (4%), or diazepam (4%) were also reported on the first occasion.

- Amphetamines, heroin, cocaine, and methadone were drugs the most frequently injected. Opiates, benzodiazepines, and hallucinogens were injected by a fewer number of participants.

Risk taking

- Forty eight per cent of participants had shared needles on at least one occasion. Of the 28% (n=7) who had shared needles in the last 12 months, 8% (n=2) had shared needles in the past week, 12% (n=3) had shared in the past month, and 12% (n=3) had shared needles in the last year.

- More than half of the sample (56%, n=14) shared filters and injecting implements (eg spoons) with other people, with 32% (n=8) doing so on almost every occasion, or on every occasion that they injected in the last 12 months.

- Less than half of the participants (48%) reported using a new syringe on every occasion they injected.

- Most participants estimated their risk of contracting HIV (92%), HBV (92%) or HCV (84%) to be 'very low'. Over 70% of participants had been tested for each of these Blood Borne Viruses (BBV) in the last 6 months.

- Fifty two per cent had either had exposure to, or been vaccinated for HBV. Thirty six per cent of the sample had tested positive for HCV.

- Some participants (16%; n=4) believed that sharing needles with blood relatives or close friends did not constitute a risk behaviour.

- Almost 75% (n=19) of the participants reported that they had had a casual sexual partner in the last 12 months. Of all 19 participants who had had casual sexual partners, 47% of these people always (n=6) or often (n=3) used condoms. Seven participants (or 37% of those) who reported casual sex in the last 12 months, stated that they never used condoms.

Social Issues

- Eighty eight per cent (n=22) of participants were injected by other people on the first occasion they injected; 56% were injected by other Nunga's[2]. Seventy two per cent of participants had assisted other people to inject at some time.

- Seventy two per cent (n=18) of participants stated that at least half or more of their good friends were users of drugs, and 60% (n=15) of all participants were aware that at least half of their good friends also injected drugs. Eighty per cent (n=20) of participants injected with other people on most or all occasions they used.

- Fifty six per cent (n=14) of participants reported that IDU interfered with their relationships with friends, or other people (56%), family (52%, n=13) and partners (44%, n=11). Financial problems caused significant concern for the majority of participants (88%, n=22). Forty per cent (n=10) stated that drug use had contributed to accidents. An increased likelihood of becoming involved in acts of physical aggression (n=4), increased involvement in criminal activity (12%, n=3), and a reduced motivation for study (4%, n=1) were also reported.

Health problems related to IDU

- The most common problems reported by participants were sleeping difficulties (80%, n=20) hot and cold sweats (72%, n=18), lack of appetite (68%, n=17) mood swings and trackmarks (64%, n=16), thirst (60%, n=15) and lack of energy (56%, n=14).

- Primary amphetamine users more frequently reported incidents of paranoia, bad dreams, and heart problems than those primarily using heroin, symptoms consistent with amphetamine intoxication. Heroin users more frequently reported problems sleeping, hot and cold sweats, lack of energy, constipation (consistent with heroin withdrawal), dirty hits, trackmarks and sores not healing, more frequently than amphetamine users.

Dependence on heroin and amphetamine

- Of 21 participants who completed the Severity of Dependence Scale (SDS), 16 (76%) were considered dependent, using a score of more than 4 as indicative of greater severity of dependence on amphetamines, and a score of greater than 6 for heroin. Sixty six per cent (8 out of 12) of primary amphetamine users (mean = 6.6; s.d. = 4.7) were assessed as dependent, and 62% of primary heroin users (8 out of 13) (mean = 8.1; s.d. = 4.7), were considered dependent according to the SDS.

- Although the results obtained on the SDS were generally high in comparison to other IDU studies, the results were consistent with participants' reports of social and health-related consequences of IDU, and therefore suggest that this tool may be useful in assessing psychological dependence on heroin and amphetamines among indigenous populations.

Dependence on Alcohol

- Seventy two per cent (n=18) of Aboriginal participants were defined as current alcohol users[3]. Whilst this was slightly higher than that reported amongst indigenous people in national studies (eg. 62%, CDHSH 1996), the median number of days that participants consumed alcohol was monthly (excluding the prison sample) (range=1-312).

- The Alcohol Audit (WHO 1989) was used to assess hazardous and harmful levels of alcohol consumption. A score 13 or more indicated harmful[4] levels of consumption and a likelihood of dependence on alcohol (CDAS 1993). The 18 'current drinkers' scored a median AUDIT score of 16 (range: 2-39 of a possible range of 0-40). According to the scoring template 13 participants (72% of current drinkers, 10 males, and 3 females) were considered to be drinking at harmful levels, and likely to be dependent, even though the majority of these (n=9) were consuming 'harmful' quantities on a monthly basis or less frequently.

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[3] 'Current' drinkers were those considered to have used alcohol at least once in the past 12 months.

[4] According to the NHMRC guidelines, consumption of more than 6 standard drinks during one session is considered to

- According to the AUDIT, each of the 6 female participants were consuming alcohol at levels considered to be hazardous (n=3) or harmful (n=3) to their health.

- Closer examination of individual patterns of behaviour indicate that harmful and hazardous levels of consumption were readily identified by the AUDIT. However, it is likely that several participants were misclassified as dependent according to the scoring template used and other conventions recommending a cut off score for dependence. It is more likely that these participants experienced problems related to binge drinking and intoxication, than dependence. These results suggest that the AUDIT scoring template was inappropriate for this sample in terms of defining dependence. On the basis of this information, further research on the design of an appropriate instrument, or supplementing investigations with other objective measures of alcohol-related problems, obtaining larger sample sizes, and testing the sensitivity and specificity of the AUDIT for this population, is indicated.

Psychological Health Problems

- Mental health problems were experienced by 64% (n=16) of all participants, with depression (40%, n=10), paranoia (16%, n=4) and forgetfulness (8%, n=2) most frequently reported.

- Over half of the sample (52%, n=13) had attempted suicide on at least 2 occasions.

- Ninety two per cent (n=12) of those who had ever attempted suicide admitted to having been intoxicated on at least one occasion they made an attempt. They stated that intoxication often facilitated the decision to go through with an attempt.

Prison

- Eighty four percent of the participants (n=21) had been to prison in the past, for a median number of 4 occasions, spending a median of 33 months (almost 3 years) in gaol (range: 2 days-13 years). The median age the participants were first admitted to the prison system was 19 years (range=12-39 years).

- Thirty two per cent (n=8) of the participants were interviewed during a gaol term.

- Eight per cent of participants (n=2) had their first injection of an illicit drug while in prison and of the 21 participants who had ever been to prison, 57% (48% of the total sample) had injected while interned on at least one occasion. One participant believed that he contracted HCV while in prison due to sharing needles.

Services

- More than two thirds (72%, n=18) of the sample had accessed health services in the past, such as a GP (28%, n=7), methadone programs (28%, n=7) Aboriginal Health Services (16%, n=4) or Drug and Alcohol Services Council (DASC) (24%, n=6), for treatment for AOD related problems. The remaining 28% of the sample (n=7) had never accessed services for assistance with AOD problems.

- Almost half of the participants (48%, n=12) had only ever attended one type of service for their drug and alcohol problems.

- The primary reason for attending services included assistance to cease or reduce their drug use; for 'family reasons', to obtain pills, to save money, to stop always feeling ill, to stop using, to prevent suicide, or to 'sort my life out'. Participants (48%) also sought assistance for reasons not related, or indirectly related to, AOD problems, such as for social support, legal advice, or financial reasons.

- Twenty eight per cent of participants (n=7) stated that methadone programs were the most effective treatment they had received, although General Practitioners (12%, n=3), Aboriginal health services (8%, n=2) and other assistance, such as counselling, Salvation Army and family members, had successfully helped others.

- Forty per cent of the participants (n=10) were too 'shamed' to attend a non-Aboriginal service for a drug use problem; the remaining 60% stated that they were not shamed to attend a non-Aboriginal service, if they required assistance. Most participants (92%) stated they would not be too shamed to attend an ATSI service for treatment for their drug use or health problems and would actually prefer an ATSI service. But, as few ATSI services catered for Aboriginal injecting drug users, these people had little option but to attend mainstream services.

- Even though most participants believed they would attend ATSI services, participants were concerned about, and feared breaches of confidentiality when attending ATSI services, and considered this to be a barrier to seeking assistance from Aboriginal health services.

Participants' recommendations

- A health clinic or organisation managed by Aboriginal people, offering a range of health, social and welfare services (like the metropolitan clinic) was the preferred option for 48% of participants.

- Forty per cent of participants (n=10) described a need for an Aboriginal drug and alcohol worker, who could provide casual support and counselling, conduct educational sessions, and provide an Aboriginal managed needle exchange program (NEP). These injecting drug users identified barriers to accessing the local NEP, including hours of operation, and fear of breach of confidentiality.

- Controversy surrounded perceptions of the suitability of the local drug and alcohol agencies, as the services were perceived to be focussed primarily on alcohol problems. The participants identified a need for services specifically for people who injected drugs in the region.

- Participants also requested increased access to methadone programs, a methadone support group, 'user friendly' GP's and a telephone information service to respond to AOD[5] issues.

[5] Participants were generally unaware of the existence of the South Australian Alcohol and Drug Information Service (ADIS)

Using Rapid Assessment Methodology (RAM) to Examine Injecting Drug use in an Aboriginal Community

Background

The National Centre for Education and Training on Addiction (NCETA) was approached by Aboriginal Drug and Alcohol Council (ADAC) and the Lower Murray Nungas Club (LMNC) for assistance to investigate the prevalence and problems associated with injecting drug use in the Lower Murray region of South Australia. Rapid Assessment Methodology (RAM) (Vincent and Allsop 1996) was utilised to conduct this research, a methodology previously used to examine the hazardous and harmful use of amphetamines in metropolitan Adelaide (Vincent and Shoobridge 1997).

The overall aims of this project were:

- to use Rapid Assessment Methodology (RAM) to examine the impact of, and harms associated with, injecting drug use in a semi-rural Aboriginal community
- to assess the viability of adapting this methodology for use among Aboriginal communities, by Aboriginal people.

The objectives of the project were to:

- identify risk taking behaviour associated with IDU (such as sharing needles) among injecting drug users in the Lower Murray region to assess practices and perceptions about the spread of blood-borne virus (BBV) (eg. HIV and HCV).
- to examine the patterns of injecting drug use and related harms in the Lower Murray region of South Australia
- to identify other issues of concern raised by members of the community, that arose out of the research process
- to determine if RAM are a valuable tool in conducting research in Aboriginal communities.

Introduction

Injecting Drug use among Aboriginal populations

Although heroin use among Australia's indigenous people was identified as a significant health issue in the early 1980's (CDCSH 1989, NAHSWP, 1989), scant research has since been conducted to investigate the prevalence and impact of illicit[6] drug use among this population (Perkins, Sanson-Fisher, Blunden, Lunnay, Redman & Hensley, 1994). Only recently have a small number of studies investigated illicit and intravenous drug use among Aboriginal and Torres Strait Islander people (ATSI), and the potential impact of preventable diseases, such as HIV and hepatitis in this population. Similarly, there are few studies investigating the efficacy, or appropriateness, of research tools, or treatment options for injecting drug users in ATSI communities.

Most studies investigating alcohol and other drug use among ATSI people have centred on individual communities in specific locations. Varied methods of data collection and sampling techniques, differences or inaccuracies in reporting procedures (for example, health staff not recording Aboriginality on client records), and geographical and cultural differences between the various indigenous groups, have contributed to a lack of comparability between studies.

Until recently, ethnicity or Aboriginality was not routinely identified in hospital, clinical or other health records. Additionally, the stigma associated with injecting drug use (IDU), and a reluctance by people to identify their Aboriginality, or injecting behaviour, has contributed to the lack of information about illicit and injecting drug use among indigenous Australians (Brady 1991; Brady 1991b, Feacham 1995; Healy 1978; Lake 1992; Sagger and Grey 1991). In an article reviewing Aboriginal drug and alcohol use Brady (1991) identified a startling deficiency in the available research, in the lack of longitudinal studies investigating indigenous drug use, illicit drug use or polydrug use among Aboriginal people. Although more frequent attempts are now made to include ATSI participants in health and drug use surveys, the numbers of ATSI peoples recruited for such studies are frequently too small (around 5-7% of the sample data) to analyse the group separately (for example Hando and Hall, 1993; Hando 1996; Loxley 1997; Loxley, Carruthers and Loxley,

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[6] For the purposes of this review, illicit refers to the **non-medical** use of a range of drugs, including opiates (such as

1993; Carruthers & Bevan, 1995; Spooner, Bishop, Parr, Stephenson and McLauchlan 1993; Vincent Allsop and Shoobridge 1998a).

During the late seventies and eighties, some of the first significant (in part, by virtue of their prior absence) reports attempting to quantify the use of drugs (other than alcohol), such as analgesics and benzodiazepines, among indigenous people were published (see Kamien, 1978; Hayward, 1988; Fleming, 1988; Watson, Fleming and Alexander 1988). Recognition of a dearth of data specifically investigating injecting drug use, and in particular, patterns of drug use among urban Aboriginal people, have resulted in a new wave of studies this decade. Those few available in the public domain are briefly reviewed below.

National Studies

To date, only one national study has attempted to identify patterns of injecting drug use among Aboriginal Australians. The first National Drug Strategy Household Survey (CDHSH 1996) of indigenous peoples (n=2993) living in metropolitan and other urban areas Australia-wide[7], included ninety five (3%) South Australian participants.

Overall, there were few differences in the patterns of illicit and injecting drug use among the ATSI population compared to non-indigenous Australians. Up to 12% of both the ATSI and general community had ever tried 'hard' drugs (amphetamines, heroin, cocaine, hallucinogens, designer drugs, or having injected drugs), with around 4% of each population identified as ***current*** users of at least one 'hard' drug. Around 6 percent of both indigenous and non-indigenous populations reported having ever tried amphetamines, with fewer than 2% of each population reporting current use. Around 2% of each population reported having tried heroin, cocaine, and hallucinogens, with less than 1% of each sample reporting current use. Designer drugs were used slightly more frequently among the non-indigenous population however, the percentages are similarly very low (with less than 2% reporting current use).

[7] Around 24% of the ATSI population live in major urban centres. 1986 Census classifications, used by the Australian Bureau of Statistics, define a major urban area as containing a population of greater than 100 000 people, 'other' urban areas contain a population of between 1 000 and 99 999 people, and populations of less than 1000 are defined as rural.

The report also found that indigenous injectors were likely to

- share needles when using amphetamines than when using other drugs
- be male
- experiment with illicit drugs (particularly marijuana, amphetamines and hallucinogens)
- be city dwellers (especially in NSW)
- be aged between 20 and 34 years

Benzodiazepines were the only drug for which the incidence of use was greater among indigenous females than males. Polydrug use was also common, with alcohol, tobacco, marijuana, amphetamines and injecting activity most frequently reported by respondents who nominated amphetamines, cocaine or heroin as their primary drug.

ATSI youth tended to experiment with illicit drugs around 18 years of age, approximately 12 months younger than the population in general[8]. However, for inhalants, ATSI youth were more likely to have commenced by the age of 14 years, compared to an average age of 17 years among the general population. While ATSI youth commenced amphetamine use at a similar age to non-indigenous youth (around 19 years), indigenous youth tended to commence use of heroin at a slightly younger age (17.5 years), than their non-indigenous counterparts (20.2 years) (CDHSH 1996).

This research described a slightly greater trend among ATSI peoples towards use of marijuana and tobacco, 'current'[9] injecting behaviour, use of illicit drugs, and drug experimentation, than non-indigenous Australians. In contrast, while indigenous Australians were less likely to report they were current regular drinkers than the general community[10], indigenous Australians were more likely to consume alcohol at levels considered to be harmful to their health (CDHSH 1996).

Alcohol (95%) and alcohol related violence (93%) were most frequently regarded as serious social problems for indigenous people, although high unemployment (87%), illegal drug use (78%), racism (76%), poverty (72%), deaths in custody (71%), and tobacco use (65%), was also highly rated (CDHSH 1996). Alcohol was believed to contribute to the most deaths, according to 66% of indigenous participants (compared with 5% of people first nominating amphetamines or heroin), and contributed to violence or criminal activity, health problems, family breakdown and other social problems, dependency, death,

[8] Age of first injection was not stated in the CDHSH (1994) report.

[9] Current use was defined as having used in the last 12 months (CDHSH 1996)

unemployment, and drink driving. However, marijuana was nominated by 61% of the sample as most significant ***drug problem***[11], with alcohol (37%), amphetamines (29%), heroin (22%), cocaine (17%), tobacco (16%) and injecting drug use (9%) less frequently nominated (CDHSH 1996).

A second national study, the National Aboriginal and Torres Strait Islander Survey 1994 (ABS 1995; ABS 1996a) was conducted concurrently with the CDHSH (1996). This survey, based on 1991 Census data, was designed to estimate the demographic, social and economic characteristics of ATSI people across Australia. Approximately 6.6% of the total ATSI population, (17 500 indigenous people across all states, including prisoners) were interviewed. Although drug and alcohol use, and in particular marijuana use, featured highly as health related problem, the survey only elicited information about the patterns of use of alcohol and tobacco. These were found to be similar to those reported in the CDHSH (1996) for alcohol and tobacco use.

Regional studies

Illicit drug use among indigenous IDU has also been investigated in rural NSW, Brisbane Adelaide, and Canberra. These studies vary considerably in their aims, and methods of data collection, so are not directly comparable. However some of the major points identified in these studies include:

- a tendency towards polydrug use (in particular heroin, amphetamines, marijuana, alcohol and tobacco) (Perkins Sanson-Fisher, Blunden, Lunnay, Redman & Hensley 1994, Lane, 1993, Larson, 1995), with patterns generally consistent with subsequently published data (Perkins et al 1994).
- a slightly greater likelihood of illicit drug use compared with the non-indigenous population (Perkins et al 1994)
- links with drug use, unemployment and socioeconomic status (Perkins et al 1994)
- a greater likelihood of sharing needles and equipment than non-indigenous users (Lane 1993, Larson 1994)
- poor knowledge of BBV and their transmission (Lane 1993, Larson, 1995)
- a tendency towards cleaning needs rather than obtaining new needles (Lane 1993)

[11] The question discussed was “When people talk about a ‘drug problem’, which drug do you think of?” (CDHSH 1996, p.

- a general request for Aboriginal specific alcohol and other drug services, staffed by experienced workers, with the capacity for respecting confidentiality (Lane 1993, Larson 1995, Humes, Moloney, Bass Becking and Bammer 1993).

Injecting Drug Use and risks for transmission of Blood Borne Viruses (BBV)

In 1992, IDU worldwide, with the exception of Australia, were identified as the largest single group infected with HIV or AIDS. Injecting drug users were also considered to be responsible for transmitting HIV in the majority of perinatally and heterosexually acquired cases (Des Jarlais 1992). Australia did not witness similar increases HIV rates of infection among injecting drug using populations that other Western nations experienced (Crofts, 1992). In fact, Australian male injectors, who reported injecting drug use as the only risk factor for transmission, represented less than 4% of cumulative cases over the past decade, whereas users who had homosexual contact only represented only 3.1% of cumulative cases. However IDU was attributed to 26.2% of the total cumulative rates for infection for women. Encouragingly, the number of new cases per year has continued to steadily decline since 1984 (Feacham, 1995).

Until the 1970 census, there existed no formal data about the health of ATSI Australians (Forrest, 1995). While we now know that indigenous people are more likely to have a shorter life expectancy, and to experience significant health problems (diabetes, cardiovascular illness, hepatitis, blindness, tuberculosis) than their non-indigenous counterparts (Brady, 1991; Thomson, 1991; Houston & Legge, 1992), only recently, have links been made between economic and social disenfranchisement, ethnicity, and high levels of drug use, to the increasing incidence and risk of HIV and STD transmission (Adams 1992; Crofts, 1992; Hogg, 1992 ; Loxley, 1997; Saggers and Grey, 1991). Factors limiting the effectiveness of education and prevention programs for indigenous Australians have been identified, including:

> ***…inadequate health infrastructure; competing primary health needs; a lack of intersectoral coordination: inadequate training and support for indigenous health workers ; a reluctance on the part of Aboriginal and Torres Strait Islanders to see HIV/AIDS as a priority: and a reluctance on behalf of the communities to confront particular practices such as homosexuality or injecting drug use.***
>
> ***(Feacham, 1995, p. 94)***

In light of this information, subsequent fears of a major HIV outbreak among Australia's indigenous population are probably not unfounded (Thomson 1991; Feacham, 1995). Between 1992 and 1994, the cumulative rates of newly diagnosed HIV infection increased by 50% among the ATSI community, compared to 17% among the non-indigenous population. In the general population, 80% of all diagnosed cases were reported prior to 1992. While male to male contact has been identified as the primary mode of HIV transmission for both the ATSI and non-indigenous population, the ATSI community has more recently reported infection following heterosexual contact only, at a rate significantly higher than that reported by the non-indigenous community. Recent epidemiological evidence suggests that the cumulative proportion of HIV acquired through heterosexual contact by ATSI people was 24% between 1992 and 1994, as compared to 7% for the non-indigenous population. Although methods for the reporting and tracing HIV infection among the indigenous population have improved (Corrie, 1992; Mulvey and Manderson, 1995; Feacham, 1995), it is predicted that a pool of unidentified, untested, HIV infected heterosexuals continue to threaten ATSI communities (Bowden and Patel, 1993; Bowden, Sheppard & Currie 1994; Philpot, 1993).

Prisoners who use drugs are at considerable risk of increasing the risk of BBV transmission to both indigenous and non-indigenous communities. Considering that around half of all prisoners report IDU, and that around 40% of all injecting drug users have a history of imprisonment (Crofts et al 1996), incarceration represents a very real risk for entry of BBV into the community. Indigenous people are over-represented by at least tenfold in prison system (Crofts, Webb-Pullman & Dolan 1996; Major 1996). Some research suggests that indigenous prisoners are less likely than the non-indigenous population to have been incarcerated because of drug-related and robbery offences (Biles, 1992), whereby others state that "nearly every offence (by ATSI juveniles) involves some alcohol or substance abuse" (Beresford & Omaji, 1996, p. 152). Crofts et al (1992) stated that high levels of risk behaviour in prisons (including injecting drug use and high risk sexual activity) show few signs of declining while strategies preventing BBV transmission are not widely implemented. For example, anecdotal reports suggest the transmission of BBV through the sharing of used sharps, such as razor blades and tattooing equipment (Crofts et a; 1996; Edwards & Frances, 1996; Douglas, 1995).

Whilst IDU amongst prisoners presents a very real risk to all prisoners, some research suggests that individually, the indigenous inmates are neither less nor more likely to inject drugs in prisons than non-indigenous Australians (Feacham 1995). Similarly, whilst internment has been identified as an important point for initiation into injecting for both

ATSI and non-ATSI prisoners (Lane 1993), reports proving a relationship between drug use history prior to incarceration, and IDU while inside prison, have been inconsistent.

Although the HIV 'epidemic' appears to be relatively controlled, and the risks for transmission for HBV has slowed, it is estimated that between 80 000 and 130 000 people have already been infected with HCV. Up to 76% of all cases reported IDU as a risk (NHMRC 1997). Some studies (Wodak, 1997; NHMRC 1997) have estimated the prevalence of HCV among injecting drug users at between 30 and 85%, with an estimated 3000-6000 new infections identified among injecting drug users each year. Indigenous populations have not been identified as at particular risk for transmission for HCV (NHMRC 1997). However the occurrence of injecting activity and concerns about risks for sharing injecting implements and risks for transmission of other BBV, ensure that relevant strategies preventing BBV transmission among the indigenous population are of equal, if not greater, importance as those targeting the population in general.

Research Methods

Overall, the research methodology used to investigate injecting drug using patterns among ATSI populations have varied considerably. Collection and analysis of quantitative data formed the basis of the larger national studies (CDHSH 1996; ABS 1995); the smaller studies have tended to complement quantitative data with that obtained through qualitative methods (Humes et al, 1993; Lane, 1993; Larson 1996; Moloney et al, 1993). For the following research, a methodology also combining qualitative and quantitative methods, was utilised.

Rapid Assessment Methodology

Rapid Assessment Methodology (RAM) has evolved from a research tool primarily used for rural development projects in developing countries (Beebe, 1995), to a versatile approach to research, that may include utilising a range of qualitative and quantitative methods of data collection, developing processes to inform program development, and organising and developing procedures for program monitoring and evaluation (Afonja, 1992, Pearson and Kessler, 1992) in urban areas in developed countries.

RAM is an eclectic approach to research, whereby a variety of research methods or tools for collecting and analysing various types of quantitative and qualitative data may be employed. The strategies utilised depend on the research questions; the time frame required to collect the information; and most importantly, their acceptability to the community involved in the research, among other things. The validity and reliability of the various methods utilised are enhanced through continual triangulation, or cross checking across all the various sources of data. Data is obtained through a combination for traditional (quantitative) and ethnographic methods of data collection, including the identification, examination, and analysis of existing quantitative data, 'key informant' (or consultant) interviews, direct observation, and focus group discussions. Focused quantitative surveys, transcripts of informal conversations, personal diary entries, and other forms of qualitative and quantitative data have also been utilised. A rapid assessment attempts to assess a situation holistically by looking at it from many perspectives, placing problems in context, and looking for interactions and patterns, and utilises the experiences of multidisciplinary teams to increase the breadth of interpretation of data (Pearson and Kessler 1992).

Rapid assessment is particularly appropriate for investigating the ever changing nature and patterns of drug use, and recognises the geographical and cultural differences that occur between regions, and within and between drug using cultures.

Pearson and Kessler (1992, p. 388-9) have defined the hallmarks of RAM as follows.

- RAM is a rapid, pragmatic, and action orientated approach to program development and critique, problem solving and decision making.
- The inquisitive or investigative nature of the method encourages the researchers to explore a range of view points and possibilities within the research problem.
- Paying attention to the process of the research encourages identification of facilitators and constraints on the research process.
- A holistic viewpoint places situations in context with their environment.
- Utilising the perspective's of many key informants increases the researchers confidence in the accuracy of the results, as the key informants are those who will ultimately benefit from the research.
- 'Informed judgement' is obtained by consideration of the different perspective's of the participants.
- RAM is efficient through utilisation and analysis of existing sources of data.
- The interdisciplinary nature of the research team reduces the potential for a dominant view point to emerge from one discipline

- Utilising a team comprised of both ‘insiders’ and ‘outsiders’ provides the opportunity to complement the local experience, expertise and knowledge of the insiders with different skills, expertise and objectivity provided by the outsiders (the researchers).
- Community involvement and interaction between community members is emphasised.

Methodology

This project utilised the principles of Rapid Assessment Methodology, and drew on the experience of the research team who had previously used RAM for assessing the hazardous and harmful use of amphetamines in the Adelaide metropolitan region, and a regional centre in rural South Australia (Vincent, Allsop and Shoobridge 1997b). The aims of this pilot project included assessing the viability of the method for adaptation for use among Aboriginal populations of drug users.

Profile of the Murray Mallee region

The project was conducted in the Murray Mallee, which is located south east of Adelaide, South Australia. The majority of the research was conducted in the Lower Murray region, incorporating the Council districts of Murray Bridge and Meningie, and within the boundaries of the ATSIC region of Adelaide. The Lower Murray region lies within the broader region of the Murray Mallee. To facilitate interpretation of the data, the circumstances surrounding IDU, and the impact of IDU within the Aboriginal community of the Murray Mallee, a brief profile of the Murray Mallee region follows.

The Murray Mallee region contained a population of 31 342 people in 1996; just over 1000 (3% of the population in the Mallee region) of these people were of indigenous origin (ABS 1997a). The main town in this rural area, located 77 kilometres from Adelaide, sustained a population of almost 16 000 people in 1996 (ABS 1997b), who worked in primary industry, including agriculture, dairying, and a meat industry, and tourism (MB&DTA undated). Aboriginal people represented approximately 4% (n=623) of the population of the main town (ABS 1997b), a conservative figure according to the local Aboriginal people, due to the relatively mobile nature of the indigenous population.

The Murray Mallee was overseen by the Papta Warra Yunti Regional Council, for the ATSIC region of Adelaide (ABS 1996d).

The median age of all people who were living in the largest town in this region in 1991 was 32 years of age (ABS 1994), increasing to a median age of 36 years in the 1996 Census (ABS 1997a). In 1991, children (under 15 years of age) represented 42% of the total Aboriginal population. By comparison, children (under 15 years of age) represented only 25% of the population for all residents (all households, including non-indigenous Australians) living in the region. Older individuals (defined as people over 45 years of age[12]) represented 11.6% of the Aboriginal population, where 6.4% of the total Aboriginal population were older than 55 years of age. By comparison, 44.9% of all residents in the region were over the age of 45 years, and 24.7% were over the age of 55 years (ABS 1994).

In 1995 in the ATSIC region of Adelaide, 66% of Aboriginal people reported an annual income of $12 000 or less (ABS 1996a). According to the 1991 Census, the estimated average individual income for all residents in the main town in the Lower Murray region 1991 was $8-12 000 per annum, similar to most other towns in close proximity (ABS 1994). This is comparable with South Australian data (whereby 62% of Aboriginal people earned less than $12 000 per year (ABS 1996a)) and National data, where 56% of indigenous people and 41% of non-indigenous people earned less than $12 000 per year (1997c). By the 1996 Census, 37% of Aboriginal people in the major town earned up to $10 000 per annum, 24% earned at most $21 000 per annum, and 12% earned up to $31 000 per year (ABS 1997b). Although similarities in income across these studies may be seen and little change in income seem apparent over the past 8 years, different income categories contribute to difficulties in making direct comparisons across these studies.

According to the 1991 Census, annual household incomes for all residents in the major town on the region were estimated at a median of $20-25 000 per annum. Forty per cent of non-indigenous families, and 44% of indigenous families[13] were estimated to live on an income of less than $20 000 per year. (ABS 1994). In 1996, comparisons of household incomes across indigenous and non-indigenous households were similar across all major income categories. For example, 38% and 40% of indigenous and non-

[12] Because of a life expectancy up to 15 years lower than the non-indigenous community, Aboriginal people consider their elders to be of an approximate age of 45 years.

indigenous households earned less that $20 000 per annum, however, slightly more Aboriginal than non-Aboriginal people (38% compared with 34%) were earning more than $31 000 per annum (ABS 1997b).

According to the 1994 NATSIS survey, the unemployment rate among South Australian Aboriginal people was the second highest in the country at 45%, with 38% unemployed nationally. Half of these people (26%) had been unemployed for 12 months or more (ABS 1996a). By comparison, the official unemployment rate for all South Australians in April 1997 was 9.4%; a breakdown of unemployment rates for Aboriginal people in 1997 was not available at the time of inquiry (CES, 1997). Nationally (from the 1996 Census), 26% of Aboriginal people were employed in CDEP (Community Development Employment Project) schemes (ABS 1997c); 1% of the indigenous population of the town was employed by CDEP in 1996 (ABS 1997b).

In 1996, indigenous and non-indigenous people living in the major town in the region attended secondary school (5% each group), technical or further educational institutions (3% and 2% respectively), and university (.8% and .4%) at similar rates (ABS 1997a).

[13] Annual household income was defined as the sum of all personal incomes of each resident household member aged 15

REPORT OF CONSULTANCY PHASE

Method

The first, or consultancy phase of this pilot research project involved conducting semi-structured interviews, informal interviews, or conversations with 75 people who had knowledge about injecting drug use in the Lower Murray region. The consultants were interviewed individually, or participated in groups of up to 5. These people were able to describe the nature and patterns of injecting drug use from a perspective broader than their own personal experience (whether their participation in the IDU scene was as a health or welfare worker, police officer, or injecting drug user for example).

The aims of this stage were to obtain information about perceptions of infectious disease, such as HIV, HBV and C, and the health, social and legal implications of injecting drug use in the region. Consultants were also asked how they thought existing services catered for Aboriginal injecting drug users in the region, and what recommendations they could make that may improve treatment and health options for Aboriginal injecting drug users who lived in the region

The information from this stage was used to explore the extent and nature of injecting drug use and users in the Lower Murray region of South Australia. This included the existence and nature of various sub-groups of users, reasons for use, routes of administration, risk-taking and criminal activities associated with use, problems faced by users, and services available for users, amongst other things.

During the consultancy stage of the project, quantitative indicator data were obtained from clinical services (DASC client services, and needle exchanges), hospital admission statistics (Appendix A), and from the Australian Bureau of Statistics (ABS). These data were used to confirm/validate, some of the information which was obtained in the consultant interviews.

Recruitment of consultants

Seventy five individuals (56% Aboriginal and 44% non-Aboriginal) participated in this phase of the research. Thirty one participants (74% of Aboriginal participants) identified as Ngarrindjeri (or Nunga). The participants included Aboriginal elders, community and family members of users, injecting drug users themselves, and members of a range of health, welfare, and legal professions, private enterprise (such as pharmacies), community health and policy makers. Table 1 shows the primary role of the consultants and the general nature of their experience with IDU in the region. Many consultants had contact with IDU and users through their many roles, for example, through work, family or social situations, or a personal history of IDU. To preserve anonymity of the consultants, the specific nature of the consultants' occupations will not be provided. Because of the diverse nature of the work, personal experiences, and differing levels of participation of consultants, care should be taken in interpreting the proportion of participants who discussed the range of topics below. For example, consultants from the legal professions may have less knowledge about specific health related problems experienced by injecting drug users.

Table 1: Occupations of consultants

Consultant background	(n)	(% of consultants)
General health	14	19%
Welfare/social support	9	12%
Legal representatives	7	9%
Family members	2	3%
Injecting drug users	12	16%
Education sector	4	5%
Community member	11	15%
Policy and health promotion	7	9%
Employment	2	3%
Private enterprise	7	9%
	n=75	**100**

Potential consultants were initially contacted by telephone. Upon face-to face contact, participants were given information about the research to give other potential consultants. These participants were asked to describe the nature of their work or involvement with injecting drug users prior being interviewed, to establish an adequate knowledge base. All participants who were contacted or interviewed were asked to inform other people about the research. Flyers (Appendix B) were provided for this purpose. Fifty six consultants (75% of the consultant sample) participated in formal scheduled semi-structured interviews (Appendix C), while others (25%) participated in informal conversations. These interviews/conversations took place in the consultant's

workplace, at the Lower Murray Nunga's Club, or at the consultants' home. The informal conversations or opportunistic interviews were often conducted in the outside area of the Club, where members of the Aboriginal community frequently gathered in the smoking area to talk. In fact, the majority of the participants (n=23) who preferred to have an informal discussion usually involved other people present at the time. This venue provided the opportunity for the consultants and other Nungas to introduce the two researchers to other local people, visiting health and community workers, and dignitaries, for the purposes of inviting them to participate in the study. This approach helped to publicise the research, encouraged wide community participation, and removed the focus of attention away from those who used or injected drugs[14]. Similar themes were used in both the informal and formal interviews, and additional themes explored as they arose.

All participants who were interviewed were informed about the research developed, the role of the researchers, and how the information was to be used. The consultants gave their verbal consent for the researchers to take notes (for purposes of accuracy), and it was explained that they may be quoted (without being identified), should their story assist in illustrating particular findings.

The consultants were asked to identify how they knew about injecting drug use in the region, the types of users they had been in contact with, broadly, where users lived, and how often they had seen these people in the last 12 months. This information was collected using a short 'information sheet' adapted from the Illicit Drug Reporting System Pilot Study (Hando, O'Brien, Darke, Maher, & Hall, 1996). This information sheet (Appendix C) was self-administered prior to the interview. The first page provided information about the study that participants could keep for future reference. Some participants (n=11) chose not to complete the information sheet, and others (n=13) did not return them by the end of the research period. Of the 56 consultants who participated in formal interviews, 57% (n=32) returned completed information sheet.

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[14]

Results

Profile of consultants

The following profile is from the 32 (of 75) consultants who returned information sheets. Overall, 38% of Aboriginal participants (n=16; comprising 9 males and 7 females), and 48% (n=16; 6 males and 10 females) of non-indigenous participants returned information sheets. Twenty six consultants (81%) were employed full time, 2 (6%) were working part time, others were attending school (6%) or university (6%) or working on the local CDEP program (6%). Another consultant was performing home duties, another was on the pension, and a third performed voluntary work. (Multiple responses were provided here).

Almost 80% of the consultants who returned information sheets (n = 25) found out about the research through interviewer contact, although seven of these consultants (22%) had initially heard about the project through the Aboriginal Drug and Alcohol Council (ADAC), or through involvement in the Project Advisory Committee (PAC). Another seven consultants (22%) heard about the research through their contact with members of the local community centre.

Of the consultants who returned information sheets, 59% (n=19) knew about Nunga injecting drug users through their work, and 56% had acquaintances (n=10), friends (n=4), or family members (n=4) who were currently injecting drugs. Nine per cent of these consultants (n=3) spoke from personal experience, and others (41%) knew about Nunga injecting drug users through their contact with agencies (n=3) or through the grapevine (n=11). Multiple responses were recorded here.

As would be expected, the consultants who were currently injecting drugs, or whose family members also injected drugs [15] had far more contact with other people who had injected, either every day (6%; n=2;) or few days (18%, n=6). Some consultants had contact with users on a weekly (22%, n=7) or monthly (16%; n=5) basis, and others (13%; n=4) every few months or less. Those who had no current personal contact with users (16%, n=5), had had either personal experience in the past, they were familiar with the issues through their work of through people known to them, they knew people whose family members or partners injected, or they heard about people engaging in IDU

[15] These figures pertain to those who returned information sheets. Fourteen consultants were current IDU or had been

practices ‘through the grapevine'. Those few consultants (9%, n=3) with no personal contact with users were included in the study because they had access to information of a behavioural nature, such as needle disposal information, or through their experiences with health, or child custody related issues, or broader community policy and prevention tasks.

Although 75 individuals participated in the study, a further 15 people, from a range of community and health organisations, were also formally invited to participate. Some of these people stated that they were simply not interested in participating (n=4), and others (n=5) believed that non-Aboriginal people should not have access to some aspects of Aboriginal culture. These people expressed concern that the information obtained from the study may be used inappropriately. It was assumed by the researchers that non-response to telephone messages, faxes, letters, or non-attendance at pre-arranged meetings (n=6) indicated a reluctance to participate.

The following report represents responses for all 70 consultants.

Description of Aboriginal people who injected drugs in the Lower Murray area

There was considerable variation in the estimates given by consultants about the number of Aboriginal and non-Aboriginal people known to be injecting drug users in the Lower Murray area. Because there was a considerably larger population of non-Aboriginal people in the region, most consultants believed that there were more non-Aboriginal than Aboriginal injectors. Other consultants (n=6) did not know of any non-Aboriginal injectors although they had knowledge of Aboriginal injectors. Because of the hidden nature of illicit drug using populations, coupled with the stigma attached to being an Aboriginal injecting drug users (as consultants (n=16) frequently described), it is difficult to make definitive statements about the number of injecting drug users who may have been living in the area at the time of the study. However, consultants consistently believed that there was a core number of Aboriginal residents who were considered dependent heroin or amphetamine users (of about up to 10 people), and a group of about 30[16] people living locally, who used depending upon drug availability. Consultants also described a mobile population of about 20 injectors, who moved between regional

towns, Adelaide, and prison. Some regular users were believed to be based in the city, and visited the Lower Murray region to visit family, for 'time out', or other reasons[17].

Sixteen consultants[18], described IDU as a 'shaming' experience for individuals and their families, hence, many users were careful about hiding their use from family and friends, to protect themselves and their families from the stigma associated with drug use.

> ***Sixty per cent of them [the parents] say that it's the children's' fault, not their fault, as they say that you can't watch your children all the time. There's a lot of shame associated with being the parent of a user...The parents say 'I look after my children well' but often they don't want to know [if their children is an user], because of the shame...***

Descriptions of Nunga injecting drug users varied considerably, because IDU was believed to cross all social boundaries. Consultants broadly described IDU in the region as most likely to

- be aged between 16 and 45 years (though most frequently between 20 and 35 years)
- be male
- use yarndi, tobacco, and alcohol more frequently than heroin or amphetamines
- primarily heroin users who also used amphetamines, or used amphetamines as a substitute, if heroin was unavailable.

Some consultants (n=6) were aware of some 14 – 16 year olds who were episodic users, who used when drugs were readily available.

Perception of IDU as a problem

Although consultants had at least some knowledge about Nunga injecting drug users in the Lower Murray region, consultants expressed a diverse range of opinions regarding the seriousness of IDU for the community, compared to other drugs and other problems.

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16 These 60 regular, occasional and 'floating' IDU represent around 6% of the Aboriginal population in the Lower Murray region, using the ABS 1991 data.

17 Where consultants and survey participants have supplied reasons for their behaviour, or explanations about an issue, examples are stated. In some instances, participants in the survey or consultancy phases were reluctant to elaborate on what these 'reasons' may be. Where it was likely that the information would be offered, the participant was questioned further, but not to the point of offending the participant.

18 IDU were described by a few consultants in the scene as 'closeties', or cupboard (hidden) 'junkies' or IDU, where very few trusted people were privy to knowledge about their IDU. A person's IDU usually only became public knowledge, when that person had been apprehended or jailed for drug related crime. Some family members stated they were the last to have knowledge about recreational IDU, unless the user came to the attention of health or other community workers, eg. Family and Community Services (FACS). Others stated that regular users were more easily recognised by family members, due to

Fourteen consultants believed IDU was of major concern. These concerns were influenced through current or past personal use (n=5); because family members were users (n=4), or because of nature of their work in crisis management (n=5). These consultants identified a range of problems associated with long-term IDU, including social, financial, and relationship problems. 'Family shame'[19], inability to gain or retain employment, inability to properly care for dependents or self, arguments and assaults with friends, families or others, and suicide, were attributed to regular use. Problems associated with recreational use focussed upon immediate monetary needs to pay for a 'taste' and the risks of criminal behaviour; and assaults (particularly related to polydrug use); inability to pay bills; and a perceived increasing popularity of injectable drugs that put users at risk of contracting blood borne disease. Alternatively, there were those (n=11) who believed that IDU would be more problematic in the future than it was in the present, as they expected that illicit drug experimentation would increase. However, they supported education programs to prevent use, and supported the development of appropriate services for those injecting drug users who were living in the region.

Availability

Regular injecting drug users usually obtained heroin and amphetamines from the city, as the local supply was generally considered erratic. Consultants believed that very few local Nungas dealt in drugs, and believed that those known to deal lived elsewhere. Occasionally, some Nungas were believed to sell locally produced yarndi[20], acting as 'middle men', and rarely were local Nungas considered to be involved in yarndi production. Prescription drugs were obtained from chemists locally, in Adelaide and the Adelaide hills, or on the local black market.

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[19] Consultants (n=5) had witnessed entire families being shunned by the broader community, when members of a family were involved in IDU. They described situations in which it often took years for these families to regain the respect of the local Aboriginal community because of the behaviour of the person who was injecting, or the behaviour of the family of the person who was injecting. Some family members were criticised for their attempts to minimise the impact of injecting drug use on themselves, and in some cases were believed to be 'rescuing' the user, rather that allowing the user to face the consequences of their drug use.

[20] Consultants believed that the many yarndi dealers 'illegally' obtained their supply from local producers, and sold it

Other drug use

The overall majority (n=53) of the consultants believed that the problems caused by alcohol, yarndi, (or alcohol and yarndi in combination) had greater impact on the Aboriginal community than IDU. Polydrug use, (the combination of alcohol, tobacco yarndi, and prescription drugs, such as benzodiazepines and codeine), according to 29 consultants, was believed to contribute to more problems within the community than any drug alone.

Because of the popularity of alcohol, yarndi prescription drugs, or polydrug use, consultants had some difficultly attributing specific problems to any particular drug. There were many common features associated with problematic use of alcohol, yarndi and prescription drugs; many of these identical to those described above for the use of heroin and amphetamines. The few differences in drug using behaviour or consequences associated with specific drugs are discussed separately, below.

Alcohol use

Alcohol was said to cause social disruption among families, where 'the kids' were believed to suffer most, as their health, dietary, physical and social needs were not being met. Consultants also believed that alcohol facilitated successful (and unsuccessful) suicide attempts, and was attributed to health problems, such as diabetes, and hypertension.

Consultants attributed alcohol use to hospitalisations, domestic violence, assaults, poisoning, accidents, and financial problems such as an inability to pay rent, buy food and pay bills. Two hospitals provided information, and supported consultants perception of greater links between Aboriginal alcohol use and hospitalisation than for admissions due to illicit drug use. No admissions were made to either hospital as a consequence of injecting drug use in the past 12 months, although 3 overdoses (prescription drugs) were recorded. One hospital reported that between July 1995 and July 1996, of 16 alcohol or other drug (AOD) related admissions, 3 patients (19% of AOD admissions) were Aboriginal. Aboriginal people made 4 outpatient or casualty attendances during this period. Consultants from another hospital reported 7 admissions related to overdose from prescription drugs. Other reasons for attending hospitals (where alcohol use was not recorded) included suturing, assault and concussion (Appendix A).

Despite the concerns expressed above, several consultants (n=9) believed that alcohol consumption, and alcohol related problems, (such as alcohol-related personal and social problems) and social incidents, (public drunkenness and assault), had decreased in recent years. The Community Development Employment Program (CDEP); more effective policing of parks and reserves; greater access to welfare programs, and the assistance of the Mobile Assistance Patrol (MAP) were believed to have contributed to a reduction in alcohol related incidents. One consultant stated that the public and very social nature of Aboriginal drinking increased Nungas visibility, hence increased the likelihood of scrutiny and criticism from other members of the Lower Murray community.

There was considerable diversity of opinion about the ideal philosophies that should underpin programs for people with AOD problems. Whilst local programs were attributed as greatly assisting local Aboriginal people to cease drinking, the abstinence-based philosophy used by many of these agencies (and adopted by many reformed drinkers), was difficult to reconcile with philosophies used by other health programs, and harm-minimisation strategies that had already been introduced in the region. Some consultants (n=4) described how abstinence-based philosophies had interfered with their right to choose to use alcohol in public, arguing that they did not have alcohol problems, and that Aboriginal people should be able to model responsible alcohol use without being criticised by their own people. In contrast, two consultants believed that some sections of the community were hypocritical regarding alcohol use by Aboriginal people. For example, sporting clubs often rewarded sporting achievement with alcohol, a message these consultants described as misguided, and disrespectful to Aboriginal people, and helped reinforce stereotypes surrounding Aboriginal people and alcohol use.

Yarndi (Marijuana) use

The combination of alcohol and yarndi was considered to be a greater problem than with either drug alone. Yarndi was described to be almost as commonplace as tobacco use among Aboriginal people, and although less openly discussed, consultants believed that smoking yarndi had become a 'norm' of social activity for younger and older users alike. Three consultants estimated that over half of the Aboriginal people in the region aged between 18 and 50 smoked yarndi, and 36 consultants believed that yarndi was of greater concern to the community than other drug use problems. Yarndi was described as replacing alcohol as a social activity, and contributed to a whole range of social and lifestyle problems that the Aboriginal and non-Aboriginal community faced. Theft, to fund

purchase and supply of yarndi, an inability to meet household and financial commitments, aggression, violence, laziness and lack of motivation to work, were examples provided by consultants of the problems associated with use of yarndi.

Three people described personal involvement with a small number of individuals who had experienced what they described as yarndi-induced psychosis or schizophrenia.

As with older users, yarndi was perceived to be replacing alcohol as a drug of choice for younger age groups. Consultants described children as young as 12 to be occasional and sometimes frequent yarndi users. Several consultants (n=7) estimated that between 10% and 20% of school children (both Aboriginal and non-Aboriginal) were regular users of yarndi. While some consultants (n=4) believed that non-Aboriginal teenagers were more frequently suspended or expelled for drug (yarndi) use at school, other consultants (n=5) believed that reporting more frequent drug use for the non-Aboriginal population de-emphasised the incidence of drug use among Aboriginal people. Another consultant supported this statement by describing an incident where a group of Aboriginal teenagers 'planned' their expulsion from school, through blatant use of yarndi within the school grounds.

Despite these differences in reporting, consultants believed that yarndi use contributed to learning difficulties, a lack of motivation, aggression, laziness and apathy for school-aged youth, older youth, and adults in both the Aboriginal and non-Aboriginal communities. Three consultants attributed yarndi use to an anti-authoritarian attitude, and contributed to a lack of respect for teachers and elders.

Yarndi was described as a precipitant to violence. Lack of supply resulted in incidents of theft from local suppliers, who then sought retribution for their losses. Use of yarndi at public functions, combined with the disinhibiting effects of polydrug use (a combination of alcohol, yarndi, and occasionally amphetamine) was described as contributing to interracial tension and assaults.

Methadone

Indicator data suggested that there were few Aboriginal people accessing public methadone programs[21] in South Australia, relative to the injecting drug using population

[21] Methadone was available from two separate programs in South Australia. The Public Methadone Program, operating

in general. In the Lower Murray area, the only GP registered as a private prescriber (who had one methadone client) left the region soon after the completion of the study. A lack of interest by local GP's further ensured little opportunity for local users to obtain methadone.

On a state-wide basis, to April 1997, less than 2% of the 650 registered public methadone program clients, identified themselves as Aboriginal (Christie, personal communication, 11 April 1997). Almost 1000 clients were registered on the private prescribers methadone program, but because ethnicity/Aboriginality was not routinely recorded by the private prescribers (Drage, personal communication, 9 May 1997), it is difficult to estimate the numbers of indigenous injecting drug users attending this service. Informal conversations with 7 metropolitan based private prescribers stated that Aboriginal people rarely presented for methadone, and at the time of the report, these 7 prescribers had a collective total of less than 10 Aboriginal people between them. (Refer to Appendix A for further information on methadone services). Another source (J, personal communication, 24 April, 1997) believed that there were approximately 35 Aboriginal people in the metropolitan area alone who were prescribed methadone, but it was unlikely that the numbers were significantly greater than this.

Use of prescription drugs

Use of 'pills' (benzodiazepines, such as Valium, Rohypnol, antidepressants and codeine phosphate etc) was considered by some consultants (n=27) to be 'endemic' in the Aboriginal community, and contributed to the social, health and lifestyle problems that have been previously described. Local general practitioners had long recognised problems related to the use of the benzodiazepine, Rohypnol, and consequently banned its prescription to local people. Although consultants recognised a reduction in the demand for and use of this drug, other prescription drugs had increased in popularity. One pharmacist was concerned about an 'enormous amount' (300 boxes a month, or 30 - 40 scripts a day) of Panadiene Forte or Mersyndol that was being supplied to (primarily, he suggested) Aboriginal people. He also described a demand for Sudafed, although pharmacists believed that allergy and sinus problems particular to the region contributed to this demand. Another consultant strongly believed that the demand for Sudafed and

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Private Prescriber Program is operated by privately based (DASC trained) General Practitioners, and is supervised by

other medications demonstrated just another instance where Aboriginal people ignored the ‘misuse’ of readily available drugs.

Tobacco

Consultants acknowledged that tobacco was the drug most commonly used by Aboriginal people, however few consultants also acknowledged the health related implications, other than stating cigarette smoking was a difficult habit to cease. Some (n=4) Aboriginal consultants were concerned that the increasing popularity of tobacco smoking among youth, and poor enforcement of regulations provided few barriers to youth commencing using this drug. Sharing of cigarettes was commonplace, and smoking was said to provide much of the 'social lubricant' for informal discussion.

Other problems

Six people stated that a number of other issues, such as ‘pokie’ gambling (n=5), unemployment (n=3), racism (n=3), and loss of identity (n=1), were of greater concern to the community than problems related to drug use.

Reasons for drug and alcohol use

Young Nungas (n=7) and other consultants (n=14) described considerable hypocrisy, and lack of positive role models, in relation to drug or alcohol use, as very few Aboriginal people did not use any type of drug (including alcohol, yarndi or cigarettes). Because these drugs were socially acceptable, there were few reasons to choose not to use alcohol or other drugs.

> ***…the teenager is only copying what he sees…***

Consultants generally believed that drug and alcohol use was merely symptomatic of deeper problems within Aboriginal society.

Drugs are not an excuse for Aboriginality, although many use for that reason. It's a cop out, and they don't realise that it's money going into someone else's pocket, so the families go without...it has a lot to do with group pressure, if you don't smoke dope you're seen as an outcast by your own peer group...a lot of it is about wanting to belong and not being able to express how they feel…

This quote exemplifies a range of reasons attributed to drug and alcohol use within the Lower Murray community. Consultants believed that a lack of cultural identity, family fragmentation and a need to 'belong' to a peer group or community[22], and generations of disadvantage precipitated low self-esteem which contributed to drug use. Sexual abuse or violence, feelings of hopelessness, lack of educational or employment opportunity, and boredom also contributed to drug and alcohol use. This then resulted in problems such as family neglect, and difficulties in expressing emotions. Consultants believed drug and alcohol use provided an escape from emotional pain, or an opportunity to feel good within the overall context of the lifestyle experienced by some Aboriginal people.

"There is not enough opportunity to succeed. There are lots of factors ...that have turned into drug using...lots of people who I know are using [drugs] are family men, and they would like to do the right thing but they are continually banging their heads against a brick wall...and if you do it long enough you get tired. So, drug use is a quick fix; an easy way out, so you don't have to face your personal problems. All drugs do this".

Risk taking behaviour

Risk for BBV

The consultants were divided in their views of the knowledge held by the community regarding information about transmission of blood-borne viruses (BBV). Two health workers reported low serum prevalence of HCV among their clients, while two others believed that HCV was quite prevalent among their group of clients (within the prison system)[23]. Again, while some consultants believed there was inadequate information about hepatitis and HIV, others stated that there had been ample opportunity for people to learn about the means and risks of transmission. They were, however, united in

[22] Consultants described an inability to identify with, or adequately fit into, either the Aboriginal or non-Aboriginal communities, contributed to drug and alcohol use, particularly for those of mixed marriages.

[23] Information about incidence of HCV among prisoners was not readily available at the time the report was being

stating that the promotion of educational material, or education about BBV, was still essential, and that there was no room for complacency.

Needle sharing

Several consultants (n=17) stated they knew of some recreational users of drugs who they described as "notorious sharers" of needles, who were complacent about the risks associated with sharing. However, these consultants believed that most people who injected were likely to practice safe injecting techniques. Another 7 consultants were certain that users they knew did not share injecting equipment. These consultants stated that some people engaged in so-called 'risk behaviour' (or unsafe injecting, using or sexual practices) because they believed that non-Aboriginal people were more likely to contract HIV than Aboriginal people. These beliefs were partially attributed to the delivery of 'safe using/safe-sex' messages for a non-indigenous population by non-indigenous people. Some consultants (n=4) stated that some groups of users had interpreted harm-minimisation strategies (such as do not share your needle with anyone) as a "white man's intrusion"; more evidence that 'white people' were "telling us what to do with our lives".

The 'culture' of 'sharing belongings' was described as an additional barrier to safe injecting practices, with several consultants (n=7) describing how obligations to share belongings with family members or close friends would, for some users, also include needles. Asking a family member or close friend about their likelihood of having a BBV would not be considered as a possibility, and if this information was requested, it would be considered a personal insult.

> ***"It's a sharing culture...they get the needles from the city...some of them are using heroin, and they won't use the whole lot [of needles] and use the same needle for 3 or 4 people. They share the needle, share the heroin, and they only have enough for one blast. If there's only a small handful of them they'll go dutch"***

> ***"Trust me brother, we are one, we will go together... I have known you all my life"***

Condom use

Use of condoms to prevent transmission of BBV was considered to be a separate issue to that of needle sharing, and drew a range of alternate responses. While some

consultants (n=7) believed that community education programs had influenced appropriate use of condoms, preventing disease transmission or pregnancy, others (n=22) believed that many ignored messages about the risks associated with unsafe sexual practices. Some consultants (n=11) believed that Nungas just preferred not to use them, others (n=5) believed that condoms were seen as another one of 'white man's impositions', and some (n=3) stated that Nunga's believed they were not susceptible to contracting 'white man's diseases'. Intoxication and the resulting disinhibition were said to contribute to increased feelings of invincibility, and lower the perception of risk for contracting BBV.

> ***People can afford a packet of condoms, or contraceptives, but they'd rather ride bareback; lots won't wear them. They say "you can put them on a white man, but don't bring them to me! I'm macho, I'm a black man. If I was meant to use it I would have been born with it. You won't see too many Nungas with a condom in their back pocket, and I know a lot of fellows. It's not really relevant to the community; opportunity comes first…***

Some consultants (n=3) had actively attempted to educate local youth about the use of condoms. These consultants believed that recently, young people had begun to request condoms, and believed that this was evidence that safe-sex messages were being increasingly accepted. However, the community was described as ‘still coming to terms’ with harm-reduction strategies that opposed some traditional and conservative views about drug use and sexual health. Three consultants stated that their support of harm reduction strategies such as these had affected their working relationships with community members who did not support these views. They believed that an abstinence (from sex) philosophy and attitudes that discouraged discussion about sexual health, put people at risk of contracting disease.

Incarceration

Incarceration was a risk situation according to consultants (n=9), and because sterile needles were difficult to obtain within the prison system there was often little choice but to share needles. One consultant described a creative and determined inmate using a biro as a syringe barrel.

Other risk taking behaviour

Other risk-taking activities described by consultants included stealing yarndi from the local providers, as previously stated (n=13), and driving while under the influence of alcohol or drugs (n=3). Others reported users stealing needles from relatives with diabetes (n=3). Intoxication was believed to increase feelings of depression, or of reducing inhibitions so that people behaved in unusual ways.

Health problems related to injecting drug use

Consultants generally attributed IDU to a range of physical and psychological health, social, financial, legal and relationship problems. Others (n=11) perceived that IDU was increasing in popularity, which put users and other community members at risk of exposure to communicable blood borne disease, such as hepatitis and HIV. The difficulties faced by the community were enhanced by the lack of appropriate avenues of support or services for drug users and their families, as the available services (with one exception) were primarily alcohol focussed.

Consultants (n=9) had observed injecting drug users in generally poor states of health, and had observed weight loss and lethargy among users they knew. Some consultants identified specific concerns, such as the risk of needle-stick injury for health workers (n=7), or that the disinhibiting effects of intoxication resulted in accidental (n=3), or intentional injury, such as deliberate self-harm (n=8) in drug users. Others (n=8) specifically identified accidental overdose as a consequence of using. But overall, consultants found it difficult to identify specific health related problems, apart from the risk of contracting forms of hepatitis or HIV, as there were so many factors that contributed to poor health outcomes for Aboriginal people. In the main, consultants felt that amphetamine, heroin, yarndy, and polydrug use contributed to poorer general health because money was invested in drugs that could otherwise have been used for food or medical purposes, to support social or welfare needs, or to satisfy other priorities.

Psychological problems related to injecting drug use

Suicide

The most frequently reported psychological problem described by consultants was the risk of suicide (n=15) while using drugs or alcohol. Consultants believed that drug use facilitated a suicide attempt, or heightened feelings of loss, poor self-esteem, or underlying depression so that the risk of self-harm was increased once someone became intoxicated. Consultants explained that some people who would not be considered at risk while sober, may exhibit unusual behaviour once they were intoxicated, that included attempts on their life.

> ***"The devil blanks your mind and makes you do it. I had a drug and alcohol cocktail, and I was there, with a thing around my neck. I kicked the chair away and the beam snapped - I was lucky it did or I wouldn't be here today".***

Grief and loss

Grief and loss was a major theme emerging from the consultancy phase of this research. Every Aboriginal consultant described having to attend numerous funerals and grieving for family, friends or relatives. Non-Aboriginal consultants had observed or heard about members of the Aboriginal community 'constantly' attending funerals. As one non-Aboriginal consultant said;

> ***It's a much bigger thing for children in the Aboriginal community. Generally death is an eye opener, for a white professional anyway... the [Aboriginal] children talk about death as a big part of their lives, and almost every child knows someone who's either killed themselves, or who has died prematurely...They say that their mum died at 40, so they don't expect to live much past that themselves. The majority of white children have had no personal contact with anyone who has killed themselves…***
>
> ***They [the children] say that they're going through a bit of a rough patch, because their cousin has hung themselves, or their uncle tried to kill himself..."***

During the research period, a number of deaths occurred within the Lower Murray Aboriginal community. Due to variations in anecdotal, newspaper and official reports about the number of deaths, and their causes, it is difficult to establish exactly the number of people lost to the community during this time. One source estimated that 25 local people had died (including death by natural causes) within this small community in the 12 months to April 1997, and a further 19 people had died in this region alone between April and August 1997, with a similar, or slightly greater number of people having died in the Adelaide Aboriginal community (Wilson, personal communication, 13 August, 1997; De Belle, 1997). Because of family connections between the Adelaide and Lower Murray communities it is difficult to differentiate any overlap in the data reported here.

The grieving process was considered to be protracted, as many Aboriginal people were unable recover from the death of one person, before they were attending another funeral. Consequently, consultants described the community as constantly experiencing loss and sorrow.

Social issues in the Lower Murray region-

Youth identity

Five consultants (both Aboriginal and non-Aboriginal) described youth in the Lower Murray (Aboriginal and non-Aboriginal youth) as struggling to define an identity. Smoking yarndi, non-conformity, and 'dropping out' of school, were a means of finding a challenge, and expressing individuality. A Year 11 or 12 education was perceived by some youth as a 'white kid's' role. One consultant described some continuing Aboriginal students as distancing themselves from other Aboriginal children as a means of surviving in the school system. These difficulties, and the social problems faced by youth in the region, was seen to affect self-perception. One consultant reflected:

> ***It's [drug use] related to their self-esteem...you can see how some of them [youth] lack pride in their Aboriginality, although you can see the same attitude in the whites sometimes, but you can see it in the way they walk, with their heads down and their shoulders low, they shuffle their feet, and wear…black clothes...***

Boredom (n=14) was commonly thought to be a reason for using alcohol and/or other drugs among youth and older people in the region.

Consultants perceptions of educational levels and employment opportunities

Contrary to the above, some consultants (n=3) believed that more Aboriginal students were taking the opportunity to continue school in past years, and their prospects were improving as their educational levels improved. This was attributed in part, to the school's commitment to offer culturally based education for Aboriginal and non-Aboriginal students in recent years.

One consultant reported that between 1990 and 1995, 88 Aboriginal children had been enrolled in the local high school. Of 55 students who had commenced Year 11 during this period, 29 (53%) successfully completed Year 11, and went on to gain employment. Almost 80% of these ex-students (n=23) were still employed at the time of the study, and a further two students were continuing their education. The remaining four ex-Year 11 students were single parents (n=2) or unemployed (n=2). Of the 33 students who left school before completing Year 11, the majority (79%) were unemployed at the time of the study, 15% (n=5) were employed, and 6% (n=2) were single parents.

Three consultants (both Aboriginal and non-Aboriginal) strongly believed that there were no longer educational disadvantages for Aboriginal students, and welfare and lack of employment opportunities crossed cultural boundaries for all people living in the region.

A few consultants (n=2) believed some Aboriginal youth who had found employment were vulnerable to pressures to provide money to provide the entertainment (such as funding for yarndi) for their peers. These consultants had witnessed some Aboriginal youth being taunted by other Aboriginal youth because they had a job, or were 'hassled' to provide money for their friends. Consequently, some youth became disillusioned and were forced to choose between these friendships or their jobs.

Consultants (n=14) predicted poor future employment opportunities for Aboriginal and non-Aboriginal youth and young adults in the region. Many youth perceived that gaining an education or work skills would not result in a job, therefore a commitment to study

was of no benefit. Consultants described youth as reluctant to investigate opportunities outside of the region because they perceived that other areas also lacked opportunity. Consequently, these youth became the next (up to third) generation of welfare recipients. Lack of opportunity was attributed in part to a decline in the economy of the rural industry in the region. Consultants had observed the region change from a relatively wealthy middle-class rural area, to a primarily welfare state in the last five or so years. Cultural divisions between and within the communities, contributed to an overall lack of hope for the future among many of the younger people. These issues were described by consultants as contributing to the context of drug use in the region.

Lack of employment opportunities were frequently cited as a reason for using drugs. However, a number of recent initiatives, such as the Community Development Employment Program (CDEP), projects operating from the Lower Murray Nungas Club, and the art gallery, were frequently cited examples of positive changes that increased pride and opportunity, and hence discouraged drug use. These programs had become the focus of social activity for many Nungas in the region, provided a backdrop for considerable community participation and communication, and provided a means of utilising time for those who were unemployed. Some consultants (n=9) voiced their disappointment at the pending closure of the club (which occurred in March 1997), however, others (n=5) believed that this created an opportunity for Aboriginal people to develop their own initiatives, and increase the opportunity for self- funding.

The CDEP program was said to provide many tangible benefits to the Aboriginal community. Many consultants (n=16) stated that the program had been influential (along with increased policing, use of police aides, and utilisation of the sobering-up service) in changing the patterns of alcohol consumption, and reduced the opportunities to drink, for many individuals in the region. The CDEP was held responsible for restoring pride in members of the community who participated in the program as they could learn new technical and management skills, their work was acknowledged, and the activity of working reduced boredom. A number of potential self-supporting projects, such as growing seedlings to establish native gardens and restoring the local landscape, were positive benefits of the program. Opportunities to work, and to be involved in constructive projects were seen as quite definite links to preventing drug use.

> ***"They want to do something , they don't want to sit in a park all day. You give them something to do, and you reap the rewards".***

Still, CDEP was seen to have not reached it's full potential, and consultants described further opportunities to develop businesses[24], art[25], craft[26], and self-funding projects from the program that would benefit the community in the long term. Some believed the program provided an incentive for school leavers, who may otherwise have faced unemployment, although others (n=9) were critical of the impression the program created for some school leavers. They described how they had seen many bright students choosing CDEP for short term gain (income and independence), when they had academic potential.

Sense of Family and Community

Consultants (n=11) frequently described Aboriginal women as a major strength of the family, and the community, by taking responsibility for caring for the family, arranging community activities, and often by providing reasonable incomes. They described that a range of factors, such as health problems, role changes, and lack of recognition and self-esteem had contributed to men having less prominent roles in society in recent years. But consultants also described that in recent years, many programs have been conducted that were supportive of women, and while the women were becoming empowered, the men had fewer opportunities for self-development or to take prominent positions. Although the consultants supported the range of programs that were available to help women in need, they stated that there was a large gap in services whereby the needs of men, defined roles and appropriate recognition for their work, were ignored. They believed that it was essential to develop services for Aboriginal men, as they were seen to be at risk for drug and alcohol use, aggression or violence, and at risk of suicide. Consultants agreed that men did not have outlets for their emotional needs, and speaking to female health workers was not an option for many.

While a sense of 'family' was one of the major strengths of Aboriginal culture, some consultants were disturbed to see some youth reflecting some of the more negative behaviours that may have previously been a part of family life, such as drinking, or aggressive behaviour. This was particularly distressing when family members had made

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[24] A local enterprise was in the process of establishing a business that offered accredited literacy and computer courses for local Aboriginal (and in the future non-Aboriginal people) in the region. It was anticipated that students who successfully completed the courses would then have the opportunity to develop teaching skills.

[25] A CDEP project group had been involved in the restoration of the old railway station for the use as an Art Gallery for local Aboriginal art. The gallery was opened during the closing stages of this project.

[26] Members from the CDEP were developing a particular craft, using feathers collected from native fauna, a craft that they

significant recent changes to their lives and behaviour through ceasing their own alcohol or other drug use. Others believed that there were incentives for people who were relatively poor, to utilise benefits offered though welfare and family payments. The stresses resulting from caring for many young children were often reflected in the health of grandmothers, who often took (unwanted) major responsibility for their grandchildren. The consultants strongly believed that some of these more negative attitudes of younger Aboriginal people were pervasive, and distressing to observe, and contributed to a lack of communication between generations.

Consultants were asked to comment about community issues, with the intention of eliciting information about the community who injected drugs, how the Lower Murray Aboriginal community felt about IDU, and how the community as a whole, could work together to address the problems related to IDU. Generally, the relationship between various agencies in town was described having improved in recent years, with a number of successful initiatives having been conducted[27]. However, perceptions of division between some sections of the Aboriginal and non-indigenous community, and perceptions of unfair distribution of employment opportunities (whereby family members were preferred employees) were described as barriers to effective working relationships.

Within the IDU community, consultants believed that local users tended to use drugs with their own groups, and rarely mixed with non-Aboriginal people. Those who travelled, were more likely to have non-Aboriginal injecting friends in the region and in the metropolitan area.

A number of consultants (n=16) described how some Aboriginal people were pressured to 'conform' to a particular ideal of Aboriginality. Seven of these consultants had been accused of 'trying to be white', by having ‘white’ friends, and working for government agencies, when they believed they had been striving for themselves, and their people, and were attempting to break the stereotypes that some non-Aboriginal people held for indigenous people. They were disappointed that their achievements or roles were sometimes not recognised as being beneficial to Aboriginal people.

> ***"I'm always gonna be Ngarrindjeri, always Aboriginal, but if I stay away from Aboriginal people, I'm gonna be seen as white anyway. But if that's the way it is, and I want to get on in life, then that's the way I have to go."***

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[27]

Consultants (n=6) were particularly concerned about the effect this perception had on the children who were products of cross-cultural marriages. These children were perceived to be a particular risk of drug and alcohol use, and suicide, because they did not properly 'fit' in either the indigenous or non-indigenous communities.

> ***Lots of young ones are lost about their culture. Lots of fair skinned kids are not accepted by their own [Aboriginal] people, even though there are lots of families who have white partners. Those are the kids we worry about, as they are at risk of suicide, as these are the kids that don't belong...We need to look after our fair skinned kids.***

Fourteen consultants stated that the occasional overt acts of racism (from both cultural groups) occurred from time to time, although most were reluctant to discuss this in great detail, as this was accepted as a way of life.

Members of the Aboriginal and non-Aboriginal community were generally confident about their increasing ability to work together, following the success of a number of community projects, such as 'Murrundi Voices'[28]. Both groups believed that while they still had much to learn about working together, the climate to do so was improving. A recent initiative organised by a local Aboriginal community worker was hailed as a success. This initiative involved arranging an outdoor forum to advertise local services to both Aboriginal and non-Aboriginal people. However, another person was critical of both communities for their inconsistency, different philosophies, and neglect of the involvement of youth in establishing programs.

> ***…they have different ways of solving a problem...you don't get the users' side of the services, or you mix the communities and the youth get left out. Both the general and the Aboriginal community have a bad record of not following things through...but then again, everyone knows what's going on, and everyone knows everyone else's move…***

Consultants described sporting events as a positive means of interaction between the Aboriginal and non-indigenous community. Two consultants spoke about what were improper rewards from sporting clubs for successful Aboriginal athletes. They cited

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[28] This project was jointly produced by the Aboriginal people of the Lower Murray region, and the local council. The result of the project was a book telling stories about influential Aboriginal people in the region. Towards the end of the project,

instances of successful teams and individuals being provided with alcohol as their football 'trophy'. These consultants were disappointed with token gestures such as this, and felt that this type of reward, whilst offered with the best of intentions, demonstrated that Aboriginal people were not taken seriously by some members of mainstream society.

Imprisonment

Imprisonment was described by consultants (n=24) as a way of life for Aboriginal people. Consultants believed that drug related offences (eg possession of yarndi) frequently did not deserve the extent of punishment given. Some believed that prison was an environment that was conducive to using drugs, and provided additional opportunity to learn more about drugs. Consultants stated that yarndi, benzodiazepines, and occasionally heroin, was used within both male and female prisons. Others (n=4) believed that imprisonment sometimes provided the opportunity to have a more stable environment than some prisoners experienced when 'outside'.

> ***I know of one girl who was let out, and she was back in 2 days. I asked her "did you plan this?" and at first she said "no way", but her life was better inside...you can't ignore the benefits - you get a colour TV, 3 meals a day, it's safe, you can't drink, you can get your life back on track - for some, the only way to become a non-drinking alcoholic is to be in gaol. There is not enough support on the outside. It's choice of freedom - and harm minimisation in a social sense….***

> ***Gaol is time to get away, and withdraw from the scene. For some it's difficult - if they only get 8 months....it's not enough to plan for, for they might need 18 months to save, or do that course they wanted to do...***

Consultants (n=3) described how release from prison constituted a risk for overdose for those with a history of injecting drug use, due to a reduction in tolerance to drugs resulting from enforced abstinence, or a reduced or adulterated supply during imprisonment. One consultant believed that those who reinstated IDU on leaving prison were at particular risk of overdosing during the first 24 hours, and within the first 3 months, following their release.

The consultants had different opinions of the practice of needle sharing, with some stating that inmates would only share with other Nungas, whereas others described inmates as “sharing with anyone because access to needles was so poor”. Three consultants knew of inmates who had their own injecting equipment. Others (n=3) knew about prisoners who had attempted to clean their syringes with alcohol, bleach, detergent, soap, water or coca cola, but the risks of being caught either obtaining cleaning fluids or equipment, or in the process of cleaning their syringes, was considered prohibitive to practicing harm reduction measures.

Consultants (n=7) believed that recently initiated education programs within the prison system had begun to influence patterns of drug use in gaols, by encouraging inmates to investigate issues relating to their drug use.

Twenty four consultants believed that most prisoners with an IDU history were likely to have injected on at least one occasion during their incarceration, and were concerned that imprisonment placed some prisoners at greater risk for BBV transmission than any drug use outside. Three consultants believed that a considerable proportion of prisoners had HCV, however were unable to provide data to prove their claims. One consultant suggested a longer term increased the risk for contracting HCV.

Six consultants had knowledge of inmates who were initiated into injecting during a prison term. One consultant stated that his naivety about injecting resulted in him contracting HCV, which was identified during his internment. The prison system provided regular monitoring of HIV and hepatitis status, however, some consultants (n=7) believed that those with shorter sentences received less vigorous testing, information or followup, which had the potential to place them, other inmates, or their families at risk of contracting or passing on disease.

Impressions of available services

Alcohol-related residential services had operated in the region for many years, and most consultants generally believed that they had been moderately successful for people with alcohol related problems. However, many consultants (n=48) commented that these services were of limited effectiveness for people with other drug use problems, and because of their varied success, the reputation of these services had been damaged to some degree.

Among the criticisms of the residential programs were that few workers were knowledgeable about IDU, and the services were generally male focussed and staffed. Others (n=17) believed that more activities, group work and counselling for residential clients would be beneficial, and visits by workers from other services in the town would increase clients' opportunities for rehabilitation.

Qualifications of workers in the drug and alcohol field drew considerable discussion. While some consultants (n=12) supported the employment of 'recovering alcoholics' as counsellors, others, particularly those with a drug use history (n=9), preferred workers with professionally recognised qualifications. Most consultants agreed that existing agencies could provide opportunities for existing staff to gain relevant drug and alcohol qualifications, and community workshops would help the general community to better support those with drug use problems.

Previous requests for training Aboriginal health workers about alcohol and drug use issues had been fulfilled by the DASC worker, however high 'burn-out' rates of Aboriginal health workers, and funding cuts to staff positions and programs, were suggested as reasons contributing to the high turnover rate (n=7).

Two consultants suggested that the region needed a purpose-built rehabilitation centre region for people who used or injected illicit drugs, others (n=12) thought this to be unrealistic, and favoured strengthening relationships between available services to better utilise resources. In fact, during the last stages of the research period, an Aboriginal liaison officer had been employed at the local hospital to increase liaison between local services and facilitate access to generic services for Aboriginal people. Some of these consultants (n=7) were unaware of the existence of a DASC service in the region. These consultants suggested that promotion of the available services would result in increased attendances from Aboriginal people.

Indicator data suggested that the regional DASC service was generally well utilised by Aboriginal people in the region, although less well utilised by those with IDU problems. Nineteen per cent (n=9) of all clients (n=48) formally registered in the 1995-96 financial year were Aboriginal, for assistance with problems related to the use of alcohol (n=8), cannabis (n=5), benzodiazepines (n=1) and opiates (n=1). Of these 9 people, 6 were male, 3 female, aged between 20 and 38 years (Christie personal communication, April, 1997). A casenote audit of informal contacts found that over 71 Aboriginal individuals (representing 18% of the local indigenous population) had accessed this service in the

past 4.5 years, of whom, only 31 people were officially registered. In 1995, 22 new Aboriginal clients contacted this service, 16 new clients attended in 1996, and between January and July, 1997, a further 9 new Aboriginal clients attended this service. Some clients were multiple attenders. Injecting drug users were not identified (Appendix A).

Consultants (n=7) stated that resources were often wasted through duplication of services, and often, additional, (often unnecessary), or tokenistic 'culturally appropriate' services were created. One consultant suggested, for example, that employing an Aboriginal podiatrist for Aboriginal people who were affected by diabetes was unnecessary, although culturally appropriate diabetes education was essential.

Consultants (n=58) described inconsistencies between drug and alcohol organisations in their support of abstinence-based or harm-minimisation approaches to drug and alcohol use. Differences between agencies proved somewhat difficult to reconcile in the treatment of individuals affected by drugs, and tended to confuse users and their families. However, consultants generally recognised that although their own opinions may support one particular view, the different approaches merely presented additional choices for users. It must be noted that this debate is ongoing within the drug and alcohol field, (Brady, 1996; Roche and Ober 1997) and is not specific to Aboriginal organisations. For example, some harm-minimisation strategies, such as needle exchange programs, drew both considerable criticism, and considerable support, within different sections of the community.

Consultants (n=39) believed that there was only limited access to needle exchange programs (NEPs) in the region. Informal discussions with 5 pharmacists revealed a relatively low demand for needles by Aboriginal users (in comparison with other pharmacies state-wide offering a NEP service; see Appendix A), although this may be reflective of the size of the population of injecting drug users in the region. The pharmacists did not routinely collect information, although they reported that clients usually only purchased one or two needles at a time, for around $1 per needle. Sales of new syringes varied from 10 needles per week to 10 needles per month. The pharmacists generally described their clientele as Caucasian, although two chemists reported that they had, on occasion, sold needles to Aboriginal people (not known by them to have diabetes). Two consultants stated that it was sometimes difficult to know if a customer was Aboriginal or not, and another stated that because Aboriginality was irrelevant to their business, they tended not to think about their clients in such terms.

Consultants attributed low attendance by Nungas to fear of breaches of confidentiality (where a user may be seen purchasing syringes), by identifying as an injecting drug user, cost, and fear of less favourable treatment. Consultants believed that these barriers resulted in some users reusing or sharing injecting equipment. Some injecting drug users reported that they, or people they knew, purchased or obtained free syringes from city locations and distributed them locally.

Consultants (n=19) were not always aware that the local hospital supplied 'fit-packs' (as an after hours only service) through the Accident and Emergency service (Appendix A). This service was not formally advertised, and was promoted through word of mouth, or by certain agencies. Consultants (n=5) knew of some IDU who were unaware that the service only operated after hours. Consequently, some users had reported that they were denied new needles during normal office hours and were asked to return after hours. Other consultants (n=3) described a variation in the attitude and knowledge of the staff regarding IDU, or issues surrounding Aboriginality, which added to the embarrassment, or shame, for injecting drug users attending the service, and discouraged further attendance. One consultant stated that

> ***…that's it with Nunga's. You ask once, and you don't get it, you don't bother asking any more. I think it's specific to Nunga's, you generally take it that they know all there is to know, otherwise they wouldn't be in the position that they were in…***

Data obtained from the one registered NEP (at the hospital) indicated that approximately 116 individuals attended the service each year (or around 10 clients per month: range 0-31), for the past three years. During the first five months of the research period (September 1996 to January 1997), the number of individuals who attended the NEP ranged from 9-31 individuals. Between 1 and 19 individuals (6-100% of total number of attenders for each month) also collected condoms with fit-packs (Appendix A). Although information about Aboriginality was not routinely collected, the manager of the program reported that very few Aboriginal people attended the service.

A needle exchange operated and managed by Aboriginal people was supported by 11 consultants, as this allowed the opportunity for face-to-face information exchange, and development of rapport, and although 3 consultants suggested vending machines (n=3), personal contact with users was considered the preferable option.

A funded Aboriginal drug and alcohol position, to support and enhance existing AOD services and facilitate access to generic services, was supported by 18 consultants, however, this recommendation usually came with a caveat, whereby "the right person would need to be employed". Confidentiality was raised as a significant issue, but in contrast, no consultant had experienced, or were aware of, breaches of confidentiality from Aboriginal health workers[29]. Ideally, this position would incorporate an after-hours service, individual and family counselling, a needle exchange service, home visits, health worker training, and workshops on drug use and communicable disease issues.

Consultants (n=9) supported prison-based drug education programs, that discussed lifestyle, social and behavioural issues related to IDU, to assist prisoners to plan for their discharge from the prison system. One such project was operating during the research. These consultants believed that these programs should ideally be supported by a post-release program offering supported accommodation and supervision, with access to paid work or worksites (eg workshops) for developing trade or craft skills learned in prison, and increasing prisoners confidence to adapt to life outside prison.

Consultants (n=5) also supported the development of services designed specifically for Aboriginal men, that recognised changes in male roles in the family and community, and offered support, advice or referral for health related matters. The employment of a male Aboriginal community health worker was considered a starting point. The consultants also suggested that the community needed to encourage opportunities for men to participate in and lead community development programs, to demonstrate examples of effective leadership for other Aboriginal people in the region.

As noted, grief and loss had long been identified as a significant health and social issue for this community, and in previous months, and in response to community demand, a program designed to address these issues commenced during the final stages of this research.

The impending closure of the LMNC was seen to reduce the opportunities for community gatherings and support of Aboriginal culture. One consultant suggested that the club could be self-funded through member subscriptions and fundraising activities (as is the case with other cultural groups), rather than relying entirely on external sources of funding.

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[29] One consultant clarified this issue by stating that in closed communities, such as within the prison system, it was more

Consultants believed that community reconciliation, land rights, and grief and loss issues were inter-linked with drug and alcohol use, so these issues also needed to be addressed before drug use issues could be resolved.

Service development suggestions from Phase 1

Consultants made a number of suggestions for responding to drug related harm in the Lower Murray region. These suggestions will be raised for discussion in community meetings and focus groups during the third phase of the research. They are summarised below:

- Provide training for existing health, welfare and drug and alcohol workers in drug and alcohol management issues. Contacts were made between agencies to assist in facilitating the development of this process.

- Conduct community workshops and community education programs focussing on AOD issues.

- Promotion of all agencies that respond to the needs of those with AOD-related problems and their families. Increase intersectoral links and facilitate opportunities for liaison between services, to ultimately improve options for clients with alcohol and other drug use problems.

- A local Aboriginal NEP service and dedicated AOD worker.

- Support funding applications for the employment of a male health worker.

RESULTS AND DISCUSSION OF SURVEY PHASE

In the second stage of the rapid assessment, the qualitative information obtained from the consultants, combined with the indicator data, informed the development of a formal questionnaire (Appendix D) to survey current injecting drug users. Because of a dearth of previous research investigating injecting drug use among Aboriginal people, a questionnaire developed by Larson and colleagues[30] was adapted for this project, in order to provide comparative data. The survey instrument contained structured and open-ended questions. The draft questionnaires were discussed with the Project Advisory Committee (PAC) and consultants in the field, piloted, and modified accordingly.

Seven pilot interviews were conducted, to eliminate any residual problems with the survey instrument. These interviews were conducted with 5 indigenous people and 2 non-Aboriginal partners of indigenous drug users. Each Aboriginal participant fulfilled the criteria for participating in the survey phase of the study; the non-Aboriginal users were included as they also had a history of IDU, had lived in the Lower Murray region with their partner, and were very familiar with the issues relating to Aboriginal IDU in the region.

This survey instrument elicited information about demographic details, drug use history and current patterns of drug use. Physical and psychological health problems, social functioning and the social context of injecting drug use were also included. Questions were posed about sexual and injecting risk-taking, incarceration history, and the users' experiences with drug treatment services. Users were asked what they thought could be done to reduce the harms associated with injecting drug use. Included in the questionnaire were the Severity of Dependence Scale (Gossop, Darke, Griffiths, Hand, Powis, Hall and Strang, 1995), and the Alcohol AUDIT (WHO, 1989).

[30] Larson (1995) "A survey of indigenous injecting drug users" , Australian Centre for International and Tropical Health and

Method

Participant recruitment

Aboriginal injecting drug users (defined as having injected on at least one occasion in the past 12 months) from the Lower Murray region, were targeted for this survey using flyers describing the research. The flyers were designed by a local Aboriginal artist, and incorporated cultural images from the local area, and images depicting injecting drug use (Appendix B). Flyers were placed in the local community centre, public toilets and telephone booths, law courts, pharmacies, community centres, service stations and the local needle exchange program (NEP). The sample comprised those responding to the flyers, contacts known to the research officer, consultants from the first phase, or through members of the Project Advisory Committee (PAC). Interviews took between 25 and 90 minutes to complete, and were conducted in a private room in the community centre, in parks, private residences, and in the regional prison.

Feedback from the community indicated that while Aboriginal injecting drug users had become aware of the research through the distribution of the flyers, they were reluctant to contact the interviewer directly (via telephone, or mobile network) to arrange an appointment for an interview. Hence, only a few participants (n=3) arranged an interview through this means.

The most successful recruitment strategy occurred when contacts (consultants) directly facilitated contact with members of drug using networks, quickly facilitating access to 'hidden' populations of indigenous injecting drug users. For their considerable time and efforts taken to complete this role, these contacts were reimbursed $25 for every 4 people who participated in the survey. On other occasions, participants were recruited via informal introductions with community members who were 'passing through' the community club, or by taking the opportunity to talk with members of the community as they were going about their daily business within the club premises, or on the street.

Participants were reimbursed $20 at the completion of their interview, as an acknowledgment of the value of their information, the time taken to complete the interview, and for expenses incurred, such as transport costs, and telephone calls.

The interviews took place in a range of settings, including the Aboriginal community centre, parks, private residences and in a prison. The majority of the interviews (64%) were conducted on a one-to one basis. There were occasions that an additional person (a member of the PAC or a proxy, or a friend or partner of the interviewee) was present for the entire, or a portion of, the interview. Where an additional person was present, the research officer explained her preference for interviewing participants alone, for reasons of confidentiality, and observer influence. On each occasion, the interviewee insisted that the other person remain during the interview.

Only those who had injected on at least one occasion in the last 12 months were included in this study. An additional six Aboriginal people (4 females and 2 males) had contacted the research officer for an interview, but as they did not identify with the Lower Murray region, their participation was declined.

Results

Demographic information

Twenty five participants from the Lower Murray region were individually interviewed using the survey questionnaire between 6/1/1997 and 17/2/1997. The sample consisted of 19 males and 6 females, of a median age of 30 years (range=19-42 years). This sample is of a similar age group (range=16-43 years; median/mean=ns) to the Aboriginal injecting drug users surveyed in Adelaide (Lane, 1993), and slightly older than those interviewed in Brisbane (median 21 years; range =13-44 years) (Larson 1996).

The majority of participants (84%) identified as Ngarrindjeri, one person identified as both Ngarrindjeri and Kaurna, one person identified as Murri, one person was Koori, and one person identified as Noongar.

Residential Location

Fifty six percent (n=14) of the participants were born in the Lower Murray region, or had lived there for most of their life. The majority of participants (N=17, 68%) had resided in the Lower Murray region for the last 12 months, some (N=3, 12%) had lived there for at

least 6 months, while others (N=5; 20%) had lived there for 6 months or less in the last year. Eight participants were interviewed in prison.

Although 13 participants (52%) had lived in one residence in the past 12 months, almost as many (N=9; 36%) had lived in three or more different places. Two people (8%) had lived in two places, and 1 person described herself as itinerant. The participants were relatively mobile, residing in (60%), and frequently visiting (64%), other towns in the area, including Adelaide, to visit family (56%), friends (20%), to attend to business or work (12%), to attend funerals (4%), or to visit relatives in prison (4%).

Income

Table 2 displays the source and range of income for the participants. Table 2 shows that 12% of participants (n=3) received income from full-time employment, with the remaining 88% (n=22) receiving some form of government benefit.

Table 2 also shows that the majority of the sample (72%) estimated their income at below $15 000 in the 12 months prior to their interview. This information is consistent with that published for South Australian Aboriginal people in the National Aboriginal and Torres Strait Islander Survey (ABS 1996a), whereby 61% of Aboriginal people in the Adelaide ATSIC region estimated a yearly income of less than $12 000.

Table 2:

Source and range of income for survey participants

Source of Income	**N**	**%**
Unemployment benefits	8	32%
Prison benefit	8	32%
Employment	3	12%
Other	2	8%
CDEP	2	8%
Sickness benefits	1	4%
Disability pension	1	4%
Income Range	**N**	**%**
$0 – 4999	8	32
$5 - 9 999	3	12
$10 - 14 999	7	28
$15 - 19 999	1	4
$20 - 29 999	4	16
$30 - 39 999	1	4
>$40 000	1	4

Education

Whilst 80% of this sample of injecting drug users (N=20) had left school by the age of 16 years, over half (52% of the sample, N=13) had attained an educational standard of at least Year 10 equivalent. Of these, 7 participants (28%) had completed Year 10, 4 participants (16%) had completed Year 11, and 2 participants (8%) had completed Year 12. The percentage of participants who left school at 18 years (8%) was consistent with reported in Census data (7%) for indigenous students in the region in 1991 (ABS 1991a).

Twenty two participants (88%) had undertaken further education since leaving school[31], a much higher rate than that reported among indigenous people in South Australia (where 23.1% of the indigenous population had post-school qualifications) or the Adelaide ATSIC region (27.3%) (ABS, 1996a). Seven participants (28% of the sample) had gained vocational training, such as apprenticeships (n=3), or on the job training through Aboriginal traineeships (n=3) or private industry (n=1). Seven participants (28%) had commenced (n=4) or completed (n=3) tertiary education, and 1 of these participants had gained a post-graduate qualification. Four participants (16%) had studied at TAFE, and 4 had studied while in gaol. Six males (24% of all participants, or 32% of males) and 1 female had obtained tertiary qualifications. Considering the size of the sample, it is consistent with the NATSIS survey (1996a), which found that 25% of indigenous males and 22% of indigenous females across South Australia have post–secondary qualifications (ABS 1996a)[32].

Employment

Three participants (12% of the sample) were employed locally on a full-time basis. Another three (12%) were employed on the local CDEP program, and eight people (32%) were residing in prison at the time of their interview. Ten participants (40%) were unemployed, and one person described their role as home duties. One of these participants (aged 27 years) had never held a job.

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[31] The highest levels of education achieved by each participant are reported here.

Living arrangements

Ten participants (40%) were sharing accommodation with friends, partners, relatives or family, 3 people (12%) lived alone in their own place, and 4 (16%) either lived in supported accommodation (n=2), a rehabilitation centre (n=1), or camped permanently on the riverbank (n=1). Eight participants (32%) were in prison at the time of the study, which is reflected in the 52% (n=13) who were currently dissatisfied with their current place of residence. Of the remaining 5 people who were dissatisfied with their current living conditions, 2 had suffered frequent break-ins in recent months, and 3 did not state their reasons.

Relationships

More than half of the participants (52%) were in a sexual relationship at the time of the interview, and 20% (n=5) were in a relationship with a non-Aboriginal person. Sixteen per cent of participants (n=4; 3 females and one male) stated that their partners also injected drugs. The partners did not participate in the study.

Children

Table 3 shows that 17 participants (68% of the sample, 13 males and 4 females) had children. Seven participants had 1 or 2 children, 7 participants had 3 or 4 children, 2 participants had 5 children, and one person had six children. Only 6 participants (24% of the sample, 5 males and 1 female) stated that their children were living with them. One male participant was a sole carer, while the remaining 5 participants shared parenting responsibility with their partner as a family. The previous partner had primary responsibility for the children of 5 (20%) of the male participants. For 2 female participants (8%), the children were cared for by their immediate extended family, while 3 male participants (12%) stated that their previous partners' family had primary responsibility for their care. One female participant had placed her children in foster care.

Table 3:

Number of children, and children living with participant

	No. Children		No. of children at home	
	n	**%**	**n**	**%**
no children	8	32%	n/a	n/a
1 child	4	16%	4	16
2 children	3	12%	-	-
3 children	4	16%	-	-
4 children	3	12%	1	4
5 children	2	8%	-	-
6 children	1	4%	1	4

Social networks

Table 4 displays information about the social networks established by the survey participants. As can be seen from Table 4, 92% of participants (n=23) had at least one or two good friends in whom they could trust. Seven participants (28%) stated they had between 3 and 5 good friends, and 8 participants (32%) had more extensive support networks, with at least 6 good friends with whom they could confide. Three participants believed they had no friends in whom they could confide.

Of those participants who had good friends, 40% (n=10) were of mixed gender, although a third (32%) reported that their good friends were of the same sex as themselves.

Few of the participants had younger friends (12%); most were of a similar age (32%) or older (28%).

While nine participants (36% of all participants) stated that most or all of their friends were Nunga, a similar proportion (32%) stated that they had equal numbers of indigenous and non-indigenous friends. A fifth (20%) stated that their closest friends were non-Aboriginal. Although it appears that there is some trend to the Aboriginality of friends of participants of the sample, thirteen participants (52% of the sample) stated that their friends were not related to them. Around a third (36%) of participants reported that about half of their good friends were related to them in some way, that is, as siblings, cousins, or uncles.

Drug use appeared quite common amongst friendship groups, with 72% of participants reporting that at least half of the group also used. A large proportion of participants

(60% of all participants and 68% of those whose friends used drugs) reported that at least half of their group of friends also injected.

Table 4: Participants' social networks

Social networks	n	%
How many good friends do you have?		
no friends at all	3	12
1-2 good friends	7	28
3-5 good friends	7	28
6 or more good friend	8	32
What sex are your friends?		
no friends at all	3	12
same or mostly same sex	9	36
half same sex, half opposite sex	10	40
all or mostly opposite sex	3	12
What are the ages of your friends?		
no friends at all	3	12
mostly younger	3	12
about the same age	8	32
half older and half younger	4	16
mostly older	7	28
How many friends are Nungas?		
no friends at all	3	12
all or mostly Nunga	5	20
half Nunga, half non-Nunga	8	32
all or mostly non-Nunga	9	36
How many friends are also relatives?		
no friends at all	3	12
all or mostly not relatives	13	52
half relatives, half not relatives	9	36
all or mostly all are relatives	-	-
Do your friends use drugs?		
no friends at all	3	12
almost none or none take drugs	4	15
half take drugs, half don't	3	12
almost all or all take drugs	15	60
Are your friends also injecting drug users?		
no friends at all	3	12
all or almost all are NOT injecting drug users	7	28
half are injecting drug users	6	24
almost all /all are ALSO injecting drug users	9	36

Further information about relationships, and other social arrangements and related injecting activity are discussed further in the section 'Social aspects of IDU'.

Drug use

The participants had used a mean of 5.9 drugs (S.D.=2.4) in the last 12 months (Table 5). The Lower Murray injecting drug users were using a similar number of drug classes to studies of amphetamine users in Adelaide, and heroin users in Sydney. Both studies

reported a mean of 6.3 drugs used over a six month period (Vincent, Shoobridge and Ask, 1997, Darke, Cohen, Ross, Hando and Hall 1994).

Marijuana was the primary drug of choice for nine participants (36%); heroin (36%), tobacco (16%), amphetamines (8%) or alcohol (4%) were also selected as a first preference. The second most preferred drug was tobacco (32%) yarndi (28%), alcohol (12%), heroin (12%) and amphetamines (12%).

Table 5 displays a guide to drug use patterns for this sample. The table reports percentages of those of the total sample who have ever used a drug (column 2), and those (of the total sample) who reported using in the last 12 months (column 3). Also reported in column 4 are the number of participants (as a percentage of the total sample) who had ever injected a drug, and if they had injected in the last 12 months. The fifth column in Table 5 is a calculation of the median number of days of reported drug use for those in the sample who used that drug, including those currently in prison. The sixth column is a calculation of the median number of days for the sample ***excluding*** those who were in prison at the time of the survey. These figures have been added for interest, and to identify differences in the patterns of use for those with unrestricted opportunity to obtain drugs[33]. However, the data reported below includes the prison sample, unless otherwise reported, following a convention set by NATSIS (ABS 1995).

Injecting Drug Use

The number of participants who had injected, both in the past, and in the last 12 months, can be seen in the fourth column of Table 5. Seven different drugs had been injected by the survey participants, with amphetamines, heroin, cocaine and methadone, the drugs most frequently injected in the past 12 months. There was less frequent use of amphetamines (72% compared to 99%), but similar levels of use of heroin (68% compared to 66%) in this sample, compared with the indigenous sample in Brisbane (Larson 1996). Participants in this sample did not report ever having injected ecstasy, unlike other studies that have investigated patterns of injecting drug use (for example, Hando and Hall, 1993; Larson, 1996; Vincent et al, 1997). Further detail about drug use patterns is provided in Table 5 below.

[33] Due to small numbers of participants in this study differences between prison inmates and non-prisoners will not be

Table 5:

Drug Consumption History of sample

Drug Class	Ever used (%)	Used in last 12 months (%)	**Ever injected (Injected in last 12 months)(%)**	No. days used in last 12 months median (range)*	No. days used in last 12 months median (range)**
Tobacco	96	96	**-**	365 (365)	365 (365)
Yarndy	96	88	**-**	307 (21-365)	312 (26-365)
Amphetamines	96	76	**88 (76)**	12 (1-182)	24 (5-182)
Alcohol	96	72	**-**	46 (1-312)	12 (1-312)
Heroin	88	68	**88 (64)**	72 (1-365)	242 (1-365)
Benzodiazepines	88	64	**12 (12)**	26 (1-365)	26 (1-365)
Hallucinogens	76	40	**4 (4)**	3 (1-60)	4 (1-60)
Opiates	64	40	**20 (8)**	13 (1-120)	10 (1-104)
Cocaine	56	16	**36 (16)**	17 (1-104)	17 (1-104)
Methadone	48	28	**32 (16)**	197 (2-365)	275 (2-365)
Petrol	44	4	**-**	1 (1)	0 (0)
Inhalants	24	0	**-**	0 (0)	0 (0)
Ecstasy	12	12	**-**	1 (1-10)	1 (1-10)
Barbiturates	8	0	**-**	0 (0)	0 (0)

* Includes prison sample

** Excludes prison sample

Other drug use

Tobacco, yarndi, and alcohol, followed by amphetamines, were the most commonly used drugs in the last 12 months. Similarly, alcohol, yarndi and tobacco, amphetamine and heroin (93.5%, 74.2%, 74.2%, 61.3% and 52.1% respectively) were most commonly used in the Lane (1993) survey of indigenous NEP attenders in Adelaide.

Patterns of drug use

Amphetamines

As displayed in Table 5, 76% of the sample (n=19) had injected amphetamines for a median number of 12 days (about once per month; range 1-182) in the 12 months prior to interview. More than half of current amphetamine users (n=10, 53% of current users) reported monthly or less frequent use, 3 others (16% of current users) reported fortnightly use, and one participant (5%) used on a weekly basis. The remaining 5

current amphetamine users (26% of current users) reported a frequency of use of between 2 and 4 times per week.

Amphetamines were the drug most frequently injected in other studies of drug use patterns among Aboriginal people (CDHSH, 1996; Gray, Morfitt, Williams, Ryan and Coyne 1996; Lane 1993; Zibert, Hando and Howard 1994).

Heroin

As displayed in Table 5, 17 participants (68% of the sample) had used heroin in the 12 months prior to the survey, whereby all but two participants (8%) injected during this time. Heroin was used for a median number of 72 days in the last 12 months (range 1-365). Patterns varied between participants. Six participants (35% of current users) used heroin monthly or less frequently, three people (18%) used between weekly and monthly, 2 people (12%) used 4 times per week, and another 6 participants (35% of current users) used 5 times per week or more frequently; three of these people reported daily use of heroin. Heroin users comprised almost 52% of Lane's (1993) metropolitan Adelaide sample, and 66% of the Brisbane sample (Larson, 1996).

Cocaine

Fifty six per cent of the participants (n=14) in the Lower Murray survey had tried cocaine in the past, with nine participants stating they had injected cocaine on at least one occasion. Of the four people who had used cocaine in the last 12 months, all had injected, and reported that they had used while in NSW, not SA. Only one person reported regular cocaine use (5 times a week for six of the past 12 months, whilst living in Sydney) before stopping. Larson (1996) reported that 16% of indigenous participants in Brisbane had injected cocaine on at least one occasion, and 34% of a primarily non-indigenous Adelaide sample of amphetamine users had used cocaine in the previous 6 months (Vincent et al, 1997).

Methadone

From Table 4, methadone was used on a median of 197 days (range 2-365; or approximately 4 times weekly) in the last 12 months. Forty eight per cent (n=12) of

participants had used methadone in the past, and 28% (n=7) reported use in the last 12 months. Eight participants (75% of those who had ever used) had injected methadone in the past, with half of these people reporting having injected in the last 12 months. Although this sample demonstrated significant past and recent use of methadone, only four participants had been on a registered methadone program in the past 12 months. Only two of these 4 people stated that they were content with the methadone program, having received methadone consistently for at least 9 months. One person ceased their involvement in the program after 9 months, and another ceased the program after 4 months of use. Three participants had used methadone (from illicit sources) on two occasions in the last 12 months.

Other surveys of indigenous users have reported relatively low levels of use of methadone in their samples. In Adelaide, 6.4% of indigenous injecting drug users reported use of methadone (in a category that included other drugs) (Lane 1993). Twenty per cent of Brisbane participants had injected methadone in the past; eight participants (10% of all participants) had injected the methadone they received from a recognised methadone program. Another 8 participants obtained their methadone from illicit sources (Larson 1996).

By comparison, in a sample of primarily non-indigenous Adelaide amphetamine users, 10% of participants had injected methadone in the past, and 6% of the sample had injected in the past 12 months (Vincent et al 1997).

Other drug use

Tobacco

Only one of the participants had not ever used tobacco, and the remaining 96% were current daily tobacco smokers. Whilst this is higher than other local injecting drug use studies (74% indigenous (Lane 1993) and 75% of non-indigenous injecting drug users (Vincent et al 1997) identified as current tobacco smokers), it is consistent with Darke et al (1994) who found that 92% of non-indigenous, primarily amphetamine users in Sydney were current users of tobacco. National studies have consistently reported relatively high levels of tobacco use among Aboriginal people (52-54%) in comparison to the population in general (29%), with males generally more likely to be current smokers than females, particularly males living in rural areas (CDHSH 1996; ABS 1995, ABS

1997c, ABS 1997d). Among indigenous South Australians, 60% of males and 52% of females identified as current smokers (ABS 1997c).

Yarndi (Cannabis)

Eighty eight per cent of the sample (n=22) reported having used yarndi in the last 12 months, and all but one participant (96%) had used yarndi at some time in the past. Participants reported use of yarndi for a median of 307 days (between 5 and 6 days per week; range 21-365) in the past 12 months. Ten participants (45% of current users) reported daily use, 18% (N=4) used less than weekly, with the remainder using between 3 and 6 times per week.

Other studies of indigenous and non-indigenous injecting drug users reported similarly high levels of use of yarndi in the 12 months prior to interview (see Lane, 1993 with 74.5%; Spooner et al, 1996 with 95%; Vincent et al, 1997 with 94%, Darker et al with 93%, for example.)

Ecstasy

Ecstasy had been used by 3 participants (12%) for a median of one day (range 1-10) in the last 12 months.

By comparison, 26% of Lane's (1993) indigenous sample were current users of ecstasy, whereby 23% of participants used ecstasy with amphetamines, and 19% used ecstasy in combination with acid and amphetamines. In an Adelaide sample of primarily non-indigenous amphetamine users, 41% of participants reported having used ecstasy in the previous 6 months (Vincent and Shoobridge 1997).

Petrol

One person (4%) reported having used petrol on one occasion in the last 12 months, although 44% of the sample (n = 11) had used in the past.

Alcohol

Eighteen participants (72% of all participants), were current drinkers of alcohol, having consumed alcohol for a median number of 46 days (or less than weekly, range=1-312 days) in the past 12 months. Excluding the prison sample (n=15), participants drank on a median number of 12 days, or about once per month (median=12; range=1-312). Eight participants (44% of current drinkers) used monthly or less frequently. Two participants reported consuming alcohol regularly on at least 5 times per week, one person drank on a weekly basis, with the remainder slightly more frequently than weekly. Seven participants (28%) had abstained from alcohol for more than a year. One person ceased using alcohol 10 years ago, and a prisoner reported using once since he was detained.

Benzodiazepines

As shown in Table 4, the participants reported benzodiazepine use on a median of 26 days, or around once per fortnight (range; 1=365 days). Whilst 88% (n=22) had used benzodiazepines in the past, fewer (n=16, 64%) had used in the last 12 months. Three participants had injected benzodiazepines in the last 12 months. Of the 16 current benzodiazepine users, one third (38%; n=6) were using more frequently than weekly, with one reporting daily use. The majority of current users (63%; n=10) used approximately once per fortnight or less; most of these (n=12, 75%) were male. The 4 females reported varied patterns, from once only use to twice weekly.

Lane (1993) reported that 19% of indigenous participants were ‘pill’ users, who used them in combination with amphetamines (10%) and heroin (10%). Forty four per cent of Adelaide amphetamine users reported using benzodiazepines in the past six months (Vincent and Shoobridge 1997).

Population data for indigenous people indicates that the use of benzodiazepines (defined as sleeping tablets in this study) (4% ever used, and 0.9% in the past 12 months) is similar to the population in general (3% in the past, and 0.9% in the past 12 months) (CDHSH 1996). For purposes of comparison, benzodiazepines are more frequently used by both indigenous and non-indigenous females than males (CDHSH 1996; Humes et al 1993).

Patterns of injecting behaviour

Age first injected

Participants in this sample were a mean age of 18.6 years (S.D.=5.4) on the first occasion they injected, compared with a mean age of first injection of 17.8 years (S.D.=ns) for indigenous injectors in Brisbane (Larson 1996). Although mean age of first injecting was not reported in the CDHSH (1996) national indigenous survey, respondents reported first use of heroin, cocaine, and amphetamines at mean ages of 17.5 years, 19.5 years, and 18.5 years for those drugs respectively (S.D. = ns). Differences in ages of first injection are likely to be unreliable due to the small sample sizes in the cited reports. Further investigation with larger sample sizes would be required for a more accurate estimate of transitions to injecting behaviour for Aboriginal people.

First drug injected

Amphetamines were the first drug injected by the majority of participants (48%) in the Lower Murray region, a similar finding to the Brisbane sample (Larson 1996). Other participants in the Lower Murray survey reported that heroin (32%), morphine (12%) cocaine (4%) and Valium (4%) were the first drugs used intravenously.

Sixteen participants (64%) reported injecting on the first occasion that they ever used some drugs, namely speed, heroin, morphine and Valium. Seven participants (28%) snorted on the first occasion they used (heroin or amphetamines), and 2 people (8%) swallowed on the first occasion they used amphetamines.

Social Aspects of Injecting Drug use

Participants described quite extensive networks of other injecting drug users, reporting a median of 24 other Nunga injectors (range; 2-100), who lived both locally or in the city. This is similar to the average number of injecting drug user within social networks (mean=20; S.D.=ns) reported by Lane (1993) in her survey of indigenous injecting drug users in Adelaide.

The majority of participants in this study (88%) reported that other people injected for them on their first occasion of injecting. Only two people (8%) injected themselves, and one person was assisted the first time. Fourteen participants (56%) were injected by other Nungas, who were their relatives (n=7) eg cousins, siblings or uncles, friends (n=6), or their partner (n=1). Eight participants (32%) were assisted to inject on the first occasion they injected by non-indigenous friends (n=5), acquaintance (n=1), partner (n=1), or dealer (n=1). Seventy two per cent of participants (n=18) stated that they had assisted other people to inject at some time. Larson (1996) also reported that 65% of participants had assistance from other indigenous users to inject on the first occasion.

Seventy two percent of participants (n=18) acknowledged that at least half or more of their good friends were also users of drugs (including non-injectables), and 60% of all participants (n=15) stated that at least half of their good friends also injected (Table 3). These figures are consistent with other Australian research. For example, 75% of non-indigenous amphetamine users in Adelaide stated that at least half of their friends were also users of amphetamines (Vincent et al 1997), and 67% of Sydney study participants reported that their friends were also users of amphetamine (Hando and Hall 1993)

Most participants (92%) in the Lower Murray survey (amphetamine and heroin users) tended to inject with other people present. Eight per cent of participants (n=2) almost always injected on their own, while 3 others injected with others present on only some occasions.

This is consistent with previous research, whereby amphetamine users tend to mix or develop friendships with other people using amphetamines (Hando and Hall, 1993; Vincent et al, 1997). There is increasing evidence to suggest that, unlike reports whereby dealers are accused of fostering dependence among their clients, trusted people are more likely to assist naive injectors on their first injecting occasion (Crofts, Louie, Rosenthal and Jolley, 1996; Larson, 1996; Vincent et al 1997). The results of this study support this finding that those who use amphetamines are more likely to do so in the company of others. However, the role of the drug user in initiating their own injecting behaviour must also be considered. Crofts et al (1996) states that some time before the first episode of injecting, a potential injecting drug user publicly announces his intention to inject, should the opportunity present itself. The event itself may be unplanned. Crofts et al (1996) also found that 'significant others', such as friends or acquaintances, and sometimes family members, helped or injected first time injectors.

Risk behaviour

Perception of HIV/hepatitis risk

Most participants (92%, n=23) believed that their chances of contracting HIV was 'very low', mainly because they stated that they didn't share their needles or implements (44%, n=11), or they always used clean needles (20%, n=5). Others stated that they because they were very careful (16%, n=4), because they had stopped (8%, n=2) or cut down their use (4%, n=1), or because they knew the risks (4%, n=1), their risk of contracting HIV was low. One person believed they would have been at 'very high' risk had they continued using, and another stated that because they used only with a group of friends with whom they had had a long term drug-using relationship, their risk was 'low'.

Participants' perceptions about their risk of contracting hepatitis B (HBV) were similar to those responses for HIV, where again, 23 participants (92%), stated that their risk of contracting HBV were very low. The reasons given included that they had quit using (8%, n=2), did not share (24%, n=6), they were careful about their injecting practices (20%, n=5) or they always used clean needles (16%, n=4). Others stated that previous vaccination or exposure to HBV (12%, n=3) protected them. Another had been an educator and stated that they had the knowledge to prevent infection (4%, n=1). Again, one person used with the same group of people each time (therefore rating their risk as low), and one felt he would have contracted a disease had he continued using (rating very high).

> ***I won't share needles. I use condoms and a sponge, except with my partner.***
>
> ***I don't share with anyone, except for my sister. I always use a clean spoon, and I usually know my partner, so I don't use condoms.***
>
> ***I don't give the wrong people my needle...I only share with people I know.***

However, this participant was to later contradict himself, and commented about the likelihood of having contracted HCV.

I reckon I've probably got It [HCV]... I used a needle once, and now it's too late. He told me after I used it, that he had it...

Similarly, while participants (84%, n=21), generally rated their chances of contracting HCV as very low, a few (12%) believed they were at high risk. Reasons for perceived low risk included that they did not share (20%, n=5), they always used clean needles (16%, n=4), they were very careful during their use (12%, n=3), they had ceased using (8%, n=2), or they were already HCV positive (8%, n=2). Again the explanations given for HIV and HBV applied to HCV, with the general exception of the prisoners, who believed that incarceration placed them at particular risk for contracting BBV, as one person stated;

…if you are in gaol and you use, you can get hepatitis C by banging up syringes in gaol. It's all around you, [drugs] you can buy it anytime. The only problem is, is if you need a syringe...half the population in gaols have hepatitis C.

As is well documented, up to 60% of prisoners are incarcerated for drug related crime; up to 40% of prisoners inject during their incarceration, approximately one third participate in sexual activity during their prison term, and about one fifth participate both in sexual activity and IDU. Hence, participants appeared quite aware of the risk for contracting blood borne disease during internment (Douglas, Gaughwin, Ali et al 1989; Pedic (undated); Dolan, Hall and Wodak 1994; Rutter, Dolan, Wodak, Hall, Maher and Dixon 1995).

Almost all participants (96%, n=24) stated that they had been tested for both HIV and HBV, although fewer people (76%, n=19) had been tested for both diseases within the last 6 months. Ninety two per cent of participants (n=23) had been tested for HCV in the past, (one person was unsure if they had ever been tested), and 18 participants (72%) had been tested for HCV in the 6 months prior to the interview. Testing for blood borne disease in this sample was higher than the number of people who had ever been tested in the Larson (1996) study, where 69% and 65% of indigenous participants had been tested for HIV and HCV respectively. Half (50%) of Larson's sample had been tested for BBV within the last 6 months (Larson, 1996).

No participant stated that they had ever tested positive to HIV. Thirteen participants (52%) had either had exposure to (n=4, 20% of the total sample), or been vaccinated for (n=8, 32% of the sample) HBV, and one person was unsure of their status. This result is

similar to injecting drug users surveyed by Loxley, Carruthers and Bevan (1995) where 18% of participants had had previous exposure to HBV. Nine participants (36%) stated that they had tested positive to HCV. Two people were unsure of their HCV status.

The number of participants in this study reporting positive test results was higher than that reported among indigenous injecting drug users in Brisbane (24%). Larson (1996) stated that her results were similar to those found in a study of NEP attenders in southern Queensland (Selvey, Wignall, Buzolic and Sullivan, 1996). Lane's (1993) Adelaide study of indigenous injecting drug users did not report knowledge about or testing for HCV, although 14% of non-indigenous amphetamine users in Adelaide (Vincent et al 1997) stated that they had definitely contracted HCV. The national ASHIDU study (Loxley et al 1995) reported that between 40% and 70% of the participants (reflecting differences between cities) had returned a positive test indicating exposure to HCV. The ASHIDU also stated that the possibility of becoming infected was likely to increase proportionally with length of time involved in injecting behaviour. Risk was related to the last drug injected, and tended to be higher among people who last used opiates (Loxley et al 1995). Geographical and population differences, different educational programs, and also access to services may account for a significant proportion of the variance in these results between States.

Needle sharing

Eighteen participants (72%) stated that they did not share needles or injecting equipment. 'Sharing' refers to using a needle either before or after another person (Ward, Darke and Hall 1990), however, the perceptions of four participants (16%) differed slightly in this definition of needle-sharing behaviour. Two of these participants defined sharing as having used a needle either before or after another person, but with a caveat, whereby sharing a needle only occurred on the same occasion of use. They stated that if a needle was 'borrowed' by another person, and the owner did not use on that particular occasion, the owner was perceived to have not shared that needle. The needle may or may not have been cleaned prior to return to its owner. Other participants (n=2) did not always consider that giving a needle to a very close relative, sibling, cousin or sexual partner, constituted sharing behaviour.

Last time I shared was more than 2 years ago; it was 5 uncles I shared with, and on one occasion only. Being relatives, I didn't actually think of things like that, like diseases and stuff like that. But never again!

Some participants (n=3) believed that sharing with someone known to have the 'same' status, either the same blood-borne disease, such as HCV, or a 'disease free' status, did not 'really' constitute sharing behaviour. Larson (1996) reported a similar attitude towards sharing behaviour. Generally, the majority of participants in this study agreed that sharing was defined as using a syringe either before or after someone else, regardless of the relationship.

Overall, 12 participants (48%) reported that they had shared needles on at least one occasion since they began injecting, and 8 people (32%) reported sharing needles in the last 12 months.

Table 6 shows how often participants shared needles in the last 12 months, and the relationships of the person with whom they shared.

Table 6:

Frequency of sharing behaviour with other injecting drug users

Relationship to person who shared syringe in last 12 months	Frequency of sharing: ***never*** n (% of sample)	Frequency of sharing: ***sometimes*** n (% of sample)	Frequency of sharing: ***most times*** n (% of sample)
other Aboriginal injectors	18 (72)	2 (8)	5 (20)
non-Indigenous injectors	22 (88)	-	3 (12)
relatives	21 (84)	3 (12)	1 (4)
regular sexual partner	24 (96)	-	1 (4)
stranger	24 (96)	1 (4)	-
acquaintance	24 (96)	1 (4)	-
casual sexual partner	25 (100)	-	-

Overall 8 participants (32% of the sample) shared needles on 17 different occasions in the 12 months prior to interview. Table 6 shows that 7 participants shared needles with other indigenous people. At other times participants shared with relatives (n=4), although 3 people (12%) shared syringes with non-Aboriginal users on most occasions in the previous 12 months. Others had shared with a regular sexual partner (n=1), an acquaintance (n=1), or a stranger (n=1). (Multiple responses are included here). No participant reported sharing needles with a casual sexual partner in the last year.

To gain more information about patterns of sharing activity, participants were asked whether they used a needle before or after other people. Of the 12 participants (48% of the total sample) who had shared at some time, all but one participant (92% of people who had ever shared) had used both before and after another person. One person stated that they had only ever used before another person.

Participants were asked how many other people also used the same needle on the most recent occasion that the participants had shared a needle. The majority of participants (n=8, 67% of those who had ever shared) stated that on the last occasion that they used a needle after someone else, only one other person was involved. Four participants had been in groups ranging from 4 to six people, when they had shared a needle. Three participants stated they had used a needle before 3 other users, and 1 person reported that they had used before 4 other people.

In the week prior to the interview (Table 7), 2 participants stated that they had shared needles with another person. Three participants (38% of people who shared in the past year) reported having shared in the past month, and 3 people had shared needles in the last year. Four people (one third of the 12 who had ever shared) had not shared a needle for at least 2 years.

Table 7:
Recency of occurrence of sharing activity

	never n (% of sample)	2 years ago n (% of sample)	in last year n (% of sample)	in last month n (% of sample)	in last week n (% of sample)
Used after another person	13 (52)	4 (16)	2 (8)	3 (12)	3 (12)
Used before another person	14 (56)	4 (16)	1 (4)	3 (12)	3 (12)

There were some inconsistencies with the responses to sharing behaviour. Four participants stated that they had never shared, although they later reported that they had tested positive to HCV and were unable to determine the source of infection. Another 2 participants initially stated that they had not shared, but in subsequent questions stated that they had shared, but not for some time (1 participant had shared in the last year, and the other in the last 2 years). Each of these participants were positive for HCV. Two participants had shared recently , but were uncertain of their HCV or HBV status. Four participants stated that they had shared, and believed they were HCV and HBV negative, although 2 of these participants had not been tested for at least 6 months. Overall, at the time of the report, of those who had shared needles or implements in the past, 7 stated

they had HCV, and 3 had HBV. There was no means of defining, retrospectively, if these participants had shared with the knowledge that they had returned positive tests.

Four years ago, Nu-Hit reported that "Aboriginal IDUs were five times more likely to be sharing syringes...than were their non-Aboriginal counterparts" (Lane 1993, p.31), because 'sharing' belongings was a culturally appropriate behaviour for Aboriginal people. The Nu-Hit program attempted to address some of these 'cultural norms' associated with 'sharing behaviour', to exclude needles from this particular aspect of Aboriginal culture. Lane (1993) reported some success in both reducing the level of sharing among needle exchange participants, and in increasing the use of condoms in the Nunga community, by attempting to challenge these cultural norms. This phase of the project aimed to identify issues such as sharing activity; educational responses to risk activities would ideally be addressed in the third phase of the project. However, following each interview, participants were offered a range of educational material on issues such as risks associated with sharing injecting equipment, as a harm reduction measure.

Sharing of injecting implements

Fifty six per cent of participants (n=14) stated that they had shared the same filters and injecting implements (such as spoons) with other people, and 8 people (32% of all participants) stated that they did so on almost every occasion, or on every occasion that they injected in the last 12 months. One person stated that they often shared filters or injecting implements, and 5 people (20%) stated that they did so on some occasions.

Sexual behaviour

Questions about sexual activity were given to the participant to complete, for reasons of privacy. As shown in Table 8, 24% of participants stated that they had one sexual partner in the last 12 months, and 56% had more than one sexual partner in the last 12 months. Six participants (24%) ***always*** used condoms with casual partners, and the remainder of the sample used condoms with casual partners often (12%, n=3) , sometimes (8%, n=2), or rarely (4%, n=1). The largest proportion of participants (28%, n=7) never used condoms with a casual partner.

Table 8:

Frequency of Condom use in the last 12 months

	n	%
number of sexual partners in last 12 months		
no sex	5	20
1 person	6	24
2 people	5	20
3-5 people	6	24
6 or more	2	8
more than 10	1	4
use of condoms with regular partner		
no regular partner	10	40
always	1	4
often	1	4
sometimes	4	16
rarely	2	8
never	7	28
use of condoms with casual partner		
no casual partners	6	24
always	6	24
often	3	12
sometimes	2	8
rarely	1	4
never	7	28

Obtaining clean injecting equipment

Eighty four per cent (n=21) of participants had purchased needles from chemists in the past, but 4 participants (16%) stated that they had never purchased needles, relying on friends or relatives (n=2) or other unstated sources (n=2). In the previous 12 months, 68% of the sample (n=17) stated that they had purchased needles from chemists (8 participants stated they obtained needles locally, and 9 participants obtained their needles from chemists in Adelaide). There was considerable variation in the recency of purchase, as 48% of participants who had ever purchased needles (n=10) stated that they last purchased needles more than 6 months before they were interviewed. One third of those who had ever bought needles (n=7) had done so in the past week, 14% (n=3) had purchased needles within the last 3 months, and one had bought needles within the last 6 months. Not one participant stated that they ever used the NEP at the local hospital. Hospital staff stated that very few Aboriginal people used this service. Two participants explained why the chemists and NEP's may be under-utilised.

I don't like going to them - I don't like them to know I'm a user.

The chemists are making a real killing on needles. Lots of people don't even want to deal with them, they don't want 'unsavoury characters' around their chemists.

Less than half of the participants (48%) reported using a new syringe on every occasion they injected.

Techniques surrounding needle disposal were briefly described by the participants. Used needles were primarily disposed of in rubbish bins (40%), or sharps containers (32%). Four people (16%) saved the needles for re-use (including 2 prisoners), two people (8%) disposed of them in drains, 2 participants burnt the needles once they had been used, and 1 person gave the needle to another person for disposal. (Multiple responses are included here). The number of participants who used sharps containers for disposal (32%) was similar to that found in Larson's (1996) study (32%).

Obtaining drugs

The most popular area in which to obtain drugs for injection was Adelaide (64%), although 9 people (36%) stated that they had bought either heroin or amphetamine in the local area at some time. Nearly half of all participants (48%, n=12) described their dealers as Caucasian, whereas others obtained their supply from both Asian and Caucasian dealers (n=6). Four people (16%) reported that they used Nunga dealers at times, although this was uncommon in the Lower Murray area. Aboriginal dealers were most likely to have been residents of Adelaide, although the 'scene' had changed during the final stages of the project with indigenous newcomers reported to be selling amphetamines in the region. Although the consultants in the first stage of this project reported that a range of drugs were relatively freely available within the region, less than one third of the survey participants (32%) stated that they had recently obtained their supplies locally.

Health problems related to IDU

Participants were asked to identify any health problems they believed were related to their injecting drug use. As shown in Table 8, the most common problems identified by

participants as related to their drug use were sleeping problems (80%), hot and cold sweats (72%), lack of appetite (68%) mood swings and trackmarks (64%), thirst (60%) and lack of energy (56%). Columns 3 and 4 show problems reported by those whose drug of choice was amphetamines (n=12) or heroin (n=13) respectively.

Table 9:

Health problems associated with IDU

Health problem	Total (n)	Total (%)	heroin (n=13) n (% of users)	speed (n=12) n (% of users)
Sleeping problems	20	80	11 (85%)	9 (75%)
Hot and cold sweats	18	72	11 (85%)	7 (58%)
Lack of appetite	17	68	9 (69%)	8 (66%)
Track marks /bruising	16	64	10 (77%)	6 (50%)
Mood swings	16	64	8 (62%)	8 (66%)
Thirsty/dehydrated	15	60	8 (62%)	7 (58%)
Lack of energy	14	56	8 (62%)	6 (50%)
Depression	13	52	6 (47%)	7 (58%)
Headache	13	52	6 (47%)	7 (58%)
Problems breathing/coughing	13	52	6 (47%)	7 (58%)
Teeth/dental problems	12	48	6 (47%)	6 (50%)
Paranoia	11	44	4 (31%)	7 (58%)
Nausea	11	44	6 (47%)	5 (42%)
Itchy	10	40	5 (38%)	5 (42%)
Dirty hit	10	40	7 (54%)	3 (25%)
Constipation	10	40	8 (62%)	2 (17%)
Hurting self while 'out of it'	9	36	5 (38%)	4 (33%)
Bad dreams	9	36	3 (23%)	6 (50%)
Sores	6	24	4 (31%)	2 (17%)
Voices in the head	6	24	2 (15%)	4 (33%)
Problems with nose	4	16	2 (15%)	2 (17%)
Heart problems	3	12	0	3 (25%)
Abscess	2	8	2 (15%)	0
Other problem	1	4	1 (8%)	0

While there were similarities in the problems reported by both heroin and amphetamine users (as above). However, primary heroin users were more likely to report problems sleeping, to have hot and cold sweats, track marks, lack of energy, dirty hits, and constipation than amphetamine users (consistent with heroin withdrawal). Primary amphetamine users were more likely to report paranoia, bad dreams and heart problems than heroin users (consistent with amphetamine intoxication) [34].

[34] These comparisons have not been tested to statistical significance due to the small size of the sample. In addition, the nature of the sample, and high prevalence of polydrug use may complicate the physical and psychological symptoms reported by the participants. Replication of this study, and clearer definition of symptoms and health related problems using

Use of Medications

Prescribed medications were used by just over a quarter of participants (28%, n=7) in this survey. Three participants (12%) were attending methadone programs. Two participants (8%) had been prescribed anti-depressants, two participants (8%) had been prescribed Ventolin, one person (4%) was taking anti-inflammatory medication, and one person (4%) was taking anti-hypertensive agents. Iron tablets were prescribed for one person, benzodiazepines for another, and one person was prescribed codeine phosphate.

Dependence

Dependence on amphetamines and heroin

Because of a dearth of research about illicit or injecting drug use among indigenous populations, there are few recognised culturally appropriate tools available to conduct health assessments for Aboriginal people. Assessment of dependence on heroin, amphetamines and alcohol was considered useful to this study, and provided an opportunity to trial recognised instruments among indigenous injecting drug users.

The Severity of Dependence Scale (SDS) (Gossop, Darke, Griffiths, Hand, Powis, Hall and Strang, 1995) was used to assess the level of dependence on amphetamines and heroin, with higher scores on the 15 point scale indicative of greater dependence. This scale has been found to be a valid and reliable measure for assessing dependence on different types of drugs (Dawe and Mattick, 1997), and measures items "explicitly concerned with psychological components of dependence" (Gossop et al, 1995, p.607) in non-indigenous populations. To date, this particular scale has not been used with an Aboriginal population (Dawe and Mattick, 1997). The SDS was initially tested in Australia and the UK (Gossop et al 1995), and has recently been adapted for a NSW Vietnamese population (Swift, cited in Dawe and Mattick, 1997). Recommendations from the yet unpublished Swift study suggest few cultural problems related to the wording or interpretation of the scale.

Larson (1996) attempted to investigate dependence among indigenous injecting drug users, using a modified version of the Severity of Opiate Dependence Scale (Saunders,

Sitharthan McGrath and Cairns 1991), which has some similarities to the SDS developed by Gossop et al (1995). This research identified higher levels of dependency among primary heroin users (mean=8.5; S.D.=ns) when compared to primary amphetamine users (mean=3.7; S.D.=ns) (Larson 1996). However, this study did not recommended a criterion of dependence (cut-off score), or state how many participants were classified as dependant, therefore it is difficult to interpret the significance of the mean scores reported. Due to these limitations, this particular scale was not used for the Lower Murray study.

Of 21 Lower Murray participants who completed the SDS, 16 (76%) participants were generally considered to be dependent, using a score of more than 4 as indicative of greater severity of dependence for amphetamines (Topp and Mattick 1997), and a score of more than 6 for heroin (Gossop, Griffiths, Powis, Williamson & Strang, 1996; McGregor, Darke, Ali & Christie 1998).

Sixty six per cent (8 out of 12) of the Lower Murray participants who preferred amphetamines over heroin (classed as amphetamine users) scored more than 4 on the SDS (mean=6.6; S.D.=4.7; range 0-14). Similarly, 62% (8 out of 13) of participants who preferred heroin over amphetamines (classed as heroin users), scored greater than 6 on the SDS (mean=8.1; S.D.=4.7, range 0-15).

By comparison, two recent Adelaide studies of non-indigenous amphetamine and heroin users found that 60% of amphetamine users were considered to be dependent (mean SDS score=4.9, S.D.=3.7) (Vincent et al, 1997), and 48% of heroin users were considered to be dependant (mean SDS score=6.4, s.d.=4.1; range 0-15) (McGregor et al, 1998). Two Sydney studies of non-indigenous injecting drug users reported significant variation in the number of amphetamine users that were considered dependent according to the SDS. Hando and Hall (1993) reported that 36% of amphetamine users were classified as dependent, and Gossop, Griffiths, Powis and Strang (1992) reported that 60% of amphetamine users were classified as dependent. In a comparative study of non-indigenous amphetamine users and heroin users, Gossop et al (1995) reported that 2 samples of heroin users scored a mean of 5.2 (S.D.=5.0) and 8.7 (S.D.=4.0) on the SDS, much higher than the two samples of amphetamine users, who scored an average of 3.7 (S.D.=4.0) and 4.3 (S.D.=3.2). The cut-score for dependence on amphetamines has been reviewed (increased to greater than 4, Topp and Mattick, 1997) since these studies were published. In view of these changes, the Lower Murray Aboriginal sample have relatively higher amphetamine dependence

scores when compared to other Australian amphetamine users, higher scores than non-indigenous Adelaide heroin users (McGregor et al 1998), and comparable scores to those tested in NSW (Gossop et al 1995).

It is difficult to accurately classify the responses provided by the prisoners, as they were understandably cautious about admitting to recent injecting behaviour, and their period of detention varied considerably. These prisoners fulfilled the criterion for the survey, and had extensive histories of IDU, that invariably led to their current period of detention. The prisoners determined if the SDS questions were relevant to their current using patterns, and four declined to answer this section, as their usual using patterns were disrupted. The SDS scores from the remaining 4 prisoners are included above.

It is of note that the Lower Murray sample contained only 3 participants (12%) who were in a form of non-medical treatment at the time they were interviewed (one in a residential facility and two in supported abstinence-based accommodation), compared to 2% in the Vincent et al (1997) sample, 24% in Hando and Hall (1993) sample, and 30% of Australian participants in the Gossop et al (1995) sample. None of the participants who were in non-medical treatment had completed a detoxification program prior to seeking support from these services.

In an Adelaide study of indigenous needle exchange attenders, 54.8% of the sample indicated that they wanted to withdraw from amphetamines, heroin or other drugs. A third of the sample (33.3%) indicated that they had completed withdrawal, but less than 20% (of the total sample) had accessed drug services in order to do so (Lane 1993). Although dependence scales were not used in this study, intention to withdraw from drugs is likely to be associated with dependence.

Dependence on alcohol

Seventy two per cent of the sample (n=18) were current users of alcohol, and 15 of these were not imprisoned during the time they were interviewed[35]. Current use of alcohol in this sample was higher than the national population estimates for indigenous people (62%) (CDHSH 1996; ABS 1996a) and higher than that reported for the total Aboriginal population of SA (66%) (ABS 1996a). These national studies found that while fewer Aboriginal people described themselves as current drinkers, when compared

[35] Although 8 participants were interviewed in prison, their period of incarceration varied considerably, from almost 12

to the non-Aboriginal population, Aboriginal people were more likely to consume alcohol at levels considered to be hazardous to their health than non-indigenous Australians. Perkins et al (1994) reported similar findings in a study of urban aboriginal people in NSW.

To investigate alcohol use in more detail, the ten question Alcohol Audit was used (World Health Organisation, 1989). The questions are categorised to reflect alcohol consumption, drinking behaviour, adverse reactions and alcohol-related problems (Dawe and Mattick, 1997; Saunders, Aasland, Babor, De La Fuente & Grant, 1993). Previous research has demonstrated the AUDIT to be a sensitive indicator of hazardous and harmful alcohol use prior to the establishment of dependence and physical and psychological health complications (Conigrave, Hall and Saunders, 1995; Saunders, Aasland, Amundsen and Grant, 1993). The AUDIT is a self-report measure that can be readily incorporated into medical histories, lifestyle questionnaires and health interviews (Bohn, Babor & Kranzler 1995), and has been identified as a useful screening instrument for individuals who also have established drug dependencies (Skipsey, Burleson and Kranzler 1997). To date, it has also performed well as one of few effective screening tools that has cross cultural applicability (Dawe and Mattick, 1997, Saunders et al, 1993; Volk, Steinbauer, Cantor & Holzer, III, 1997). However, at the time this study was conducted, no field trails using the AUDIT with Australian Aboriginal populations had been published (Dawe and Mattick, 1997).

According to established scoring conventions for the AUDIT (CDAS, 1993) females who scored more than 6, and males who scored more than 7 were considered to be likely to be experiencing problems associated with their alcohol use. Those who scored 13 or more (of a range of 0-40) were likely to be consuming at levels considered to be harmful to their health, and therefore likely to be categorised as dependent. Hazardous levels of alcohol consumption were defined as use of more than 40g of alcohol per day for men, and over 20g per day for women, and harmful consumption was defined as more than 60g per day for men, and 40g per day for women (CDAS, 1993; Volk et al, 1997, NHMRC 1992).

Very few Lower Murray participants had any difficulty completing this self-report measure, with clarification of a word or phrase required in only three instances. The median score on the Alcohol AUDIT (n=18) was 16 (range: 2-39). From Table 10, it can be seen that two participants (11% of current drinkers) were consuming alcohol with the safe range and 3 participants (22%) drinking at hazardous levels. The remaining 13

participants (72% of current drinkers) were consuming at levels considered harmful to their health (by scoring 13 or more).

Table 10: Alcohol AUDIT scores for males and females

AUDIT SCORE	Safe range 0-6 females 0-7 males	Problematic range 6-12 females 7-12 males	Dependent range 13 or more
Females (n=6)	0	2	4
Males (n=12)	2	1	9
TOTAL	**2**	**3**	**13**

Table 10 also shows a breakdown of AUDIT scores for gender. Of the 6 females in the study, 2 were assessed as likely to be experiencing problems, whilst 4 engaged in harmful patterns of consumption. For males, 2 male participants scored in the safe range, 1 scored in the problematic range between 7 and 12, and the remaining 9 males scored between a range of 14 and 39.

Further information about patterns of use can be obtained from Table 7. Table 11 shows the 10 AUDIT questions, and the frequency of responses obtained for each question. The first three questions of the AUDIT were designed to assess alcohol consumption levels. Although 13 participants scored within the range of 'dependence', half the sample (n=9, including 5 who were assessed as dependent[36]) reported that they typically consumed alcohol on a monthly basis, or less frequently. Seventy two per cent of current drinkers (n=13, including 12 who were assessed as dependent) stated they ***typically*** drank 7 or more standard drinks when they consumed alcohol. Four 4 participants (22% of current drinkers) consumed 7 or more standard drinks on a weekly basis, whereby another 4 (22%) drank these quantities on a daily (or almost daily) basis. Only 3 participants (17% of current drinkers) ***typically*** consumed alcohol at or below the recommended 'safe' levels. Thirteen participants (72% of current drinkers) had reached the hazardous range (scoring between 6 and 12 for females, and between 7 and 12 for males) after completing the first three AUDIT questions.

These patterns of consumption are consistent with trends published in national data, (CDHSH 1996, ABS 1996a, ABS 1996c) whereby Aboriginal people tend to consume alcohol less much frequently than the population in general, but at levels considered to be hazardous or harmful to their health.

[36] Throughout the analysis of the AUDIT, additional information has been obtained from the raw data, to identify individual

The second conceptual category relates to issues of alcohol dependence/drinking behaviour (questions 4-6). As evident in Table 11, the majority of participants experienced problems related to these questions quite infrequently (monthly or less often). From the raw data, the seven individuals who had high individual scores for each of these questions also recorded scores in the upper ranges of the AUDIT (obtaining AUDIT scores of 27 or more).

The third category (questions 7-8) relates to adverse reactions. Seven current drinkers experienced guilt or regret after drinking on a relatively frequent basis (between weekly and daily), and another 5 stated they frequently experienced problems with their memory. According to the raw data, each of these participants were also among those who scored high overall dependence scores (greater than 25). As an aside, shame may be a more appropriate term for indigenous participants for this question, however, it appears that the participants readily understood the wording.

The last category relates to alcohol related problems and encompasses questions 9 and 10. Seven participants (38% of current drinkers) had experienced, or contributed to alcohol related injury in the last year, and 7 participants had been advised to cut down their consumption. Most participants who were assessed as dependent or problematic drinkers had scored on these questions.

This analysis has shown some inconsistencies with the scores recorded on the AUDIT and the individual patterns of alcohol use for these participants. There may be some difficulties utilising this particular scoring template (Appendix E) with Aboriginal populations, for a range of reasons. As previously stated, 94% of current drinkers had consumed alcohol at harmful levels in the last 12 months. However, although half of the participants drank heavily on a weekly basis or more often, the remaining half drank heavily on quite infrequent occasions (ie, monthly or less frequently, or binge drinking). Whilst there is no doubt that these participants were engaging in harmful patterns of drinking, further research is required to evaluate the utility of this instrument for the purposes of detecting and screening for harmful drinking patterns, and the AUDIT's potential as a research or brief intervention tool. Caution is therefore recommended in the interpretation of the AUDIT, the available scoring cards. The diverse social context of alcohol use within this population also needs to be considered with the use of such tools. Further work should be done to investigate the specificity and sensitivity of the AUDIT for this population.

Further research may reveal more appropriate use of the AUDIT for indigenous people, however, the information above suggests that individual problems and patterns of behaviour, perhaps complemented by the AUDIT clinical tool, may better assess the impact of alcohol use in Aboriginal people.

A number of studies are currently being conducted in Australia using the AUDIT as a screening tool for assessment of hazardous and harmful drinking, and for use in alcohol brief intervention strategies among some general hospital and psychiatric hospital patients (for example Roydhouse and Hulse, 1997, Ask, Allsop, Cheney, Spurr, de Crespigney, de Luca, & Williamson, 1997). Preliminary discussions with other researchers have revealed considerable variation in the AUDIT version used, the scoring templates, and the selection of criterion for hazardous and harmful drinking levels, so further comparison with other populations will not be discussed in this paper.

Overall, the patterns of alcohol use identified in this study are consistent with published data, demonstrating a trend whereby Aboriginal people tend to consume alcohol on fewer occasions, but consume at higher levels, when compared to the general population. High levels of alcohol consumption have shown to interfere with cognitive and physiological function, and cultural and social relationships of Aboriginal people (CDHSH 1996; Humes et al, 1993; Larson, 1996: ABS 1997). However, detection of alcohol related problems through simple screening tools such as the AUDIT, require further investigation, to not only account individual and social consequences of alcohol use, but to consider the social and cultural context in which the drinking takes place in some Aboriginal communities, and the context in which changing drinking behaviours would be readily accepted and supported by these communities.

Table 11: Response scores and questions of the Alcohol AUDIT

AUDIT Questions	Score 0 (n)	Score 1 (n)	Score 2 (n)
Question 1 How often do you have a drink containing alcohol?	(never) -	(< monthly) 9	(</=weekly) -
Question 2 How many standard drinks do you have on a typical day when you are drinking?	(1) 1	(2) 2	(3-4) 0
Question 3 How often do you have more than 6 standard drinks on one occasion?	(never) 1	(<monthly) 7	(monthly) 2
Question 4 How often during the last month have you found that you were not able to stop drinking once you had started?	(never) 6	(<monthly) 5	(monthly) 2
Question 5 How often during the last year have you failed to do what was normally expected from you because of your drinking?	(never) 8	(<monthly) 4	(monthly) 3
Question 6 How often during the last year have you needed an alcoholic drink in the morning to get you going?	(never) 8	(<monthly) 3	(monthly) 0
Question 7 How often during the last year have you had a feeling of guilt or regret after drinking?	(never) 8	(<monthly) 0	(monthly) 5
Question 8 How often during the last year have you been unable to remember what happened the night before because you had been drinking?	(never) 6	(<monthly) 5	(monthly) 2
Question 9 Have you or any other person been injured as a result of your drinking?	(no) 5	-	(not in last year) 6
Question 10 Has a friend, doctor of other health professional been concerned about your drinking or suggested that you cut down?	(no) 8	-	(not in last year) 3

Psychological health

A range of mental health problems were experienced by 64% (n=16) of participants. Depression (40%; n=10), paranoia (16%; n=4), forgetfulness (8%; n=2), anxiety (4%; n=1), fear (4%), hearing voices (4%), and suicidal ideation (4%) were reported.

> ***I had depression. That's why I started using - to get rid of the depression and anxiety. But now I start getting depressed when I come down again. If I have a taste, I'm OK...I do a lot of thinking about it***

> ***I get depression. Some days, I'm totally fed up with it. Some days the whole world is just too bloody deep.***

> ***When you are using drugs you always feel down in the dumps...but you use the drugs because you're rejected from your family, and you're not wanted. Rejected. You're friends don't want to know you, and so you get really depressed. When you're sitting down and broke, and you're not on it, you're feeling depressed. (S.13)***

> ***Paranoia and depression would be the most...and fear. Fear, most of the time. Fear of society, from the world, all because of what society did to me. Society was a bad society, and I want to get out of it. Drugs allowed me to escape, but in the end, it also made me violent.***

> ***It was when I was in gaol. I was on Largactil. I told them I was hearing voices and I couldn't sleep. I was on that for about 3 months, but you need to take more and more as your body gets used to taking it. In the end I started to get healthy, and they started to talk about the Largactil shuffle, so I got off it. I didn't want to end up like them [Mental health patients].***

Two people described forgetfulness, and the circularity associated with the problems and using. As one person noted:

> ***I forget things. But I get depressed because I haven't got it, and so I get whacked out, and then get stressed because I'm whacked out, and depressed because I always feel sick. It doesn't stop.***

Suicide

Fifty two per cent (n=13) of the Lower Murray sample (3 females, 10 males) had made an average of 2 suicide attempts (mean=1.9; S.D.=1.01) (for example by overdose (n=7), or attempts to use a gun (n=2) or a knife (n=1) by hanging (n=1) or self-mutilation (n=2)[37]. One woman experienced severe suicidal ideation for a three month period, during a particularly difficult time in her life in recent years[38]. An additional two people stated that had previously experienced suicidal ideation, but had not made any suicide attempts.

Ninety two per cent (n=12) of those who had ever attempted suicide admitted to having been intoxicated on at least one occasion they made an attempt, with alcohol (n=2), benzodiazepines (n=2), amphetamines (n=1), or a combination of drugs (n=4). One participant explained why they had attempted suicide.

> ***I used alcohol and pills both times. Why? 'cause everyone was dying. It seemed like it wasn't stopping. I was going to funeral after funeral, and dressing up my brothers. Dressing a cold body - you just don't forget it. They died from OD [overdose] and hanging. A lot of my friends have OD'd and died, and suicided.***

This participant was asked what sort of problems contributed to suicides in the region.

> ***I don't know. I think he did it because he split up with this girl, and he didn't get to see his children. He was depressed being on drugs, and of being sick everyday, thinking about where he was going to get his next hit from. My friends are dying because of their drug use. They're having a taste while they're drunk, and I think they're often accidentally doing it. When you're off your face, and you go and score, everyone knows that for every one that uses, this could be their last time. Why suicide? because they rip off their family and they are feeling guilty. Suicide is a way out.***

Many of the detailed explanations about reasons for suicide attempts by participants revolved around situations such as relationship or family problems, childhood sexual abuse, access to children, and drug use. A number of participants reported that using

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[37] Multiple responses are included here, as some participants made several attempts at taking their life. Some participants did not state what actions they took.

[38] The situation described by this women was considered particularly difficult, requiring significant medical intervention. Because of the specific nature of her problem, her reported number of attempts were not included in the analysis, as it is

drugs actually made it easier to go through with the decision, or triggered the feelings that suicide was a reasonable option at that point in time.

> ***Speed - makes it easier. It's more confusing, you don't know what's right, wrong, real or not. Being on drugs it's like it's not worth it to anything or anybody, let alone yourself. I suppose that is reinforced by people not being around you, always arguing with you...(S.5)***

Two participants did not state what drugs they had been using at the time of their suicide attempt, and one person stated that they had made their attempt while sober, and 'straight'.

Because so few studies have investigated patterns of IDU among indigenous people, there is little directly comparative data available, however, it must be noted that this sample is a very small sample of Aboriginal injecting drug users, from one particular region, with a large proportion of users who have experienced a range of problems related to their drug use, including imprisonment. By comparison, two recent studies of South Australian non-indigenous populations of injecting drug users reported relatively fewer suicide attempts.

While examining reasons for overdose among a non-indigenous sample of heroin users in SA, McGregor (personal communication,1997) found that only 2% of users overdosed with the intention to commit suicide. Another 2% were unconcerned about (potentially fatal) consequences of heroin use, and had taken too much, however, did not deliberately intend to suicide. When asked why other people overdosed, participants believed that although that suicide was not the ***main*** reason that people overdosed (<1%), suicide may have been one of a number of reasons why people overdosed (12%).

Further examination of the data from a recent study of amphetamine users in Adelaide revealed that although 17% of participants had made suicide attempts before they ever commenced using amphetamines, and 12% had made attempts since they became amphetamine users, only 5% attributed the use of amphetamines to these attempts. Of 7 Aboriginal participants (7% of the total sample), 1 person had attempted suicide before they ever tried amphetamines, one had made an attempt since they began using, and another made a suicide attempt both before and after commencing use of amphetamines (Vincent et al 1997).

Social problems related to injecting drug use

Participants were asked to identify how their IDU affected their relationships with their partner, family, friends, and other people, and if IDU affected their work or relationships with their workmates, interfered with studies, finances, or caused them to hurt themselves in any way, or caused any other problems. Of these 9 categories, participants each averaged around 4 categories (mean=4.3; S.D.=2.4) of problems. (Multiple responses are recorded for some answers in this section.)

Forty four per cent (n=11) of participants described their IDU interfering with their relationships with their partners, causing the relationship to dissolve in some cases (n=6), or caused arguments in relationship to using (n=4). Three people also stated that their IDU resulted in violent behaviour for themselves or their partners.

Family problems were recorded for 52% of participants (n=13), where family members worried about the participant (n=6), or the participant had to deal with the family's anger, and argued about their drug use (n=6). Two people stated that they found it harder to relate to their family once they began using, and three people no longer maintained contact with their family, as a consequence.

> ***There's a lack of communication between us now, because some of their children are starting to experiment, and they think it's a result of my doing things in front of them, but it's not true.***
>
> ***Mum's sister - I don't talk to her any more. I had a taste at her place, and I dropped a fit in her toilet. Now she won't speak to me any more.***
>
> ***My family are a bit dirty on me, 'cause they don't want me to do it, and they want me to stop and come back to them. I don't want to do what they do. I use differently to them, they're all drinkers and that.***

Over half (56%) of the participants stated that friendships had had been affected by their IDU. Some (n=4) stated that friendships had terminated as a result of drug use, or only existed for the purposes of using drugs (n=4). Others reported that arguments occurred over drugs (n=3), financial arrangements (n=1) or because of a lack of trust between the participants and their friends (n=2).

Friends turn into enemies when you use. I turn enemies with nearly every junkie I know - either they try to rip me off, by selling me icing sugar or things like that. They're always trying to burn me, and think I don't know nothing about the stuff. Every junkie I've used with I've turned into enemies with. I don't mix with them no more.

The only problem that it really causes for friends is that there are too many of them that hang around my house and jump in for a free shot, free smoke, and hang around all the time. I've ceased to associate with them, now we have a private house for me and my family.

Friends stay away when you're violent and paranoid.

Similarly, 56% of participants reported problems with other people, some as a result of criminal activity (n=6), assault (n=3), or neighbours (n=2) as a result of their drug use. One participant collected a number of drink-driving charges, one person described difficulties with her partners' family, another person was distrustful of his dealer, and another person contracted HCV while in gaol from an acquaintance.

When I was new and I came into gaol, I didn't know what gaol was like then, and used someone's syringe. I didn't know he had hep C - I caught hep C. Now I know it's too late...

Eight participants (32%) had faced problems in their workplaces as a result of their drug use. In some instances, participants lost their jobs (20%). One person stated that they had not held a job for twenty years, partly as a result of drug use.

The majority of participants (88%) stated that their current monetary difficulties were associated with drug use. Only 12% (n=3) believed that the quantities of drugs they used were inadequate to interfere with their usual financial responsibilities. Most often (n=18; 72%), participants had difficulty meeting commitments for bills, or providing basic necessities, such as clothing and food, because of the financial demands of their drug use. Difficulty repaying credit caused difficulties for 9 people, and some admitted to petty criminal activity to help resolve these problems.

Forty per cent of participants (n=10) reported accidents, and the potential for serious injury, as a result of their drug use. Minor accidents such as burning themselves while

'on the nod' (n=4), fighting (n=4), car accidents (n=4), other accidents involving moving cars (n=2) and overdose (n=1) were among the accidents reported that had occurred while participants were intoxicated.

One person reported that drug use interfered with their educational commitments.

Imprisonment

Eighty four percent of the participants (n=21) had been imprisoned, for a median number of 4 occasions (S.D.=4.1), spending a median number of 33 months (almost 3 years) in gaol (range: 2 days-13 years). Participants were first admitted to the prison system at a median age of 19 years (range=12 -39 years). As previously noted, eight participants were incarcerated at the time of the study. While some participants had been released as recently as 2 months prior to their participation in the survey; others had not been to prison for up to 8 years.

While it has been noted that incarceration may provide a means of initiation into injecting drug use (Crofts et al 1996), only two participants (8%) first injected while in prison. Of the 21 participants who had been to prison, 57% (48% of the total sample) had injected while interned on at least one occasion.

Access to services

More than two thirds (72%, n=18) of the survey participants had accessed a range of health services for treatment for problems related to their drug or alcohol use, as displayed in Table 9. Most participants had accessed more than one service.

Table 12 shows that General Practitioners (28%), and the public or private methadone programs (28%), were the most frequently used services. Although 7 participants (28%) saw a GP, their reasons for seeing them varied: some participants (12%, n=3) were quite comfortable discussing their drug use problems with their GP's, whereas others also sought the assistance of GP's mainly for prescription of methadone or

benzodiazepines (such as Diazepam or Rohypnol[39]) (16%, n=4). Twenty five per cent of participants (n=5) believed that methadone was the answer for their drug use problems:

> ***…it put quality back into my life, to spend some time with my family...and be with them, and not look to go out to score. I could get away from that [lifestyle] through that process [methadone]; I've got some respect for that process. If I had've been on methadone before I was released [from prison] I would have had the best opportunity to save myself, and from the stigma of attempted suicide, …I wanted to get off of it [heroin]…***

Table 12:

Range of Services accessed by survey participants

Service	No. participants who attended service (n, %)
Did not use any service	n=7; 28%
General Practitioner	n=7, 28%
Public (DASC) or Private Methadone Programs	n=7, 28%
Drug and Alcohol Services Council (DASC) (detox and/or counselling)	n=6, 24%
Aboriginal Health Service (activities, rehab, counselling)	n=4, 16%
Prison Officer	n=1, 4%
Drug Assessment and Aid Panel (DAAP)	n=1, 4%
Private psychiatrist (while at school)	n=1, 4%

One participant was particularly critical of what he perceived as poor access to methadone, although the use of methadone to treat his heroin dependence, suited him well. He criticised the public program for a number of reasons, such as the 6 month waiting list (as he experienced), the 'regimentation' required by the public program, and the inflexible and short duration of hours (a few hours access twice per day). He had since made a more suitable arrangement with his chemist and was seeing a private prescriber at the time the research was conducted.

The Drug and Alcohol Services Council (DASC) provided services other than methadone (such as counselling and detoxification) to six participants (24%), although another 3 participants were unaware of the existence of these services either in the region, or in the metropolitan area. Inpatient withdrawal (in the metropolitan area) had been undertaken by only two participants.

[39] As previously stated, local GP's refused to prescribe this drug in the Lower Murray region, however, it was available by

The participants were usually able to describe a range of services offered by Aboriginal health services and community workers in the region, such as counselling, health assessment and community activities for Aboriginal people, although only 16% (n=4) of participants had accessed Aboriginal services for IDU problems.

Three participants described having informal 'talks' with their GP, community health worker, or others who had previously experienced problems related to drug use. Although these participants stated that they benefited greatly from those informal discussions, they did not think of the discussions as counselling, as such. Only one participant specifically described how a formal 'counselling' service was of benefit to them. It is possible that the term ‘counselling’ implied formality, and was therefore less attractive, or less accessible, than services conducted more informally.

The participant who sought support from a prison officer was satisfied with the information he received. Although the prison programs now offer some assistance from Aboriginal educators and social workers, only recently have (pilot) Aboriginal drug and alcohol programs been implemented within the prison system. Access to trained drug and alcohol staff, and to staff of Aboriginal descent, may be of considerable importance when planning services for the prison system, considering the number of survey participants (84%) who had been imprisoned on at least one occasion.

Almost half of all participants (48%, n=12) had accessed only one service for their drug and alcohol problems.

Two people (8%) who had never attended services in the past stated that they would attend a service on their release from prison. One person was planning to seek help for his alcohol problem, and the other person was required to attend the Driver Assessment Clinic in relation to a significant number of drink driving offences.

Reasons for seeking services included a desire to stop (16%) or reduce (12%) their drug use, for family reasons (8%), to obtain pills (8%), to save money (4%), to stop always feeling ill (4%), or to ‘sort my life out’ (4%). Others felt they required assistance for ‘answers to kick the habit’ (4%), and another felt they needed professional help to prevent suicide. Some participants (48%) had a number of reasons for attending services that were not primarily drug or alcohol related (eg. financial assistance, help to bury family members, social support, legal advice etc.) (Multiple responses were recorded)

Overall, of those who had attended services, five participants (27% of those who had attended a service) were dissatisfied with that service. Methadone services were believed to provide the most tangible benefit for 28% of participants (n=7), with 5 people nominating methadone programs as helping them the most with their drug use problems. General Practitioners (n=3) and other sources of assistance (family and friends, prison, Salvation Army) (n=3) successfully helped others. Aboriginal health services helped two participants more than other services, and counselling provided the best option for one person.

The participants were read the following two statements relating to their experience of shame when attending health services. They were asked if they disagreed (a lot, or a little) or agreed (a lot, or little) with the statements

> ***I would be too shamed to use a*** non-Aboriginal ***health service for a drug use problem***

and

> ***I would be too shamed to use an*** Aboriginal ***health service for a drug use problem***

The overall majority (60%, n=15) stated that they disagreed a little (12%), or a lot (48%), with the statement suggesting that they would be too ashamed to attend a non-Aboriginal service for a drug use problem, and stated that they would attend non-indigenous services should they require assistance. However, 8 participants (32%) agreed a lot, and 2 agreed a little (8%) with the statement, indicating that they were too shamed to attend non-Aboriginal services, and preferred indigenous agencies. One participant stated that she would actually prefer a 'white' doctor.

Although almost half of participants stated that they would not be shamed to attend ***non-Aboriginal*** services, the overwhelming majority (92%, n=23) disagreed a little (n=1) or a lot (n=22) with the statement suggesting they would be too shamed to attend an Aboriginal service. Even so, two participants (8%) stated they agreed with the statement, and were a little (n=1) or a lot (n=1) too shamed to attend indigenous health services. Overall, although many participants would attend non-indigenous agencies for assistance with health problems (including AOD problems), most preferred indigenous agencies. Most participants gave similar reasons for preferring indigenous services, as they generally felt more comfortable explaining their problems to other Aboriginal people, and were more comfortable communicating in an informal manner.

I seem to relate better, though I relate to anyone, and putting myself back as a young fella - you can relate better with your own people, that's how it is, you know what I mean.

…'cause I feel like they [non-indigenous services] look down both on Nunga's and drug users. I'd just rather go to a place run by Aboriginals, that every one can go to, and feel more comfortable.

Aboriginals understand each other

I get shame, feel uncomfortable, and I'll close up. I'll speak, but I won't speak that much. I went to a psychiatrist once, and I just closed off, he was waiting for me to talk...I couldn't do it, so I just walked out.

This person preferred the informality of indigenous services, rather than formal counselling that was (perceived to be) offered by general health agencies

Others felt conflict associated with dual identification, and this sometimes presented difficulty for them to choose the most appropriate service.

It's hard to say, because I'm half and half. My mother was a white lady, you can see the red in me, 'course my father was a Nunga. Years ago I could've only gone to a non-Aboriginal place, but now that's changed.

I would feel a bit out of place, 'though I'm not prejudiced as I've got a white grandfather, but other people are paranoid about what they think about you, like, you're a black bastard, what's he doing here? He should be with his own people.

Despite the support for Nunga services, several participants stated that their attendance at Aboriginal services would depend upon how their needs were met. Some of the participants who supported Aboriginal services (17% of those who sought assistance) gave a caveat to their support, stating that they were also concerned about maintaining confidentiality. This may help explain lower attendances at Aboriginal Health Services (16%) for this sample of participants. Even so, overall, participants implied there was a need for Aboriginal services for Aboriginal people who used or injected illicit drugs. Few, if any, indigenous GP's were known to be practicing in South Australia. Similarly, few Aboriginal services in SA offered methadone programs, or a range of services for

injecting drug users. A relatively recently established methadone support group had been abolished towards the end of the study. The only service operating for Aboriginal injecting drug users in the metropolitan region was a NEP program that was undergoing change at the time of the production of this report. Hence, the Aboriginal IDU community had little option but to attend general services.

The two people who did ***not*** prefer an Aboriginal service, were concerned about confidentiality of the information they gave to Aboriginal health workers, and were concerned about a lack of credibility of services (Aboriginal and non-Aboriginal) staffed by people who had not previously experienced drug use problems.

Recommendations for services

Participants were asked to recommend what services they believed would be of most benefit to injecting drug users in the Lower Murray region.

A clinic (similar to the metropolitan service) was suggested by 48% of participants. Ideally, this clinic would be managed by Aboriginal people, would be relatively informal, and incorporate a ‘drop in’ or support service. Participants suggested that counselling, medical, health, or drug and alcohol assessments, methadone, food parcels, and overnight accommodation would be valuable components of this centre. Activities to 'take away the boredom', such as weekend outings, or skill training programs, would complement the health oriented focus.

Participants (40%) suggested that a dedicated drug and alcohol worker would be preferable. This (ideal) position, would incorporate a role offering casual support and formal counselling; it would involve conducting workshops on drug use and BBV; the person would operate as an outreach worker, and would operate a mobile (via car) NEP. Several participants (32%, n=8) emphasised that this person did not necessarily need to be Aboriginal as long as they could be trusted with confidential information, and were 'qualified' in drug and alcohol issues (past personal experience as the only qualification for this type of work was acceptable to only 2 participants). Confidentiality or trust were mentioned more frequently here (n=8), than when discussing preference for Aboriginal services in the previous section. It was apparent that few of these participants were aware that an non-indigenous outreach alcohol and other drug worker was positioned in the region, and already performed most of these task.

The local residential and support services were perceived by some (16%) to be 'not too bad’. However, these services were criticised (40%) because of their strict rules, lack of guidance, adult orientation, and the lack of professional qualifications in drug-related issues or counselling skills. Some participants (n=3) believed that these services merely offered accommodation. Four participants (16%) believed that a purpose-built residential service embracing alternative therapies, or harm reduction ideologies may be more appropriate for dealing with drug related problems for indigenous people.

The few participants (n=4) who were aware that a NEP operated from the local hospital, were somewhat critical about the hours of operation, and the location of the service

Participants (44%) stated that the ‘ideal’ NEP would be need to be cheap and accessible for injecting drug users in both the indigenous and non-indigenous community, and would need to be promoted among the user networks. Some (n=7) also suggested that the existing community club may be an ideal venue for distributing fit-packs, however, concerns about confidentiality obtaining fit-packs from this venue were also raised.

More understanding GP's, and a telephone service were mentioned by 2 participants as other alternatives for IDU in the region, and a methadone support group in the region was suggested by another two.

One person emphasised that Aboriginal culture was an important aspect of drug rehabilitation. She stated:

> ***Unfortunately I feel really sad for those who haven't got their cultural groups, because they haven't got the support that I've had, as their family is spread out. What saved me is that this is my cultural home and the country that I walk in - I'm recognised as custodian of 2 sites...every Kaurna and Ngarrinjeri person needs to have that pride and cultural identity, but I don't know the solution for people who aren't from here. Cultural identity is the only thing that will save our people from drug use".***

DISCUSSION

Summary of findings

While the primary aim of the project was to identify the hazards and harms associated with injecting drug use, consultants attributed the use of a range of drugs (including heroin, amphetamines, alcohol, and yarndi), to a range of health and social problems for users, their families, and the broader Aboriginal community of the Lower Murray region. In fact, consultants believed that rarely did anyone use one single type of drug, and most were used in conjunction with others. Consequently, with few exceptions, consultants found it difficult to identify the specific health and social problems with individual drug types. Of concern for some consultants, was an apparent popularisation and increasing acceptance of the use of yarndi among both youth and adults in the region.

Drug use, according to the consultants, was associated with poor employment opportunities, a lack of meaningful educational opportunities, criminal activity, and occasionally, violence. Injecting drug use complicated matters because of the risks associated with sharing needles and other equipment, and potential for contracting BBV, problems resulting from accidental injury or overdose, and involvement in criminal activity that frequently resulted in incarceration. A major issue identified by consultants was the potential for suicide in a community that appeared to be consistently dealing with death, and continual grief. Additional losses through drug use were considered to further add to the burden already faced. Lack of appropriate services for IDU, compounded by different drug use philosophies across agencies, and considerable variation in the skills of the staff of these agencies, led to substantial confusion about how to most effectively manage drug use problems. These problems contributed to many consultants, and users, feeling frustrated about IDU problems. Consultants often believed that drug use issues were unlikely to be resolved until broader problems such as unemployment, lack of educational opportunities, culture and identity issues, community reconciliation, and land rights, were also addressed.

Many of the concerns and issues raised by the consultants were reflected in the survey of injecting drug users. Most of the survey participants were polydrug users, and they shared their stories about a range of social, familial and health related problems they had experienced recently. Almost all participants had spent some time gaoled, frequently as a

consequence of their IDU. These users reported relatively few incidents of needle sharing. However, many shared other injecting equipment, such as spoons and filters, and a substantial number had contracted HCV. Information gained from a number of screening instruments employed, suggested that this sample of Aboriginal injecting drug users may have been experiencing higher levels of dependence on heroin and amphetamines, when compared to South Australian and other non-indigenous IDU populations. A major finding however, was the relatively high rate of suicide attempts, whereby intoxication with a range of drugs was associated with many such attempts.

The users identified a lack of services or other sources of assistance oriented to drug use problems (apart from alcohol), which may have contributed to the health related problems, and issues of dependence faced by users living in the region.

Rapid Assessment Methodology

A major aim of the project was to test the utility of Rapid Assessment Methodology, or RAM, in the identification of patterns of injecting drug use and associated harms within an Aboriginal community.

RAM is an eclectic approach to research, whereby a variety of research methods or tools for collecting and analysing various types of quantitative and qualitative data may be employed. The strategies utilised depend on the research questions; the time frame required to collect the information; and most importantly, their acceptability to the community involved in the research, among other things. The validity and reliability of the various methods utilised are enhanced through continual triangulation, or cross checking across all the various sources of data.

This research involved consultation with 100 individuals from the Lower Murray region. Representatives from the local Aboriginal and non-Aboriginal community, including representatives from a range of health, welfare, policy, legal organisations, as well as Aboriginal elders and injecting drug users themselves, were invited to participate in the research, through semi-structured interviews, surveys, and informal conversations. Other data, such as published and unpublished literature, and statistics from health agencies, needle exchange programs (NEP), and the Australian Bureau of Statistics (ABS) for example, were also collected, and checked against the information obtained from other research methods. Much time was invested by the researchers developing rapport with

community members through phone calls initially, and specifically, during their visits to local agencies and the community centre, in order to gain trust, and enhance opportunities for access to as many members of the community as possible. The method provided the opportunity for 'key' individuals to participate in the research in a way which that their anonymity was protected. Survey participants were located through opportunistic meetings with the researchers, through arrangements or introductions from other consultants, and through advertisement via fliers. 'Finders' helped facilitate access to injecting drug users.

As noted in the summary above, there were clear consistencies in the reports from consultants and users, in terms of the social and family disruption related to drug use, legal problems, grief and loss issues and access to health services in the region. Both groups described how drug use had impacted on family and social relationships, in terms of the quality of the relationships, and how basic needs were sometimes denied to families through drug use. Similarly, consultants believed that other consequences of IDU - criminal activity and incarceration in the prison system - were intertwined with the health, social and welfare problems faced by IDU and their families. Most users surveyed in this project had prison experiences which were directly related to their drug use. They told stories about the risks they, and others, had taken while imprisoned, including one who contracted HCV through sharing a needle. Emotional problems were identified by consultants and users, and reported by local media, as a major concern to Aboriginal people in the region. Grief, loss, and the potential for self-harm through drug use, problems resulting from intoxication from a variety of drugs, and risk taking behaviour, were issues that consistently challenged the small community. Indeed, two major problems identified in this sample of drug users were the risk of suicide, and the lack of services available to assist local people with health problems related to illicit or injecting drug use. Although a needle exchange program (NEP) operated in the region, reports from users, health services and consultants (confirmed by analysis of data from the NEP and information from local pharmacies), indicated that the available service was of greater attraction to non-indigenous IDU, than to Aboriginal IDU. Similarly, although local drug use agencies were considered effective in responding to alcohol use problems, most were perceived by consultants, health workers and users alike to be generally inappropriate for those with IDU problems.

Overall, the research team believed that the RAM, and the specific techniques used, identified the main issues faced by the Lower Murray community in regards to injecting drug use, and other drug use problems. The researchers were able to obtain support and

trust from the community throughout the process, and to identify issues that were common to the different sections of the community. The community was able to raise sensitive issues in a forum that ensured their anonymity was protected, and provide baseline information from which the community could now debate these issues. Many valuable suggestions about how to respond to the issues in this particular community were also made. Data triangulation proved to be a useful way of checking the validity, credibility and integrity of information obtained throughout the research process. For example, survey participants expressed reluctance to attend local NEP or pharmacy services to obtain clean injecting equipment, for a range of reasons. Poor attendance by Aboriginal injectors reflected this general reluctance, even though the services were generally unaware of the reasons for such poor attendance during the period the research was conducted. Similarly, drug users' perceptions that local health services were ill-equipped to effectively respond to problems associated with IDU were reflected in records of relatively low attendance at these services by people who were prepared to state their problems were specifically related to IDU.

There were, however, inconsistencies between users and consultants on some issues. These generally related to the health impact of injecting drug use, severity of harms and dependence. A number of factors may have contributed to these inconsistencies, including varied patterns of drug use (from rather exclusive use of particular drugs to polydrug use), and variations in the consultants' experiences and sources of knowledge about IDU and other drug use problems. The perception of secrecy surrounding IDU activity, as opposed to somewhat greater acceptance of the use of other drugs (alcohol, tobacco, yarndi), and a climate of general poor health and economic conditions, outside of any drug use, may have masked some of the direct consequences of IDU.

However, lack of knowledge about the specific health and other effects of IDU in Aboriginal communities who are already experiencing numerous and complex problems, can be understood as contributing to these apparent inconsistencies. Further research about the consequences of IDU, taking into consideration the local cultural, socio-economic and regional variations between specific Aboriginal communities would assist in clarifying some of these inconsistencies. Ideally future research should incorporate comparative data with non-indigenous IDU communities also living in the research area to identify specific differences in the harms faced.

Several methodological issues arose during the investigation. These included the validity of some of the instruments employed, sensitivities required in screening consultants, and increasing access to users themselves.

The survey instrument (Larson 1995), was deliberately chosen (although modified to some degree), to provide some comparative data with another Aboriginal IDU population. Screening instruments previously only used with non-indigenous populations, the Severity of Dependence Scale (SDS) (Gossop et al 1992), and the Alcohol AUDIT (WHO), were included in the survey. Results from the SDS, indicating psychological dependence to heroin and amphetamines, when compared with individual patterns of use and the social and health-related problems experienced by the indigenous injecting drug users, show relative consistency, suggesting that this tool may be appropriate for this population. Additional field trials with these instruments, and other measures assessing the impact of the use of drugs and alcohol are required to further assess their applicability with indigenous populations. Future research should also pay attention to the extent of polydrug use among similar samples of injecting drug users. For example, in this sample, 48% of participants used alcohol, amphetamines, heroin and marijuana concurrently, suggesting that indications of dependence on one drug may in fact be complicated by polydrug use.

The AUDIT results suggest that the AUDIT tool readily detected hazardous and harmful levels of alcohol consumption after the first three questions. However, it is likely that many participants in this survey may have been classed as dependent (for example, participants who scored less than 20), when closer examination of participants drinking patterns are more suggestive of infrequent binge drinking patterns, and problems associated more with intoxication than of dependence. This picture is obviously complicated due to the polydrug using nature of the sample. Overall these results suggest that the AUDIT as a measure of dependence was inappropriate for this sample of indigenous injecting drug users. Those scoring highly on all measures (ie, those scoring greater than 20) were possibly more likely to fit a classic neuroadaptation criterion of dependence, as their patterns of use suggests.

The use of the AUDIT as a screening tool brings us to a case in point about the effective use of such tools, emphasising the fact that such tools should not be used in isolation of other reliable indicators of problematic drug or alcohol use. For example, as we know, “a dependence syndrome is not is not absolute, but is a quantitative phenomenon that exists in different degrees” (NHMRC p.76). Other health related indicators (for example, clinical

measures and examination, liver function tests, or the SF 36 with its population norms) may give a more reliable picture of the impact of alcohol use among these participants (in addition to behavioural measures), than the AUDIT alone would suggest. Similarly, questions about the use of alcohol within the context of cultural practices, where they exist, considerations of polydrug use patterns, and certainly, the risks of under-reporting (NHMRC 1992) need to be considered in assessing drug and alcohol related harm. As an indicator of binge drinking, and intoxication related harms, the AUDIT appears to have significant applicability, however, comparison of these results with other studies using the AUDIT among similar populations would be prudent.

In adapting the AUDIT for use among Aboriginal population, some minor wording changes may be appropriate. For example, the use of certain language (guilt or regret, 'have you failed to do what was expected', 'not being able to stop once started') may be better if altered. For example, shame may be a more appropriate substitute for guilt or regret. Question 10 presents another problem, as it relates to health workers suggesting that the participants cut down on their drinking. This sample of injecting drug users had infrequent contact with health workers, hence the opportunity to take such advice, based on a clinical presentation would be quite rare. In addition, care might be taken to examine the relevance of scoring templates and cut off scores, and rather, a look at each category of problems (intoxication problems for example) may be useful, if this tool is to be used with other indigenous groups, particularly for non-urban populations.

A number of other factors may have contributed to these higher dependence levels. For example, although these participants had relatively minor difficulties interpreting and answering the SDS or the AUDIT, instruments such as these require further testing to ensure their validity and reliability for use with other indigenous samples. Interpretation of the results also require consideration of geographical, cultural, social and general health differences between different samples, particularly in relation to the language used in the tests, and the educational levels of the sample. Replication with larger samples is obviously required. Further research, and use of alternative or more comprehensive assessment tools may provide further insight into the overall effect of IDU in an Aboriginal community. For example, future studies could incorporate other instruments that have comparable population data, such as the SF-36, and include objective tests, such as urine screening, liver function tests or clinical assessment tools, acknowledging some of the weaknesses and limitations of such instruments. An opportunity to replicate this project may result in further adaptation of the instruments used, to alleviate some of the problems, and to further increase the validity of the survey results.

Particular sensitivity was required in screening consultants in this rural community. Some reports (Hando, O'Brien, Darke, Maher & Hall 1996, Vincent et al 1997) have suggested that consultants involved in this type of research should be screened to ensure that valuable research hours are not invested with people who know little about the research topic in question, and to ensure that only those with 'expert' knowledge about the issues were included. While the researchers were careful to specifically include those who were knowledgeable about IDU issues, a screening tool to exclude those without such knowledge, was generally inappropriate in a small, closely knit community such as this. Many health, legal and welfare agencies and community members who were considered likely to have contact with IDU were encouraged to participate, through telephone calls, letters of introduction, or through general conversation. Some people declined to participate, others became too busy to attend arranged appointments, while some considered their knowledge to be too poor to participate. Even so, during some interviews, it became apparent that some of these contacts knew little about IDU issues. However, this method proved to be a valid technique as it ensured that while key consultants were involved, other key community members (with apparently little knowledge of IDU issues) were able to maintain their public position and face, while also being informed about the research.

Although fliers, and access to a mobile telephone number were also utilised so that survey participants could contact the researchers, access to injecting drug users was better facilitated through the efforts of contacts (consultants, drug users, or other contacts) who undertook the role of 'finders'. There appeared to be reluctance for local injecting drug users to make telephone appointments, or to directly approach the researchers (possibly because of fear of being recognised as an IDU by participating in an interview). Because of this, some participants arranged their interviews in the metropolitan region, to prevent possible unintentional exposure as an IDU. Finders were considered appropriate, in view of the stigma attached to IDU, and the necessity to preserve anonymity of participants. This method proved effective and reliable, as the finders could brief others about the interview, thereby reducing apprehension about the questions asked, and providing information about the approachability of the researchers.

Other concerns were raised through the use of RAM, that were perceived to influence the use of alcohol and other drugs in this community. Essentially, RAM provided community members with a voice about broader issues that affected them. High levels of unemployment, the need for community reconciliation, issues of land rights and identification, health services for men, and issues associated with protracted grief and loss

became quite evident, and were acknowledged in the report. While these issues were not the focus of the study, they need to be raised in public discussions arising from this project, as they provide the context within which drug use problems were believed to have occurred within this community. Whilst as a researcher, it may be impossible to address these problems at any level, and particularly within the scope of such as small project as this, it is important to acknowledge how the community is responding to these broader issues. The community's perception of the broader concerns and how they can beset respond to them will impact on the energy and emotional ability of the community to become involved in addressing other equally difficult, and often, highly personal issues, such as drug use.

In sum, RAM proved to be a valuable tool with which to;

- encourage local people to be involved in a formal research project that aims to utilise local experiences, and form solutions appropriate for the community in question.
- provide opportunities to share local and researchers expertise, and work together to define the problems and discuss appropriate, reasonable, and acceptable proposals that may help to alleviate those problems.
- obtain valid and reliable information about the patterns, hazards and harms associated with IDU within a specific community and within a specific geographical region
- obtain quantitative information and personal stories about specific consequences, such as risk taking behaviour, for individuals who inject drugs
- obtain information about the impact of injecting drug use for the broader community
- acknowledge the impact injecting drug use has for users and the local community alike, and provide the opportunity for the community to make suggestions to reduce some of the harms associated with injecting drug use
- identify broader community issues that may hinder or enhance the development of strategies designed to address the hazards and harms associated with IDU
- look at the situation from a holistic point of view, incorporating social and cultural aspects of the issues, and incorporating other features (for example the physical geography of a region) as part of the overall 'picture' of the region, and the problems faced by the community studied.

The method also identified a need for careful planning specific to working with small communities, and highlighted the need to consider geographical, cultural and regional variations as part of the research process and analysis. Use of RAM enabled relatively rapid completion of the research process, encouraged broad community involvement, produced valid and reliable information about IDU in the Aboriginal community, and

provided the opportunity for timely access to research results. Comparison of the various data sources demonstrated consistency in many of the concerns raised, hence increasing the validity and reliability of both the research process, and results obtained. The inconsistencies between information sources indicate areas that require further research.

The information obtained will be used in the third phase of the study, in which the community will be consulted about the research findings, asked for their feedback about the research and the methods used, to prioritise recommendations made by the community, and discuss further involvement with the research team where sought, in order to respond to the harms associated with IDU in the region. The demonstrated success of this methodology for investigating harms associated with injecting drug use in one Aboriginal community, lends support for further trials with other Aboriginal communities.

Patterns of drug use and associated harms

Further major objectives of the research were to identify patterns of drug use and associated risk-taking behaviours among Aboriginal injecting drug users.

Although a small sample of injecting drug users participated in the research, there were good indications that this sample represented a large proportion of injecting drug users in the region. Consultants consistently estimated that up to 60 Aboriginal users lived in the region, comprising a core of regular users, those recognised to be recreational users, and others who drifted between the metropolitan area and the Lower Murray region. Users themselves suggested that their networks of indigenous users were of at least similar proportions, however, many of these also lived in the Adelaide area. Because of the proximity of the major town in the region to Adelaide, many Aboriginal people in the region moved between the two regions for family, work and other commitments.

Amphetamines and heroin were the drugs most frequently injected by indigenous IDU in the region, with many reporting use of both drugs in the last 12 months. Most participants also used tobacco, yarndi (marijuana) and alcohol. Many participants were considered to be dependent on amphetamine, heroin or alcohol, however, the high levels of polydrug use in the sample complicated this picture. Participants attributed drug use (including yarndi and alcohol) to a range of other health-related problems, such as sleeping

difficulties, labile moods, withdrawal symptoms, and problems associated with intoxication (such as violence or risk behaviours, accidents and suicide attempts).

A number of risk-taking behaviours were identified. While most survey participants believed they were most unlikely to be at risk of contracting BBV because they did not share needles or injecting implements and knew how to inject 'safely', there were inconsistencies in participants reports of actual sharing activity, and use of condoms with casual sexual partners. For example, a small number of participants had recently shared needles, a larger proportion had shared in the past, and many reported they had recently shared other injecting implements. A significant proportion of these survey participants also reported a positive HCV status. However, a number of barriers to safe injecting behaviour were identified, reflected by poor attendance at the existing NEP program, and different perceptions of risks and practices associated with transmission of BBV, particularly where other family members were involved in injecting activity. Polydrug use was identified as a risk taking behaviour, whereby behavioural changes impacted heavily on social and family relationships, contributed to arguments, or having accidents, and for some, increased the risks of overdosing.

Several participants stated that becoming intoxicated had facilitated their attempts at suicide. The proportion of participants who had actively attempted suicide was found to be higher than that of comparable studies of non-indigenous users. While it is important to remember that this is a pilot study, of 25 Aboriginal IDU from one particular region, the rate of attempted suicide reported here is very high, and consistent with concerns about 'grief and loss' expressed by the consultants. Even so, these results should be interpreted with caution.

It is beyond the scope of this project to recommend specific strategies for responding to harms associated with IDU in this region until phase three has been completed, but clearly the potential and actual harms that have, and may, arise from these risk taking behaviours suggest that a range of interventions may be required. These may include facilitating processes of liaison with existing services to more effectively utilise existing resources, or increasing the quality and quantity of information available to users, their families, and service providers about managing IDU. There may be ways of improving access to clean needles, to find better ways of disposing used needles, encouraging community support for additional NEPs, or supporting the employment of an indigenous health worker in the local area who has extensive knowledge about IDU issues. It may be possible to facilitate discussion about some of the underlying differences between agencies, and developing

ways of publicising particular services so appropriate referrals are made. This strategy may help to reduce the confusion for clients of such services. A range of educational strategies may be useful, such as supporting prison drug education programs, conducting information or management workshops for health workers or interested community members. Programs or literature aimed at reducing BBV transmission targeting indigenous IDU and youth, or supporting the development of materials appropriate for indigenous IDU, may also be effective.

Conclusion

In conclusion, RAM has proved a successful technique for conducting valid and reliable research in this indigenous community. The aims of the project were successfully met, whereby information about the patterns of use, and harms associated with injecting drug use, and risk behaviour, were obtained. One hundred people participated in the study, and through their stories, and openness, were able to identify the impact of injecting drug use on those who used, and the community as a whole. While injecting drug users reflected on their personal experiences with drug use, the method also provided a community voice, enabling broader expression about how drug use impacted on, or interfered with, personal, social and community relationships. The community were able to discuss how drug use further complicated already complex issues that this particular Aboriginal community was facing, such as land rights, the need for broader community reconciliation, grief and loss, and unemployment.

The method offered users and the community, an opportunity to offer suggestions about strategies, suitable for the community in which the study was conducted, to assist them to overcome some of the problems identified during the research. Cross checking the informal (eg. interviews, anecdotes and perceptions) and formal data sources (eg. NEP statistics, health surveys, hospital admission figures) confirmed information obtained, hence increasing the reliability and validity of that information. These examples, and the opportunity for the researchers to place drug use issues within the broader context of the difficulties indigenous communities already face, are just some of the many strengths of the RAM. Designing strategies to respond to complex issues, such as drug use, without consideration of this behaviour in the context of other equally complex issues, is unlikely to raise similar levels of community support. This research highlighted areas where further research is needed, such as testing the utility of available screening instruments,

and the need for more baseline data in order to respond to the specific harms associated with IDU in Aboriginal communities.

The information contained in this report provides the basis for conducting the third phase of the research, that of giving back the information to the community, so they can further discuss the issues raised, and plan appropriate responses to these. Preliminary meetings with community members were positive and favourable, suggesting that the information obtained by the research was acceptable, and useful and will assist the community in their efforts to address some of the complex issues raised.

Dissemination of Research Findings

Publications:

Shoobridge, J., Vincent, N. Wilson, S., Norville, I., Allsop, S., & Biven, A. Using Rapid Assessment Methodology to examine Injecting Drug Use in an Aboriginal community ***Proceedings of the Tenth Winter School in the Sun***, Brisbane, July 7-10, 1997

Shoobridge, J. (1998) The health and psychological consequences of injecting drug use in an Aboriginal community ***New Perspectives: Proceedings of the 1997 NCETA Research Seminar Program*** Adelaide: National Centre for Education and Training on Addiction

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Shoobridge, J. and Wilson, S. (1998) ***Indigenous injecting drug use: perspectives of the individual, the worker, the community and the researcher*** Paper presented to the NCETA Indigenous Drug Use Symposium, The Parks Community Centre, November 1998

Shoobridge, J., Vincent, N. Wilson, S., Norville, I., Allsop, S., & Biven, A. (1997) ***Using Rapid Assessment Methodology to examine Injecting Drug Use in an Aboriginal community*** Presented to the Tenth Winter School in the Sun, Brisbane, July 7-10, 1997

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Shoobridge, J. and Wilson, S. (1997) ***Where do we go from here? A working paper discussing the processes of community consultation, interpretation of results and potential for action, arising from recent research on injecting drug use in an Aboriginal community*** Paper presented at the Australian Professional Society for Alcohol and other Drugs (APSAD) Conference, University of Adelaide, Adelaide, October 1-2, 1997.

Seminars and public presentations:

22 July, 1997, NCETA Seminar Series
Shoobridge, J, and Wilson, S***. The health and psychological consequences of injecting drug use in an Aboriginal community***

23 July, 1997 DASC Calender Series
Shoobridge, J***. A Rapid Assessment Methodology examining injecting drug use in an Aboriginal community***

23 October, 1997 Presentation to the Lower Murray community

Shoobridge, J, and Wilson, S. (1997) ***Giving back the results to the community: a summary of results and participants recommendations from the project entitled 'Using Rapid Assessment Methodology to examining injecting drug use in an Aboriginal community'*** Presented to members of the Lower Murray indigenous and non-indigenous community, Murray Bridge, Lower Murray Nungas Club.

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Appendix A: Report of Indicator Data

Note:

The following is a summary of a range of information received from a number of sources throughout the course of the Lower Murray project. Because a number of these original documents contain, for example, case note numbers, birth dates and associated gender, these will not be included in their entirety. Brief descriptions of the data will be provided, in the absence of these documents in order to preserve anonymity.

Drug and Alcohol Services Council

DASC Client Services - Northern Methadone Service

Of 62 attendances for the period 1 March, 1996 to 28 February, 1997, 11 of these identified as Aboriginal (5 female, 6 male). Ages ranged from 20-39 years. Further information from the original document will not be provided here.

DASC Client Services - Metropolitan Methadone Service

To April 1997, 650 people were attending the Public Methadone Program operating from Warinilla, Adelaide. Twelve Aboriginal clients were registered with this methadone service to 30 April 1997. Identification of Aboriginality was not routinely collected in the methadone recording system. No further details were supplied.

Source: M Christie, April 1997

Private Methadone Programs

Almost 1000 clients were registered on the private methadone program. At the time of the production of this report, ethnicity/Aboriginality was not recorded by the private prescribers. (Drage, personal communication, 9 May 1997). Informal conversations with 7 private prescribers stated that Aboriginal people rarely presented for methadone, and at the time of the report, these prescribers had a collective total of less than 10 people between them. Another source (J, personal communication, 24 April, 1997) suggested that there were approximately 35 Aboriginal people in the metropolitan area alone who were prescribed methadone, but it was unlikely that the numbers were significantly greater than this estimate.

To protect anonymity the names of the private practitioners will not be named. For further information about this data, contact the first author.

DASC Attendances - Murray Bridge, 1995-96

Nineteen per cent (n=9) of all clients (n=48) formally registered on the Client Data System (CDS) during the 1995-96 financial year were Aboriginal, for assistance with problems related to the use of alcohol (n=8), cannabis (n=5), benzodiazepines (n=1) and opiates (n=1). Of these 9 people, 6 were male, 3 female, aged between 20 and 38 years

Further information from the original document will not be reported here to preserve client anonymity.

Source: M Christie, DASC

A casenote audit of informal contacts (not formally registered) identified over Aboriginal 71 individuals (representing 18% of the local indigenous population) who had accessed this service in the past 4.5 years, of whom, only 31 were registered on the official data collection system. In 1995, 22 new Aboriginal clients contacted this service, 16 new clients attended in 1996, and between January and July, 1997, a further 9 new Aboriginal clients attended this service. Some clients were multiple attenders. (Appendix A).

There were different processes of data collection for clients officially registered and those considered to be 'short term' contacts. Clients were usually formally registered based on the number of attendances within a certain period (eg of six months), and the reason for attendance. Client described as 'short term' contacts (and subsequently not officially registered) included those seeking referrals to other services, clients requesting court reports or drug and alcohol assessments, and others who responded to 'brief interventions'. Some clients presented for assistance with drug use problems on an infrequent basis, that reflected the sporadic nature of their drug use, or the sporadic nature of drug availability in the region at the time.

Source: M Blacker, Clinical Nurse, DASC, Murray Bridge

Hospital admission statistics

Two hospitals provided unofficial data relating to admissions for Aboriginal people who had identified drug or alcohol problems on admission, or had been admitted as a result of their drug or alcohol use. This information was supplied with casenote numbers, and/or birth dates, or other identifying information. Consequently, only a summary of the information provided will be reported here. For further information on these data, contact the first author.

Hospital 1: Between July 1995 and July 1996, 16 people were admitted for drug or alcohol related problems. Of these 16, 3 identified as Aboriginal (using alcohol and benzodiazepines). Four Aboriginal people attended the outpatient department or the Accident and Emergency Department in this 12 month period.

Hospital 2: Seven admissions were recorded for overdose related specifically to use of prescription drugs. The consultant reported that alcohol related attendances were numerous, for example, in relation to assaults, concussion, suturing, however, as these conditions were not the primary reason for attendance, no accurate data could be forwarded to reflect access to the service.

Summary - South Australian Needle Exchange Data (DASC)

From the data recorded from the Needle Exchange Program operating from the Murray Bridge Hospital, it can be seen that the number of needles requested by clients varies between months, and years. Over the last four year period, 4047 needles have been distributed, averaging 84 needles distributed per month (which equates to approximately 9 boxes of 10 syringes per month to 9 individuals).

Between July 1996 and January 1997, the number of syringes distributed has increased, to approximately 172 syringes per month (or approximately 17 boxes per month to 17 individuals). The highest figures recorded for this period were during the Christmas break, whereby 310 and 290 needles were distributed in December and January alone (representing 30 people per month, on average).

Although in some cases the data is incomplete, it is evident that between April and November 1996, the main drugs injected by NEP attenders in the Lower Murray region during this period were amphetamines (n=49), heroin (n=7) methadone (n=1), ‘insulin’ (n=3) and acid (n=1).

The clientele consisted of both males (n=59) and females (n=9), of between 18 and 43 years of age. Of the clients who were asked, not one stated that they had shared injecting equipment in the prior 3 months. The data collection forms do not seek information regarding Aboriginality, however, anecdotal information from staff members, and IDU in the region, indicates that this NEP is rarely a source of regular supply of clean injecting equipment for Aboriginal IDU in the region.

Source: B Braithwaite, SA HIV/AIDS Program Manager, April, 1997
J Cook, CNC Manager, Murray Bridge Soldiers Memorial hospital

Heroin Overdose Study

Preliminary data were available for the Heroin Overdose study from Project Officer, Catherine McGregor in April, 1997. (see enclosed).