

Heroin Use in Sydney's Indo-Chinese  
Communities: A Review of NDARC Research  
Lisa Maher and Wendy Swift  
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NDARC RESEARCH

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## SUMMARY AND ACKNOWLEDGMENTS

Western medicine and, in particular, the field of substance use, have much to learn from other cultures. By examining the cultural lenses used to organise drug use we can begin to improve the range, acceptability, and efficacy of options designed to reduce the harms associated with substance use in a multicultural society.

This monograph provides a timely and comprehensive review of the research literature on heroin use in Indo-Chinese (Cambodian, Lao, and Vietnamese) communities in South West Sydney. Based on recent research conducted by the National Drug and Alcohol Research Centre, it summaries the findings of these studies and discusses their implications for the field and the communities themselves. While the report focuses on particular ethnic and cultural minority groups, it is not intended to stigmatise these communities, and it remains important to note that the majority of people from Indo-Chinese backgrounds do not use illicit drugs.

"Culture" has become something of a buzz word in the addictions field. It is often used in an unreflexive way as, for example, in generic calls for services which are "culture-sensitive" and "culturally-appropriate". This monograph attempts to unpack a particular set of cultural beliefs and attitudes (those which originate in Indo-Chinese parent cultures) and to examine their influence on heroin use and related issues. As such, it represents the beginning of a larger project designed to acknowledge the cultural specificity of drug use and to explore how experiences of drug use are mediated by different beliefs, values, and traditions.

Current concepts of substance use and related experience are Anglo-centric and based on Western notions of health, illness, and identity. The stereotype of the injecting drug user - the Anglo-Australian "junkie" - has been in place for many years. Demolishing this stereotype is both important and difficult: important because it has dominated both the research literature and the development and provision of services, and difficult because the tendency is often to replace one stereotype with another. We hope that by elucidating and clarifying some of the issues involved in heroin use in a particular set of NESB communities, this monograph will challenge that stereotype, rather than replace it with another.

This report was initially commissioned by Robert Ali and colleagues as part of a study to evaluate the acceptability and efficacy of tincture of opium in the treatment of opioid dependence. We thank them for their encouragement and acknowledge their permission to reproduce this work here. We are grateful to our Director, Wayne Hall, for helpful advice and comments on an earlier draft and to Vincent Doan, Thuy-Vi Le, and Tram Nguyen for their research assistance and support. Finally, we are indebted to the Indo-Chinese heroin users upon whose experience this monograph is based.

## PART I: INTRODUCTION

Little is known about the relationship between ethnicity, injecting drug use and risk-taking behaviours in Australia. The absence of both epidemiological and ethnographic data means that we have few insights into the social, economic, cultural, and temporal determinants of injecting drug use among ethnic and cultural minorities in this country. Elsewhere, poverty, social isolation, cultural alienation, and ethnic minority status have been implicated in the spread of HIV infection among injecting drug users (IDU). In particular, evidence from South East Asia (Thomas and Day 1995) and the United States (Friedman 1987, Koblin et al. 1990, La Brie et al 1993) indicates that IDU who are members of racially or ethnically subordinate groups may be at greater risk of HIV infection.

Despite ongoing publicity over drug use and crime in South West Sydney, little is known about the patterns and contexts of heroin use among the large Indo-Chinese (Cambodian, Laotian, and Vietnamese) population in the area.<sup>4</sup> While DAMEC has examined alcohol and other drug use in the Vietnamese community, the low prevalence of illicit drug use uncovered by community surveys provides few insights into patterns of actual use (Bertram and Flaherty, 1992). However, this study did find that while reported use of tobacco by males was higher than the general population, reported use of illicit drugs was lower than in the general community. Overall, tobacco and alcohol were not perceived as drugs and consequently, were not seen as presenting significant health and social problems. While general practitioners were the most likely source of drug-related information and assistance, approximately one quarter of respondents indicated that they did not know how to access information.

Elsewhere in Australia, anecdotal reports of increased heroin use among young people from Indo-Chinese backgrounds have generated community concern. In Adelaide, the Hoi Sinh project funds a bilingual Vietnamese outreach worker to work with young Vietnamese people, local general practitioners and allied health and welfare professionals to address drug and alcohol issues among Vietnamese youth (Macfarlane Burnet Centre for Medical Research, 1997). In Melbourne, the local council in Springvale has established an outreach shopfront with an education and harm minimisation focus to provide education, support, and referrals to street-frequenting youth, predominantly from South East Asian backgrounds (Morley 1996). There has also been substantial, if often sensationalised, media coverage in recent years which has sought to highlight the problems associated with heroin use among young people from South East Asian backgrounds in almost every capital city.

To date, most of the research on illicit drug use among young people from Indo-Chinese backgrounds has focused on South West Sydney. A preliminary survey of street-frequenting Vietnamese youth conducted by a drug and alcohol worker in Cabramatta in 1993 suggests a high prevalence of heroin and benzodiazepine use among this population (Pham unpublished data). More than half of these young people reported having tried heroin and 43% reported use on at least one occasion during the three months prior to interview. Of this group, 60% used heroin at least once a day. Smoking was the dominant route of administration (70%) with only 25% of young people reporting that they typically injected the drug. However, more than half (53%) of those who reported heroin use said that they had tried injecting with one-third of those

who had ever injected indicating that they had shared needles occasionally. A significant minority (38%) also reported current use of benzodiazepines. At least one third (39%) of this group used benzodiazepines at least once a week and 13% reported daily use.

Similar patterns of drug use were found in a sub-sample of Asian detainees in NSW Juvenile Justice Centres. Zibert and colleagues (1994) found that while the prevalence of other drug use was comparatively lower, young Asian detainees were more likely to report lifetime use of opiates (43% ever tried) and sedatives (57% ever tried) than other ethnic groups.

A recent random survey of 246 students (aged 12 -21 years) at a secondary school in South West Sydney (Liebman 1996) found that approximately 10% of male and 3% of female students reported ever having used heroin. A startling 11% of 13-year-old males reported heroin use within the last twelve months. Smoking was the predominant route of administration among these young people (94%), most of whom (93%) were from non-English speaking backgrounds, predominantly Vietnamese and Chinese. While the prevalence of other drug use was lower than that reported in the 1993 NSW secondary schools drug use survey, the prevalence of male heroin use was twice that reported in the 1993 school survey. Smoking was the dominant route of heroin administration among these young people with only six percent claiming to inject (Liebman 1996).

One of the strengths of this local school survey (Liebman 1996) is that it provides rare insights into student knowledge and perceptions of drug-related issues facing young people in the area. Most respondents indicated considerable concern in relation to what they perceived as a large drug problem facing the Cabramatta community, and many indicated that they did not feel safe in Cabramatta (Liebman 1996:59). A substantial minority (41%) also reported that they had experienced concern about a friend or family member who was using heroin. Of particular concern is the low level of knowledge of drug and alcohol services among this student body. One third of the students (34%) were unable to name a single service and the average number of services named was extremely low: young women named an average of 1.4 services and young males named an average of one support service.<sup>8</sup> Less than 10 out of the 163 students who responded to this question were able to name a local specialist youth health service, the Fairfield Liverpool Youth Health Team (FLYHT). Most also indicated that they were unsure (39%) or would be unwilling (18%) to attend a support service for young people with substance use problems.

Finally, ongoing ethnographic research has also documented patterns of drug use among young people in the area, most of whom were from non-English speaking backgrounds (Maher 1996a). This study, based on more than two years of intensive fieldwork and repeated interviews and observations with primary heroin users, found evidence of a strong negative stigma attached to injecting drug use within the Vietnamese community. Many young Vietnamese injectors strove to conceal their intravenous use and many felt considerable confusion and guilt about injecting. These sentiments were supported by a cultural sensibility that young people described as the importance of 'face' in South East Asian communities. Young Indo-Chinese injectors experienced higher levels of social isolation than their Caucasian

counterparts and young Vietnamese women were particularly likely to be estranged from both their families of origin and their non-injecting peers, following identification as injectors.

This report relies on three main sources of data. First, we present data from ongoing ethnographic research being conducted among primary heroin users in the Cabramatta area (Maher 1996a, Maher and Dixon 1997). Secondly, we draw on findings from an exploratory study which aimed to investigate patterns of heroin use, including routes of administration and transitions between routes, among Indo-Chinese and Caucasian heroin users in South West Sydney (Swift, Maher, Sunjic and Doan 1997). The study was designed to explore the social and cultural contexts of heroin use in these groups (including beliefs about injecting and norms in relation to use) and to assess expectations and experiences of treatment (including the use of illicit methadone and experiences of moderating consumption without formal intervention). Finally, we report data from a recent survey designed to examine young Asian people's perceptions and experiences as consumers of policing in the Cabramatta area (Maher, Dixon, Swift and Nguyen 1997).

The report is divided into four components: Part I provides a brief introduction; Part II presents results from recent studies conducted by the National Drug and Alcohol Research Centre; Part III discusses the findings in terms of their implications for the present project; Part IV provides a summary of what we know and outlines suggestions for future research.

## **PART II: RESEARCH FINDINGS**

### **STUDY 1: AN ETHNOGRAPHIC STUDY OF HEROIN USER LIFESTYLES AND ECONOMIC BEHAVIOURS**

*Investigators:* Maher, Hall and Dixon  
*Funding Agency:* National Drug Crime Prevention Fund  
Commonwealth Department of Health

#### **1.0 Research Methods**

In-depth interviews and observational fieldwork designed to elicit information on the lifestyles and economic behaviours of street-level heroin users (n=143) were undertaken in Cabramatta over a two year period between January 1995 and February 1997. Initial ethnographic mapping sought to identify geographic and social locations in which drug use and distribution occurred within the neighbourhood and to identify dominant use patterns, acquisition and consumption sites, and social networks in the area. Mapping data were collected through direct observation, informal conversations, systematic walk throughs, and the coding of locations.

This process provided the ethnographer with a map of the street-level drug using population which was subsequently used to develop a targeted sampling plan using the time-by-location method (Clatts et al. 1995). This distribution, which involves the differentiation of potential participants by geography (street location) and time (of day and day of week) was designed to achieve representation of all of the major segments of the street-level drug using population. Within this frame, efforts were made to secure appropriate age, gender, and ethnic representation.■

Once selected, potential participants were approached and the purpose of the study was explained to them. Participants were required to read and sign an informed consent outlining the possible risks and benefits of participating in the study. A total of 143 individuals participated in at least one in-depth tape-recorded interview (mean =3, range 1-11). Data sources include 405 tape-recorded interview transcripts, 202 detailed questionnaires and more than a thousand pages of typed fieldnotes.

Interviews were designed to elicit information on a wide range of topics including demographics, childhood and family background, education and work history, drug use experience (including routes of administration, transitions and overdose), current drug use, social networks, knowledge of distribution and sales activities, income generation and expenditures, participation in criminal activity, impact of law enforcement, injecting practices, knowledge of HIV and other blood-borne viruses, and experiences of treatment and/or quitting. Observational data in the form of fieldnotes were collected on each subject and on the nature, type and level of interactions between subjects in the study. Participants were recompensed \$20 for out-of-pocket expenses incurred in the interview.

Tape-recorded interviews were transcribed and, along with typed fieldnotes, were analysed using Folio Views, a North American hypertext package. Both emic and etic concepts, words, phrases, ideas and descriptions were searched and analysed. However, the meanings of these words, phrases and concepts remain anchored in a social world and the analysis and interpretation of them, like all ethnographic data, rely heavily on the researcher's understanding of the study site and the target population.

## **1.1 Results**

### ***Sample Characteristics***

The mean age of the full sample (n=143) was 21 years with the majority (77%) aged less than 25 years. Approximately half the sample (46%) were women. The majority of participants (64%) were from ethnic or cultural minority groups, predominantly Indo-Chinese (30%). Participants had an average of eight years of schooling and most were unemployed (84%) and resident in South West Sydney (76%) at the time of the study. The majority (87%) were predominantly or exclusively injectors.

Focusing on the Indo-Chinese participants (n = 43), the average age was 18 years and slightly more than half (56%) were male. The majority (65%) identified as Vietnamese or Vietnamese-Australian, with the remainder identifying as Cambodian or Khmer (4 people), Laotian (4 people), Chinese (4 people), and Thai (3 people). Indo-Chinese participants had an average of 8 years of schooling and most (93%) were residents of South West Sydney. The majority were unemployed at the time of the study (88%) and five (12%) were full-time students.

### ***Heroin Use***

The ethnographic data suggest that heroin smoking is becoming an increasingly popular route of heroin use among young people in South West Sydney. While those who currently smoked the drug only accounted for 13% of the full sample, more than half (59%) had initiated heroin use by smoking the drug. Most were relatively recent recruits to heroin use, with a majority (63%) having used the drug for two or less years. New injectors (i.e. those who had been using heroin for two or less years) (70%) were significantly more likely than experienced injectors (28%) to report having made a transition from smoking to intravenous use.

Indo-Chinese participants in the study had been using heroin for a mean of 116 weeks or 2.2 years. Most were relatively recent recruits to heroin use with the majority (74%) having used the drug for two years or less. Almost three-quarters (72%) were predominantly or exclusively injectors at the time of the study. The majority of participants (67%) reported having made a transition from smoking to injecting and only 28% currently smoked the drug. All but two of the injectors (95%) reported having made a transition from smoking to intravenous use.

There appear to be significant ethnic differences among those who initiate heroin use by smoking. The study identified two principal methods by which young people reported smoking heroin: either by inhaling the sublimate heated on foil (.smoking., .chasing., .foiling. or .spotting.) or by smoking it with cannabis (.snow cone. or .harry cone.).

While the former method was the dominant means of administration among Indo-Chinese, Anglo-Australians were more likely to report their initial experience of smokeable heroin being combined with cannabis (although most moved through the foil stage). The data suggest that a process of micro-diffusion whereby drugs and drug practices are diffused throughout friendship networks in an area (Pearson and Gilman 1994) may be underway in Cabramatta. For example, Peter, a 19 year-old Serbian-Australian male, described how he first came into contact with heroin:

*The beginning of last year me and my friend started smoking snow cones. We used to go to a friend's house to buy pot and we started hanging out there. And this Asian bloke started coming there. He used to sell heroin but he would come there to buy pot. He brang some caps and I bought one off him one day and had snow cones.*

Like most young drug users, heroin smokers were introduced to the drug by friends.

*Asians, I've known em since school and we smoked from foil, straight from the foil using a straw and you just light underneath. Once we take it in, we have a cigarette on the side and just smoke the cigarette as a chaser sort of thing. (Suzie, 17 year-old Serbian-Australian female )*

*First time with a friend. She asked me 'Do you want to try white?'. I didn't know what white was at the beginning and she opened it up and she took the foil out and the straw and everything and that and then I just tried first puff and then vomit. That's how I started.. (Linh, 15 year-old Vietnamese-Australian female)*

The relatively low price and ready availability of heroin in the Cabramatta-Fairfield area has meant that many young people in the area have been exposed to the drug either directly or indirectly.

*Because heroin was like out here, it was here. I mean with coke and stuff, I mean some areas you'll have, you know, a bit of it and some areas you won't have it but heroin is basically everywhere around here. It's probably the biggest drug in Australia and around this area, it's the main drug. (Snoop, 17 year-old Russian-Chinese male)*

For some young people, the normalisation of heroin has been eased by its ready incorporation into a familiar repertoire based on the inhalation (smoking) of tobacco and other substances. The fact that heroin is initially smoked rather than injected mediates the 'needle barrier' for some young people: allowing prospective initiates who would decline to inject the opportunity to experiment with the drug. Many of the young people interviewed clearly did not perceive heroin smoking (at least in the initial stages of use) to be a harmful practice associated with risks of developing tolerance and dependency.

*[Do you think if he (friend) had been injecting it you would have been tempted to try it still?] No try. I hate it shooting up. It depend on your peer group. People got*

*different ideas. Some people they say .You on drugs mate, you,d better shoot it up.. When you smoke you waste a lot. But I don .t use a needle. I smart. I,m not stupid. I don.t want to smoke a lot. I know how my load going, know what I mean. I only stop me hanging out so I don.t feel no more hang out. (Tien, 19 year-old Vietnamese-Australian male)*

*All my friends just smoke it. No-one would shoot up. I mean they're not junkies, they're not going to shoot up. [Why not?] They're not stupid. I mean cause they know that shooting up is heaps more serious and more addictive than smoking is. It would definitely be harder to get off shooting you know. Plus seeing all the junkies on the streets off their face all the time - they've got no respect, no life, just come to Cabramatta, that's it. No way. (Snoop, 17 year-old Russian-Chinese male)*

*I knew you could get addicted to it but I thought oh, it won.t happen to me. I thought I,m strong enough you know, I won.t get addicted. But basically I mean everyone gets addicted. I mean what drugs aren.t you addicted to once you start for a while? Everyone thought i t was pretty cool at the time to be smoking heroin and stuff. (Long, 17 year-old Vietnamese-Australian male)*

The data indicate that a range of social factors may also serve to encourage or inhibit transitions between routes of administration and especially, the transition from smoking to injecting. In particular, user's social networks and whether they are mainly composed of smokers or injectors and perceptions of social distance - between injectors and smokers, dealers and customers, .junkies. and users - may play a role in facilitating or inhibiting transitions.

### ***Routes of Administration and Transitions***

While we have not been able to quantify these data yet, both fieldwork and interviews suggest that many young people experience a rather rapid transition from smoking heroin to intravenous use. Some young people couched their explanations for switching to injecting in terms of the rush or immediate effect; a feeling frequently described as .mad.. As explained by Alex, a 23 year-old Serbian-Australian male:

*When I shot it first time I seen it as a waste of gear smoking it cause you've got to smoke so much to get you stoned and it was just a waste. You have a shot and you get this instant hit to your head and to your body and it feels mad. So I just kept doing it from there.*

For some young people the diminishing rewards of smoking heroin meant that they were seeking, or at least open to, a more efficient technology of administration. The reasons for seeking a .better hit. were couched in terms of drug reward: *I couldn.t feel nothing .; I wasn.t getting the stoneness anymore .; and .Its a waste spotting it..* Sometimes withdrawal or .hanging out., played a role in young people.s decisions to experiment with injecting. As Millie, an 18

year-old Latin-American female, reported:

*I was hanging out really really bad and I only had one cap which I knew wasn't gonna get me stoned and I was walking around Cabra you know, trying to find someone to put in another cap to smoke and I ran into this girl, one of my friends and she was shooting up. I didn't know she was shooting it ...and I ended up trying it.*

This particular young woman also used her girlfriend's syringe on this occasion. More often however, young people couched their explanations for the transitions to injecting in economic terms and in particular, the perception that they could no longer afford to support their use: *.my dose was too high..* For young people like Kim, a 16 year-old Vietnamese-Australian, smoking heroin was literally *.a waste.* - both in terms of the cost and the failure to achieve desired effects.

*I changed to shootin up. because first of all my dose started getting high and I couldn't smoke that much like. I couldn't sit there and keep smoking and smoking you know. And plus injecting, I like it more than smoking because when you inject it hits you straight away. And like its not as much of a fuss like smoking and putting it on the foil you know, needing cigarettes to smoke. And like smoking you vomit a lot.*

Kim's quotation also suggests that, as a technology of administration, smoking may be ill-suited to the environmental features of a street-based scene. Both social and environmental factors play an important role in transitions. The emergence of a street-based injecting culture in the neighbourhood, which is dominated by Anglo-Australians, clearly exerts an influence on young Asian people. The collective nature of life on the street also means that for many young people, the forms of reciprocity and mutual support that govern everyday interactions are endearing features of this street-based injecting culture. Mixing heroin together and dividing the solution is seen as a more efficient and more equitable way of distributing the drug. But *.going halves, in a cap with an injector is not always a good move for a smoker as JJ, a 15 year-old Anglo-Australian female discovered:*

*He said I'll just put it in the spoon so I can break it in half.. Then he said JJ, go check for coppers.. And I went around to look and then I come back and it was already mixed. He said .There wasn't enough, you know, I broke off a bit but you wouldn't have got wasted.. He said if you want to have it, have a shot. It was the last \$30 too so I thought fuck it, I'll do it.*

Cross-cultural influences are also at work with some young Indo-Chinese clearly influenced by other ethnic groups in initiating injecting drug use. For example, Thai, an 18 year-old Indo-Chinese male claimed that his Australian friend - a former speed IDU whom Thai had initiated to heroin smoking - had encouraged him to inject the heroin.

*He was Aussie. I introduce him to heroin. When he came over to visit and I smoked it, he started smoking it. Three days he smoking it with me and he told me we should try shoot up and I said yeah we should try it and we try together. He know*

*how to do it - did it before with other drug. I was very scared of needle, of becoming a junkie. I was seeing all my customers you know.*

As noted in relation to Anglo-Australians, economic factors may also influence route of administration through their influence on drug acquisition routines - which, like the drug marketplace itself, are mediated by culture/ethnicity. Contrary to media reports and popular images, street-level heroin distribution in Cabramatta takes the form of a freelance market dominated by Indo-Chinese user-sellers.<sup>28</sup> As Tran, a 22 year-old Vietnamese male put it:

*Vietnamese people, they got skill for dealing. They don't like to do this - stealing and go in people houses. They like to deal heroin. A lot of young people, most of them you know, white people, they break in and armed robbery, you know, to get money to buy heroin. Most Asian they deal heroin than armed robbery.*

At the same time dealing activity also exposes Indo-Chinese young people to established injectors and in some instances, "customers" may exert considerable pressure on these young dealers to initiate injecting. As Trinh, a 17 year-old Vietnamese-Australian female, described it:

*Sometimes one of my customer would come with me when I go pick up. I'd smoke and I used to smoke say three caps and they tell me .what a waste.. They'd tell me "Half of that and you could be smashed off your face and you could be saving gear and making more profit, by shooting up". And then I tried it.*

April, a 16 year-old Vietnamese-Australian female, had a similar experience:

*With my regulars, we became friends. Not just like customers like "Here, bye". We became friends and I'd help them out sometimes. When they would see me with double the amount they use - like just for me to get stoned by smoking it - they'd tell me what a waste. Half the amount I'm smoking I could get stoned on it you know, by using the needle ... That s why I started.*

However, for some recent initiates to heroin use, cross-cultural encounters in the context of the drug market may have the opposite effect. For example, Long, a 17 year-old Vietnamese-Australian male claimed that his experience of Anglo-Australian heroin users had served to reinforce his current route of administration and to accentuate the undesirability of intravenous use.

*I only smoke [Why is that?] The needle makes people very bad. You see a lot of Aussie junkie around here - the needle makes them very bad. We only sell to them to support our habits. Everyone in our group did Year 11. (Long, 17 year-old Vietnamese-Australian male)*

As Grund and Blanken have pointed out in the Dutch context, superficial encounters in the context of dealing are not by themselves sufficient conditions for the diffusion of injecting

among populations of heroin smokers. While cultural conditions clearly inhibited a move to injecting among the Surinamese in The Netherlands, both, the stable availability of high purity smoking heroin ... and the continued involvement of the Surinamese in the distribution of these drugs prevented an economic need to initiate injecting drug use. (Grund and Blanken 1993:33).

Our research indicates that the price, purity and composition (or form) of heroin are all factors which influence the feasibility of heroin smoking. These factors are shaped by the dynamics of particular drug markets. In Australia, drug markets have historically been shaped by the demand for injectable heroin. Thus while there has been a recent increase in the purity of heroin available at street level and a relative decrease in price, an important determinant of this transition may be the pharmacological properties of the heroin itself (Centrelines 1997). As indicated by the ethnographic data, many young people are clearly seeking a better effect. However, the bioavailability of heroin (and relatedly, issues of dose and dependence) is determined by a number of factors other than heroin purity. These include:

a. Heroin Form or Composition - i.e. Heroin Hydrochloride or Heroin Base

While in theory all heroin mixtures can be smoked, base heroin is more suited to smoking than heroin HCl (salt) which is more likely to decompose upon heating. Given that the heroin currently available in Cabramatta does not need to be alkalized prior to intravenous use, it would appear to be a salt. Smoking heroin salt is inefficient and yields a considerably lower recovery rate than heroin base (Huizer 1987; Griffiths, Gossop and Strang 1994).

When high purity heroin hydrochloride (HCl) is heated on aluminium foil, the major part does not volatilize, but degrades - i.e. chars or burns. Heroin HCl is not as stable as heroin base during heating and therefore substantial amounts are lost during volatilization. Thus, when smoked, only a small part of the heroin hydrochloride is actually absorbed by the body. Similar findings have been observed in relation to opium smoking, with some experts suggesting that only about 20% of the opium smoked is actually absorbed (Kalant, 1997).

Compared to heroin hydrochloride, heroin base volatilizes much better. Under laboratory conditions, approximately 60% of the heroin base is recovered, which is about 3 to 4 times as much as the hydrochloride form (Grund and Blanken, 1993). In an early study, Mo and Way (1966) compared urinary excretion of morphine over 72 hours after chasing and injecting heroin HCl. The mean percentage recovery of morphine in the urine of injectors was 68%, compared to only 26% for smokers. They concluded that smoking was only about 40% as effective as injecting.

A study conducted in The Netherlands (Huizer 1987) found a recovery rate of only 17% when heroin hydrochloride was smoked. However, adding caffeine considerably increased the recovery rate to 51%. More recently, in the United States Jenkins et al. (1994) used a computer-assisted smoking device to deliver single puffs of heroin vapour to human subjects under controlled clinical conditions. In this study, only 28% of a heroin HCl dose was delivered intact when volatilized at 200 degrees Celsius. By contrast, 89% of heroin base was volatilized without decomposition. This study confirms beyond doubt that heroin form or composition has a significant impact on bioavailability.

### b. Presence and Type of Processing Impurities and/or Dilutants or Cutting Agents

The percentage of heroin that is volatilized also depends on the presence and type of admixed compounds. This changes over time and can vary according to region of production, level of sale and other market variables. In The Netherlands, high levels of noscapine found in street-samples from about 1985 onwards have been shown to considerably reduce bioavailability when heroin is smoked. Similarly, paracetamol may also reduce the bioavailability of smoked heroin. Conversely, adding caffeine and compounds such as barbital and methaqualone facilitate volatilization and therefore increase bioavailability.

### c. Chasing and Injecting Techniques

Grund and Blanken (1993) suggest that only 15-20% of heroin used becomes available when heroin is smoked carefully and under ideal conditions and that poor chasing techniques may reduce bioavailability even further.

The literature indicates that a much more complex relationship exists between purity and bioavailability or drug effect (and possibly dependency) when the heroin is smoked than when it is injected. When administered intravenously, users' experiences show a more or less linear relationship to the strength or purity - i.e. as purity increases, so does the bioavailability or drug effects. This is not necessarily the case when heroin is smoked. It may be possible then to exert consumer pressure to influence the market to provide heroin in a form which maximizes bioavailability for smokers. Alternatively, it may be possible to provide consumers with a simple recipe to convert heroin salt into the base form (Centrelines 1997).

Finally, while not an inevitable progression, the transition from smoking to intravenous use holds significant implications for health, including the potential for overdose and the transmission of blood-borne viruses (Griffiths et al. 1994; Gossop 1995). However, individual risk behaviours are embedded in social, cultural and geographic environments. As a neighbourhood, Cabramatta is a high risk environment for the potential transmission of blood-borne viruses. Four factors represent this risk at the neighbourhood level: drug acquisition routines (collective drug purchasing); collective injecting episodes; use settings; and law enforcement practices. This environment routinely influences individual risk practices and has important implications for public health (Maher 1996a).

During the period of the study, Cabramatta was the focus of high profile, intensive, and sustained police intervention. The impact of a highly visible uniformed police presence in Cabramatta has clearly upped the ante for those who participate in drug use and distribution. In participants' terms, the risk of being busted, has increased substantially (Maher and Dixon 1996). However, law enforcement strategies may also serve to influence patterns of consumption and, in particular, routes of administration. This influence is not always benign.

*People are starting shooting up because of the police. Like a lot of the guys I know that used to smoke started shooting up in the last few months - I'm the only one left (smoking). [What do you mean they are shooting up cause of the police?] Because it's too hard too many profit now with all the police and the cameras. They come and just stand there at the station and we have to move. When you smoke, you have to*

*smoke a lot so if they shoot up, they can use less. Like instead of smoking a half weight, you can just have one or two shots.* (Phoung, 20 year-old Vietnamese-Australian male)

*It's harder to sell cause all the police. And then 5T is always coming around (taxing) because since the leader got shot they are starting to use and they need the money too so they take it from us. There is also more dealers now - too many dealers - and they all competitioning each other - so that makes it harder to sell too.* (Duc, 17 year-old Vietnamese-Australian male)

Our research indicates that street-level law enforcement may have potentially disastrous consequences for public health. If, as we have suggested elsewhere (Maher and Dixon 1996), attempts to enforce prohibitions against the provision of widely-desired goods and services cannot fully succeed and have unwelcome by-products, then policing agencies should take account of other policy considerations in evaluating the costs and benefits of their strategies. In the context of street-level drug policing, real commitments need to be made to harm-minimization. The current situation where, inter alia, law enforcement strategies may encourage users to switch to intravenous use, can be seen as productive of harm (see also Panda et al. 1997).

To summarize, the results from the ethnographic study suggest that there are a number of factors which may exert an influence on transitions from heroin smoking to injecting. These are social and cultural influences (which may mediate health beliefs), economic factors and market conditions, pharmacological and physiological factors, and environmental influences, including the impact of street-level law enforcement.

### ***The Stigma of Intravenous Use in Indo-Chinese Communities***

Both fieldwork and the interview data indicate the existence of a strong anti-injecting sentiment amongst the Indo-Chinese community and especially amongst the Vietnamese community. Many young Vietnamese people strove to conceal their injecting drug use and, as the following quotations suggest, some felt considerable confusion and guilt about their injecting behaviour. "

*Vietnamese people think that injecting is very bad. They like to hide it because they scared other relatives seeing them, respect for relatives. Somebody will see you, say he is a bad guy. I could give us a bad name. Next relative and next relative and then they tell my parents.* (David, 15 year-old Vietnamese-Australian male)

*A lot of Vietnamese people are scared to shoot up because they see the Aussie junkies, the customers that are shooting up and they look at them and they have got no life at all you know, just like zombies walking around the streets and the Vietnamese people are really scared to be like that. They like to look respectable and they like to get respect. They don't want no-one looking down on them you know so that's a lot of reason why they will never shoot up.* (Tien, 19 year-old Vietnamese-Australian male)

The strong disapproval of injecting means that injectors may be ostracized as a form of social control. Some evidence also suggests that the stigma which attaches to intravenous use may be reinforced by the existence of strong norms against injecting among members of the 5T, a Vietnamese youth gang which is involved in drug distribution and sales activities in the area.

*None of the guys that are in 5T take it. Oh maybe some do but just on the sly. They aren't well known cause its against the group. They could get kicked out. There were a few people that got kicked out of 5T for taking heroin. I only know two people that did but they were shooting it. (Snoop, 17 year-old Russian-Chinese male)*

*I used to stay with my boyfriend, with the 5T. There was heaps of us living in one flat. But they don't use the white, just sell it. Some of them smoke it but mainly they just take pot. When I started using the needle we started fighting and that and when my boyfriend found out he bashed me. (Linh, 15 year-old Vietnamese-Australian female).*

These sentiments are supported by a cultural sensibility that young people described in terms of the importance of face, in many Asian communities. As Jessica, a 17 year old Vietnamese-Australian woman described it, *Face is very important to Asian people- how people see you- your reputation. If you lose face, you lose respect.* For some young Indo-Chinese injectors living in communal housing, the transition to intravenous use also meant that it was no longer acceptable to consume (i.e. inject) heroin in the household setting. Young Vietnamese women were particularly likely to be estranged from both their families of origin and their non-injecting peers following identification as injectors. They were also, as the following quotations indicate, subject to social control in the form of violence from boyfriends and brothers (both kin and fictive kin) which they attributed to their status as injectors.

*I don't want a boyfriend. You don't have no freedom. Like oh .Quit using . and this and that. Some guys hit you because they hate the white cause if they find out you've touched the white they'll probably hit you like my sister. She got bashed from ex-boyfriend. (Linda, 15 year-old Vietnamese-Australian female)*

*Sometimes they try to teach you a lesson. You know how they're all brothers and just say one of the brothers girlfriends is a junkie or whatever. Like they'd all know about it and it would be pretty embarrassing for the guy. All the brothers stick up for each other, listen to each other. Tell him .Oh you have to leave that girl. . That's how it is. That's how much they stick together. (Trinh, 17 year-old Vietnamese-Australian female)*

*Like my boyfriends in jail in Mt. Penang. I don't know who's been telling him stuff like I've been shooting up and all that stuff. He wrote letters out to me telling me this and that and how he's really angry with me and everything. I don't shoot up. (Stacey,*

15 year-old Vietnamese-Australian female)

While these norms may serve to deter some young people from injecting, the stigma attached to injecting also means that many Indo-Chinese are reluctant to identify as injecting drug users. Ironically, this reluctance may be exacerbated in the context of research or service provision if the researcher/service provider is from the same community as the injecting drug user (Maher 1996c).

### ***Risk-taking Behaviours***

Most of the data analysis to date has focused on risk practices and the factors which influence risky injecting practices at the neighbourhood level. Our research has identified a number of high risk practices reported and/or observed among IDU including: syringe sharing, equipment-mediated drug sharing, use of discarded syringes and injection of multiple others. In general, we found that while most young people knew that they shouldn't share needles and syringes, they were ignorant of the risks involved in sharing other injection-related equipment and collective drug preparation and division procedures.

While the literature suggests that risk practices are conditioned by several factors, including social circumstances and lifestyle factors, environmental features, severity of dependence, and availability of sterile injecting equipment, our research also found that contextual aspects of risk practices were also conditioned by length of injecting career. Older experienced IDUs were more likely to use in private settings and less likely to report sharing either syringes or other equipment. By contrast younger, inexperienced injectors tended to use in more social situations involving public settings and were more likely to share both drugs and equipment in the context of collective injecting episodes (Maher 1996a).

However, these risks may be even more acute for some groups of young people and, in particular, for young Vietnamese-Australians, for whom the sharing of limited resources may be both a cultural imperative and a response to material scarcity. Many of the young people from ethnic or cultural minority backgrounds encountered in the course of this study used the term .junkie. in conjunction with the prefix .Aussie.. Junkie is synonymous with Aussie. As Vu, a 16 year-old Vietnamese-Australian male confirmed,

*We see the customer - the skippy junkies. We're not like that. You see a lot of Aussie junkie very bad around here. Asian people using drugs is not so bad.*

Their perception of the stereotype of the junkie, as culturally laden - as Anglicized - allows them to define themselves as *not-junkies* or *other than-junkies*. This has implications for interventions and particularly those which seek to reduce or minimize risk taking. Although most young people were aware of the risk of contracting HIV and other blood-borne viruses from needle sharing, they felt that AIDS was something reserved for other people - junkies and .people from the City.: among them prostitutes and homosexual men. The threat of AIDS was seen as distant and unlikely to affect them or the people they knew.

However, our data suggest that the risk of contracting HCV may be significantly higher than

that of contracting HIV given the extremely infectious nature of this virus, the high baseline prevalence of infection among the population, and the strong likelihood of transmission through environmental contamination (e.g. sharing of drug solutions, filters, and related paraphernalia).

### ***Perceptions and Experiences of Treatment***

The ethnographic research indicates that young Indo-Chinese heroin users make repeated attempts to detoxify very early in their using careers and do so without clinical supervision using diverted methadone and illicitly-obtained benzodiazepines. More than a third (40%) of Indo-Chinese participants reported having used illicitly obtained methadone in order to quit or moderate their heroin use.

*Now I'm trying to quit. I'm only shooting up once a day. And like today I got a cap and I only used half of it. I'm saving the rest for tomorrow. Cause I'm trying to cut down slowly. I drink Rohypnol to help me sleep. [Are you worried about taking the pills - that you could get addicted to them?] No, you can't get addicted to pills. They aren't addictive. I don't know anyone that's addicted to pills. Like Rohypnol and Serapax, they're not addictive. They're good for quitting when you want to quit. They help you a lot. They help you to sleep. A few weeks ago I didn't have a shot for one day cause I was with my boyfriend and he doesn't let me take it. Um, that night when I went home to sleep, I couldn't sleep at all. I had to sit up all night. Like my whole body was aching. (Kim, 15 year-old Vietnamese-Australian female)*

*Some people got their own ideas if they take Rohypnol they don't shoot a lot but it's a very strong tablet, very bad. I try it and I don't touch it. That's why I take heroin, not make me stupid. I still got my natural feelings, not all the way natural, but natural I know what's happening. (Tien, 19 year old Vietnamese-Australian male)*

Self-medication is a common practice in many South East Asian countries. In Vietnam, for example, especially in the larger cities, many people buy one or two tablets a day from the black market. As soon as their symptoms abate, they stop buying the medication. Young Indo-Chinese heroin users in Cabramatta appear to adopt similar practices by purchasing diverted methadone and benzodiazepines to provide symptomatic relief for heroin withdrawal. In general, they exhibit little faith or confidence in long term substitution therapies.

*They're legal but the Doctors won't give them to us - to Asians. To Aussies yeah they do. But not to us. Like they think we're only saying it cause we want the pills. They think we just want it so we can be stoned every day or something. Know what I mean? I don't know why they give it to Aussies. They give it to a lot of Aussies cause like this Aussie lady, we asked her how she got it. She said she couldn't sleep at night, she needs something to sleep and you know, the Doctor just gave her this prescription. It seems so easy for her you know. For Aussies. So that's why we have to buy it off them. (Kim, 15 year-old Vietnamese-Australian female)*

*[Have you ever been on methadone?] No, I hate it. [Why is that?] I tried it but I don't like it and I see a lot of people on methadone. Its worse than heroin. OK, lets say you on methadone then you should quit heroin. I don't see you quit heroin. It doesn't work. Its my idea if you get people to quit heroin you make sure you are going to do it. Say you have ten people and one person quit heroin you happy. I think methadone nothing work on my thinking. Should give him heroin, you know. Like he need 10 caps, give him 10 to stop him hanging out and that,s it for the whole day. Each day, give him less, slowly and slowly until he quit. (Tien, 19 year-old Vietnamese-Australian male)*

Many Indo-Chinese young people also lack the cultural requisites for successful Western-style therapeutic interactions, such as a willingness to confide, a belief in the unconscious, and the ability to criticise parents openly (see also Morris and Silove 1992; McKelvey 1994). Some are unfamiliar with the role of counsellors and psychotherapists and there is no equivalent word in Vietnamese for the term .counsellor.. Many therapuetic interventions are also language based and language creates additional barriers with the delivery of counselling and psychotherapy. Even where monolingual clinicians are assisted by interpreters, affective features or cultural nuances encoded in language may be lost in the translation.

A lack of familiarity with and fear of, the hospital setting may also render inpatient detoxification an unsuitable treatment option. The hospital is an alien place for many Indo-Chinese Australians. Not only are the customs and practices strange but the patient is often isolated from their family and friends which increases the language barrier and feeling of helplessness. Food also creates problems during hospital stays: for many, hospital food is strange and served in an unfamiliar manner. The ethnographic data also suggest that treatment providers, including residential detoxification facilities, are not well-equipped to deal with heroin smokers. This point was reinforced by the experience of several young people, including the Vietnamese-Australian woman whose quotation appears below.

*They should have a separate service for Asian people like if they see all Australians they won't go there. Like if its mixed, Asians won't feel comfortable. Like I went into the city to \_\_\_\_\_. It was just so boring. Like all day you're doing nothing at all and you just think about it - its even worse than our own home. This is just old men and we're scared they've got AIDS or something. It was terrible. We were the only Asian there and they think if you use heroin you must be a junkie like all those people shoot up. We are not like that - like all raggedy and dirty like Aussie junkies. It was bad. We couldn't take it so we left. I wish I'd stayed now ... Its too hard. We were the only Asians, the only young ones and the only girls in the whole place. (Trinh, 17 year-old Vietnamese-Australian female)*

## **STUDY 2: AN EXPLORATORY STUDY OF INDO-CHINESE HEROIN USERS IN SOUTH WEST SYDNEY**

*Investigators:* Swift and Maher  
*Funding Agency:* Drug and Alcohol Directorate  
NSW Health Department

## **2.0 Research Methods**

One hundred Indo-Chinese heroin users were interviewed by a trained bilingual Vietnamese interviewer familiar with the target group. The sample was evenly split between treatment and non-treatment groups. The treatment group was recruited from three methadone clinics in the area and the non-treatment group was primarily accessed through community services (e.g. an agency providing services and programs for young people and a secondary outlet for needle and syringe exchange) and snowballing through personal and ethnographic research contacts.

Participants provided informed consent and were given assurances as to the anonymity and confidentiality of information obtained. The interview typically took between 30 and 45 minutes to complete and respondents were reimbursed \$20 for out of pocket expenses involved in the interview.

The interview consisted of a structured questionnaire based on instruments used to assess transitions between routes of administration both in Australia and overseas. Modifications were made and additional items included following discussions within the project team and consultations with Vietnamese researchers. The questionnaire was translated into Vietnamese, and then back-translated by separate Vietnamese translators, prior to being pilot-tested on six Vietnamese heroin users.

The format was primarily quantitative, with a section of qualitative questions included at the end of the interview. Domains covered by the questionnaire included demographics, drug use history, heroin use, HIV risk-taking behaviours, severity of dependence, social context, crime, health and treatment history. The questionnaire incorporated sections of the Opiate Treatment Index (OTI), including the HIV Risk-Taking Behaviour Scale (HRBS) (Darke et al. 1992). The qualitative component included a series open-ended questions designed to investigate the social and cultural meanings of heroin use, the use of illicit methadone, and attempts to moderate consumption.

Descriptive and inferential statistics were analysed using SPSS for Windows (Release 6.0). The questionnaires were coded and entered using the DE module of SPSS for Windows. Descriptive and inferential statistics were analysed using SPSS for Windows (Release 6.0). Significance tests were conducted on major variables of interest. The quantitative data are largely descriptive. Percentages are reported for categorical data, while means and medians are presented for normally distributed and skewed continuous data, respectively. Univariate tests of significance were conducted on a subset of variables identified from the previous literature and from ongoing ethnographic and other research in South West Sydney. These tests compared male and female respondents on a number of characteristics. Chi-square tests of significance were used for categorical data (such as whether they had made a transition or not), while t tests were used to compare groups on continuous variable (such as age). A

conventional level of  $p=0.05$  was set for statistical significance.<sup>iii</sup>

## **2.1 Results**

### ***Sample Characteristics***

The mean age of the sample was 23 years and the majority of respondents (74%) were male. Almost all (99%) were born overseas, predominantly in Vietnam (95%), with the remainder born in Laos (3%) and Cambodia (1%). The average length of Australian residence for overseas-born respondents was 10 years. One third of the sample were in a relationship and 11% had children. Participants had completed an average of 10 years of schooling and the majority (90%) were unemployed at the time of interview. Legal income was most commonly received from government benefits, predominantly unemployment benefits (81%).

### ***Heroin Use***

The average age at which participants first used heroin was 20 (range 11-35 years). Only 28% reported injecting heroin on the first use occasion. The majority of respondents initiated heroin use by non-injecting routes (72%) with most of those (58%) reporting smoking or chasing the dragon, (i.e. inhaling the vapours released by heating the sublimate on foil). A smaller group (13%) reported initiating heroin use with snowcones, (i.e. heroin mixed with marijuana).

Heroin was the first drug ever injected by all of those who had ever injected ( $n=65$ ). The average age at the first injection was 20 years. Most respondents (84%) were injected by somebody else the first time, with the injecting technique being almost exclusively taught by friends or peers (98%).

### ***Routes of Use and Transitions***

Approximately one third of the sample (36%) had only ever smoked or chased heroin. The main reasons for exclusive smoking were dislike or fear of injecting (86%), including a perceived lack of hygiene, a belief that smoking was less addictive and easier to quit than injecting (37%) and a fear of overdose (6%). Approximately one quarter (26%) had only ever injected heroin. The main reasons for exclusive injecting were that it was perceived as being more efficient and provided an immediate effect (75%) or that it was the only method they knew of or the norm (46%). A minority (13%) stated that they injected because they felt other routes were wasteful and/or too expensive.

Injecting was the most common route of administration at the time of interview however, with 59% of the sample predominantly or exclusively injectors and 40% exclusively or predominantly smokers. Slightly more than one third (34%) had made a transition from smoking to injecting. No respondents reported making a reverse transition from injecting to smoking but we found three instances of heroin smokers occasionally injecting the drug.

### ***Heroin Use in the Last Six Months***

In the last six months, 38% of the sample claimed that they had exclusively smoked the drug. During this time, 55% claimed that they had exclusively injected the drug. In contrast to

overseas research (Grund and Blanken 1993, Griffiths et al 1994a), we did, however, find seven respondents who claimed that they mainly injected heroin but had occasionally smoked it in the last six months. The reasons provided were primarily situational, such as being with heroin smokers, the availability of free heroin, or the absence of injecting equipment.

### ***Other Drug Use***

More than half of the sample had ever used tobacco (96%), cannabis (67%), and alcohol (59%). In the last month, 90% of participants had used tobacco, 33% had used cannabis and 12% had consumed alcohol. While more than a third (39%) had ever used benzodiazepines, only 6% reported using them in the last month. In total, respondents had ever used a mean of 4 drug classes and a mean of 3 drug classes in the month prior to interview. It is possible that the lower prevalence of poly drug use and injecting drug use among this group may serve to insulate them from heroin overdose (see below)

### ***Severity of Dependence***

The mean score on the Severity of Dependence Scale (Gossop et al. 1992) was 9. Those not in treatment scored significantly higher than those on methadone (9.8 vs. 8.7;  $t_{96} = 2.3$ ,  $p = 0.02$ ).

Using the suggested cut-off of 4 (Hando and Hall 1994) where those scoring above 4 are classified as dependent, the majority of the sample (98%) were classed as dependent. There was no significant effect of route of use, with those who had smoked in the last six months no more or less likely to be classed as dependent than those who injected.

### ***Health and Risk-taking Behaviour***

Just over half of the sample (59%) had injected heroin in the past month, with approximately three quarters of this group (71%) injecting heroin on a daily basis. HIV Risk-taking Behaviour Scale scores were significantly associated with higher dependence scores ( $r=0.35$ ,  $p=0.007$ ). One in ten injectors (11%) had used a needle after someone else in the month prior to interview, primarily no more than once or twice, and after no more than two people; these people were mainly friends. It was more common for a respondent to have lent or passed on their needle to someone else to use in the last month (19%) but usually only once or twice. These people were mainly close friends. Approximately one-third (38%) of recent injectors claimed not to re-use their needles, while 40% said they cleaned their equipment every time before re-use.

Health status in the last month was measured using the Health subscale of the OTI. The average total health score was 13.8, which is comparable to other samples of injecting drug users in South West Sydney (Darke, Hall and Swift 1994, Darke, Sunjic, Zador and Prolov 1996). There were no significant differences between those who injected exclusively in the past six months and those who had mainly or predominantly smoked.

Approximately one quarter (26%) of the sample had overdosed at least once; those who had overdosed had done so a mean of one time. Non-fatal overdose was almost exclusively related to injecting with only one person reporting a heroin overdose while smoking the drug. While recent research indicates that alcohol and benzodiazepines are strongly implicated in both fatal and non-fatal overdoses (Darke et al. 1996a, Zador et al. 1996, Darke et al. 1997), only 8%

reported using other drugs prior to overdose (4% benzodiazepines). Three quarters of respondents (75%) had also been present during another person,s overdose.

### ***Crime***

Only two thirds (67%) of the sample answered the questions in relation to criminal activity in the past month. Approximately two-thirds of these (66%) had been criminally involved in the last month. The majority reported involvement in drug dealing (65%) with only 6% reporting property crime. None of the respondents reported involvement in either fraud or violent crime. Those who were not in treatment had significantly higher OTI crime scores than those who were (3.1 vs.1.3;  $t_{60} = 4.7$ ,  $p < 0.0001$ ). Almost one third (32%) were currently facing criminal charges.

### ***Social Contexts of Heroin Use***

Most participants appeared to be immersed in a social scene which included heroin use. All but one respondent (99%) spent at least some of their free time with heroin users, with 19% reporting that they spent all of their free time with other heroin users. However, 68% of respondents reported that they had used heroin alone at least half the time in the last six months. The most frequent locations of use in the last six months were at home (77%) or at a friend,s place (45%), although more than one third (38%) reported using heroin in public places, including on the street, in the stairwells, garages and gardens of local flats, and in public toilets.

### ***Contact with Treatment and Other Services***

While half the sample were in methadone maintenance treatment, this was the first treatment experience for the majority of the sample (60%). Of those not in treatment, 54% had never sought treatment for their drug use. The treatment services most frequently utilized were methadone maintenance (24%) and detoxification programs (21%). However, 70% of participants reported having gone .cold turkey. or having attempted detoxification without clinical supervision.

In the past year respondents had utilized a mean of 2.6 non-treatment services, including the Commonwealth Employment Service (72%). Almost three quarters (74%) had seen a doctor and 32% had been to a hospital. Approximately one third reported contact with religious services (30%) and social workers (31%). Few respondents used other community services, including community health centres (9%) and migrant services (3%). None had utilized telephone counselling services.

### ***Illicit Methadone Use***

In Sydney, the use of illegally obtained or diverted methadone has been the focus of increased attention in recent years (Darke, Ross and Hall 1996b). Slightly less than half of the sample (48%) reported that they had purchased illicit or .street. methadone. The majority of these (95%) reported purchasing street methadone in order to quit or moderate their heroin use. In contrast to recent studies, our findings indicate that methadone injecting is a relatively uncommon practice in the Indo-Chinese community. Only 5% of participants who used illicit methadone reported injecting it and most reported that they ingested methadone orally because

this was the only way they knew or that they had been instructed to take it that way. Some participants believed that would die or go blind if they injected methadone.

### ***Social and Cultural Meanings of Heroin Use***

Almost all respondents (91%) reported that they knew others of the same or similar ethnic background who smoked heroin. Expressions commonly used for smoking heroin included .smoking., .chasing., .chasing the dragon., .smoking white. and .snowcones.. Just over half the sample (52%) indicated a perceived difference between those who smoked heroin and those who injected it. More than half (60%) felt that injecting was both more risky and more effective (i.e. provided a .stronger effect. or got people .more stoned.). These views are reflected in the following comments:

*Many Vietnamese feel it is less shameful to smoke than inject. (19 year-old female IDU)*

*Injecting is more effect and injecting is more likely to die soon. (16 year-old male smoker)*

*Injecting is more dangerous. It can kill you, cause you get OD. (19 year-old male smoker)*

Respondents claimed that injectors .felt differently. than smokers, indicating that injectors were .untrustworthy., felt .bad about themselves. and were .looked down on..

*They [injectors] feel different because people look down on them. (37 year-old male IDU)*

*People who smoke, like they can be trust more but the people who inject, you don.t trust them. (23 year-old male smoker)*

The term .junkie. was reserved exclusively for injectors. Indo-Chinese heroin users associated extremely negative identities with this term; a finding consistent with ethnographic research highlighting the cultural specificity of the stereotype of the .junkie. (Maher 1996c). For example:

*Junkies is stupid idiot and those that shoot up are junkie, not those who smoke. (19 year-old male smoker)*

*Junkie has low status in the society. (23 year old male IDU)*

*Junkie is mean, like they play dirty. They start to play very bad to their best friend and all that. They don.t care about their family - only care about heroin. (23 year-old male smoker)*

.Junkies, were equated with injectors, Anglo-Australians and, in particular, those who came to Cabramatta to purchase heroin, as reflected in the following quotations:

*Junkie is referred to non-Asian come to Cabra for their score. (20 year-old male IDU)*

*People from outside Cabra come to buy heroin, we call them junkie - they are lower. (26 year-old male IDU)*

*We call those Australian from other area come to Cabramatta for a score as a junkie. (17 year-old male smoker)*

These findings may have significant implications for perceptions of risk-taking behaviours among this group. Like the Indo-Chinese heroin users interviewed in the ethnographic research, respondents in the current study drew on a series of nuanced distinctions centred on ethnicity, route of administration, and insider/outsider status to distinguish self from other. These distinctions were used to organize their perceptions and beliefs about risk-taking behaviours.

### **STUDY 3: ANH HAI: A STUDY OF YOUNG ASIAN PEOPLE'S PERCEPTIONS AND EXPERIENCES OF POLICING**

*Investigators: Maher and Dixon*

*Funding Agency: Faculty of Law, University of New South Wales and  
Law Foundation of New South Wales*

#### **3.0 Research Methods**

This study arose out of the findings of a project commissioned by the NSW Police Service (Maher and Dixon 1997) which suggested that, in comparison to other ethnic groups, young Asian people had a different set of experiences of policing.

A total of 123 interviews with young Asian people involved in street-level heroin use and/or distribution were conducted in Cabramatta during a three month period in late 1996. A semi-structured questionnaire was administered to 98 young people, 25 of whom also participated in individual in-depth tape-recorded interviews. Interviews were conducted by an ethnographer familiar to the target population and assisted by a trained bilingual peer interviewer fluent in both Vietnamese and English.

Participants provided informed consent and were given assurances as to the anonymity and confidentiality of information obtained. Interviews took place on the street or in local restaurants, coffee shops and hotels and typically took between 45 minutes and one hour to complete. While efforts were made to recompense participants for out-of-pocket expenses, it is important to note that most of the young Asian people who participated in the study were

reluctant to accept payment and some refused to be compensated for their involvement.

The instrument consisted of a semi-structured questionnaire which covered five domains: demographics, patterns and contexts of heroin use, circumstances surrounding the last consumption episode, attitudes towards safe injecting rooms, perceptions and experiences of policing in the area. Specifically, the study sought to investigate, among this group:

1) perceptions of recent changes in police activity in the area; perceptions regarding the price, purity and availability of heroin; perceptions regarding changes in practices relating to the sale and use of heroin as a result of policing activity and;

2) attitudes towards and contact with different types of police; experiences of policing practices including stop and search and arrest procedures, knowledge and experiences of complaints mechanisms and criminal justice system processing.

Tape-recorded interviews were transcribed, and analyzed using Folio Views, a North American hypertext package. One of the strengths of this package is that while it appends all interviews and fieldnotes to a comprehensive infobase, text fields can be broken down into .idea. or paragraph size .folios. (Manwar et al. 1994). The questionnaires were coded and entered using the DE module of SPSS for Windows. Descriptive and inferential statistics were analyzed using SPSS for Windows (Release 6.0). Significance tests were conducted on major variables of interest.

As with the Heroin Transitions study, the quantitative data are largely descriptive. Percentages are reported for categorical data, while means and medians are presented for normally distributed and skewed continuous data, respectively. Univariate tests of significance were conducted on a subset of variables identified from the previous literature and from ongoing ethnographic and other research in South West Sydney. These tests compared male and female respondents on a number of characteristics. Chi-square tests of significance were used for categorical data (such as whether they had made a transition or not) while t tests were used to compare groups on continuous variable (such as age). A conventional level of  $p=0.05$  was set for statistical significance. Findings reported here relate to variables of interest to the present project: a full report of the study can be found in Maher et al. (1997).

### **3.1 Results**

#### ***Sample Characteristics***

The mean age of participants was 18 years with the majority (96%) aged less than 25 years. Male respondents were significantly older than female respondents (19.1 vs. 17.2 yrs;  $t_{94} = -4.1$ ,  $p < 0.0001$ ). Most (91%) were single at the time of the study. Approximately half the sample were young women (46%) and only 19% were born in Australia. The majority (77%) identified as Vietnamese-Australians with 13% describing themselves as Laotian-Australians and 7% as Cambodian-Australians. The majority (97%) spoke a language other than English at home. These languages included Vietnamese (75%), Laotian (13%), Khmer (6%), Chinese (2%) and Thai (1%).

Participants had an average of 9 years of schooling. While 12% were still attending school, most (85%) were unemployed at the time of the study. Those who were unemployed or on a pension had been without work for an average of 103 weeks (range 1-260 weeks). The majority of those who were currently unemployed or pensioners (77%) had never held paid employment. Most participants resided in South West Sydney (95%) and 68% were residents of Cabramatta. Of the 32% who did not live in Cabramatta, 74% came to the neighbourhood on a daily basis. Only two respondents were in treatment at the time of interview: one of these was on methadone maintenance and one person was enrolled in Narcotics Anonymous.

### ***Patterns of Drug Use***

All participants in the study were daily heroin users and most participants were relatively recent recruits to use, with 64% having used heroin for two or less years. Participants had been using heroin for an average of 115 weeks or just over two years. The majority (89%) commenced heroin use with smoking, while the remainder commenced with injecting (11%).

Most participants (62%) reported that they exclusively or predominantly smoked the drug at the time of interview. Smoking appears to be a stable pattern of use, with those who had never injected having used this route for a mean of 83 weeks (range 4-234 weeks). Although not significant, there may be trend toward a greater proportion of young women (47%) than young men (30%) injecting heroin ( $\chi^2 = 2.8$ , 1df,  $p = 0.09$ ).

A majority (92%) of those who currently injected reported initiating heroin use by smoking, predominantly smoking on foil or chasing the dragon, (94%). Among this group ( $n=34$ ) heroin smoking appeared to have been a relatively short-lived pattern of use with 76% commencing injecting within 12 months of commencing heroin smoking. Only 24% reported smoking heroin for more than 12 months prior to intravenous use.

The most frequent reason cited for the transition to injecting among this group was that participants were not getting stoned, (53%), followed by cost/economic factors (21%). Approximately one-fifth (18%) of those who had made a transition from smoking to injecting reported that the rush, or effects of injecting had been a major influence and 12% cited the influence of friends or customers as a significant factor influencing the shift to intravenous use.

Although this difference was not significant, all of the young women who currently injected had made a transition from smoking on foil, compared to 85% of young men. Young women may be more susceptible than young men to the influence of others in making this decision with 19% of young women injectors (compared to none of the male injectors) citing the influence of friends and customers as significant factors in their decision to inject. Two young women cited the fact that they were in custody as the main factor influencing their decision to switch to injecting.

A majority of participants (91%) reported regular use of drugs other than heroin, with 84% reporting the regular use of tobacco, 30% regular benzodiazepine use and 28% regular cannabis use. Only 2% of respondents reported that they regularly used alcohol. Young women were significantly more likely than young men to report regular benzodiazepine use

(52% vs. 11%;  $\chi^2 = 19.2$ , 1df,  $p < 0.0001$ ). With just over half the young women in this study reporting regular use of benzodiazepines (predominantly flunitrazepam), these data suggest that benzodiazepine use is a significant issue for young Indo-Chinese women.

### **Cost and Volume of Heroin Use**

Heroin<sup>™</sup> in Cabramatta is typically sold in *caps*: small units containing between 0.02 and 0.03 gms of heroin pre-packaged for individual sale. Caps are wrapped in a small piece of foil, typically taken from the inside lining of a cigarette packet, and then sealed in small plastic water balloons. Between September and December 1995, the mean purchase price for a cap of heroin was \$30.42 (range \$20 to \$40). The next most common retail unit at the street-level is the *half weight* (range 0.2 - 0.5 gms): the mean purchase price for a half-weight during this period was \$169.28 (range \$150 to \$200) (Maher, 1996d).<sup>28</sup> When combined with the results from the current study, these data suggest that retail prices for heroin in Cabramatta remained relatively stable during the period 1995-1996.

Our respondents reported paying an average of \$29-90 the last time they purchased a *cap* of heroin and \$173.10 the last time they purchased a *half-weight*. Prices varied between \$25 and \$40 for caps and between \$160 and \$200 for half weights. Nine respondents reported making purchases of *weights* (one gram units), for which they paid, on average, \$346.70 the last time they purchased heroin.<sup>29</sup> One respondent reported purchasing an *ounce* of heroin (28 grams) for the sum of \$4500 on the last purchase occasion.<sup>30</sup>

Those respondents who estimated their daily consumption in terms of caps used an average of 4.3 caps of heroin a day (range 1-10) with young women consuming, on average, slightly more caps a day than young men (mean =5 vs. 4;  $t_{45} = 2.3$ ,  $p = 0.03$ ). Respondents who provided estimates of daily consumption in terms of half-weights used a mean of 1.3 half-weights per day.

The majority of respondents (75%) reported that they normally purchased heroin in half weight quantities, reflecting their status as user-dealers in an Asian-dominated marketplace. Women were significantly less likely than men to report purchasing in caps (11% vs. 25%) and more likely to report that they normally purchased heroin in half-weight quantities (82% vs. 68%). They also paid slightly less for their drugs: paying an average of \$171.70 a half-weight, compared to a mean of \$174.40 reported by male respondents.

### **Last Consumption Episode**

The majority of participants (85%) reported using heroin in Cabramatta the last time they used it. Just under half (49%) reported that their most recent consumption episode had occurred in a public or semi-public setting. These included on the streets, in the stairwells, garages and gardens of local flats, in abandoned houses, and in public, restaurant and hotel toilets. The remaining 51% last used heroin at home (20%) or in other private settings (31%), mainly in the homes of friends. Most of those respondents who last used in public settings described these locations as dirty and unsafe.

A majority of participants (68%) reported using heroin in the company of one or more others

on the last use occasion. Of these, 82% split or shared heroin with an average of 2.0 other people. Most described those that they had split or shared with as friends (77%) or siblings (14%). More women than men reported sharing heroin with siblings and partners (31% vs. 7%;  $\chi^2 = 5.0$ , 1df,  $p = 0.03$ ).

Of those who injected and shared or split with others on the last use occasion ( $n=18$ ), 89% reported drawing from a communal solution. Of these, one third (6/18) used a syringe after someone else had used it and one person reported using a syringe before someone else had used it. More than one third of communal injecting episodes (39% or 7/18) involved at least one person re-using previously used injecting equipment. These findings are consistent with previous research which suggests that the intravenous administration of heroin in Cabramatta involves relatively high levels of risk-taking behavior (Maher 1996a., Maher and Dixon 1996). An area of potential concern identified by the study was the finding that thirteen respondents (13%) reported that they had also used heroin in countries other than Australia. These countries were all in South East Asia and eight respondents reported having injected the drug at the time.

The primary source of needles and syringes for injectors in the study was local chemists (84%). While two secondary NSEP outlets were in operation during the course of the study, only 16% of injectors reported that they mainly got their injecting equipment from a local needle and syringe exchange outlet. One person mainly obtained needles and syringes from an NSEP outlet outside the area and one person reported obtaining needles and syringes from a sibling. These data indicate that young people from South East Asian backgrounds tend to under-utilize existing NSEP services in the area.

A majority (64%) of the 36 people who injected during their last consumption episode reported that they left their used injecting equipment at the site. More young men (73%) than young women (57%) left used needles and syringes behind. Of those who left used injecting equipment at the site, 57% reported safe disposal (i.e. use of a fitbox, sharps container, bin or syringe disposal unit). However, 26% reported that they left the syringe uncapped and exposed and a further 17% re-capped their syringes before leaving them at the site.

### ***Attitudes Towards Safe Injecting/Smoking Rooms***

The feasibility and effectiveness of safe local alternatives to public or street-based injecting continues to stimulate community debate (Sydney Morning Herald 12 April 1996, Sydney Morning Herald 15 May 1997). In Switzerland, where injecting rooms have been in existence for more than a decade, evidence suggests that such facilities may reduce not only the public health risks associated with injecting drug use (such as overdose and the transmission of blood-borne viruses), but may also attenuate the public nuisance associated with street-based injecting (Dolan 1996).<sup>24</sup> In Australia, advocacy for injecting rooms and support for a proposal to develop and evaluate a safe injecting facility has come from a variety of sources, including the NSW Police Service (Brammer 1996; Mundy 1996, Rutter et al. 1997).

Slightly less than half of participants in the current study (47%) indicated that they would be prepared to use safe injecting/smoking rooms were such a facility available in Cabramatta.

The remaining 53% indicated that they would not use such a facility (47%) or that they were uncertain (6%). Approximately one-third (34%) indicated that they would be prepared to pay a small fee to use a safe injecting/smoking room.

We asked respondents who indicated that they would not use a safe injecting/smoking room to explain their reasons for not wishing to do so. Their responses reflect a number of concerns related to the stigma of heroin use, especially intravenous use, within the Indo-Chinese community (Maher 1996c). These concerns included the prospect of being identified by family and community members as a drug user, concerns in relation to hygiene, fear of needles and syringes, privacy and safety issues, and issues in relation to mixing with junkies and injectors.

*I don't want other people to know. If they see you go there, lose face. (#079, 17 year-old Vietnamese-Australian male)*

*I don't feel comfortable with other people there, especially Aussie junkies shooting up. I don't like even smoking in front of people unless it's my friends. (#002, 17 year-old Vietnamese-Australian female)*

*I wouldn't want to be in the same rooms as people who use needles. People that inject it are worse, more hooked on it cause it's in their blood. (#017, 17 year-old Vietnamese-Australian male)*

*I don't trust them and I don't want people seeing me shoot up - they will tell my boyfriend. (#019, 17 year-old Vietnamese-Australian female)*

*Because I don't want people to see me. Too ashamed. (#084, 19 year-old Vietnamese-Australian female).*

*The people that would go there and if people, like your family see you go there. (#086, 17 year-old Cambodian-Australian male)*

Respondents also expressed concerns that, despite assurances to the contrary, injecting rooms would be subject to police intervention. In addition to a culturally-based distrust of police and other government agencies, their comments also indicate concern that the type of clientele drawn to such a facility would attract police attention.

*Because all the customer would go there and it would be too dangerous - the police would come. (#080, 20 year-old Vietnamese-Australian male)*

*All the junkies would go there and use it and the police would be onto it. Only the bad junkies would go to a place like that. (#019, 17 year-old Vietnamese-Australian female)*

*Because all the junkies would go there and the place be very dirty and hot from the police. (#087, 16 year-old Cambodian female)*

*Too many people - junkies. It would be easy for the police to catch us there. (#008, 17 year-old Vietnamese-Australian female)*

Among those who indicated they would be prepared to use such a facility (47%), the benefits were seen as decreased risk-taking through improved access to sterile injecting equipment and a more relaxed environment, decreased risk of overdose, less risk of being detected or interrupted by the police, and positive benefits to the community in terms of a reduction in the incidence of discarded needles and syringes. These perceived benefits are reflected in the following quotations:

*Safe, clean, close and less risky. (#022, 17 year-old Vietnamese-Australian male)*

*Safer and the cops can,t say nothing if it legal and less people will overdose. (#028, 17 year-old Vietnamese-Australian female)*

*Cause it would be a safe place to go if the police don,t go there. (#090, 22 year-old Vietnamese-Australian male)*

*Safer, hygienic, privacy and no coppers. (#041, 18 year-old Vietnamese-Australian female)*

Participants in favour of safe injecting rooms were especially concerned to elaborate the potential benefits for the local community.

*Because cleaner for the environment. I feel bad seeing all this syringe. When I see it I feel disgusting. People should be more responsible and no more mess. People should have one place to go in. (#005, 18 year-old Vietnamese-Australian female)*

*Its better than going in someone flat and dirtying the place up. They don,t really like it. (#051, 20 year-old Vietnamese-Australian female)*

*Because then people wouldn,t have to sneak around and go in the flats and there wouldn,t be so much mess in Cabra - people that live there would be safe. (#082, 17 year-old Vietnamese-Australian female).*

Despite the positive benefits identified by some respondents, the data suggest that the beliefs and attitudes of the Indo-Chinese community towards injecting drug use and, in particular, the desirability of safe injecting/smoking rooms, warrant further investigation.

### ***Treatment Needs and Experiences***

A recent study identified availability and access to sterile injecting equipment as the most

pressing issues facing Anglo-Australian heroin users in Cabramatta (Maher and Dixon 1997). However, young people from South East Asian backgrounds interviewed in the YAPP study did not appear to afford this issue high priority: a finding which possibly reflects the lower prevalence of injecting among this group. While many of their comments centred on the police, 41% of participants also expressed concerns in relation to accessing treatment services and, in particular, access to detoxification and rehabilitation programs suitable to their needs and sensitive to both their culture and age.

*I wish they had a place for us to detox and be safe if people want to quit especially for Asian people because there is no-where for us to go. They are racist at \_\_\_\_\_ and that other place was too boring - full of old people and junkies. There was nothing to do to keep your mind from it. (#003, 18 year-old Vietnamese-Australian female)*

Young Asian-Australians were especially critical about the lack of treatment options other than methadone maintenance programs.

*Methadone is worse than heroin - it makes people very sick and hard to quit. (#054, 25 year-old Vietnamese-Australian male)*

*Need more treatment and thing to help us to quit - more medical treatment besides methadone. (#011, 20 year-old Laotian-Australian female)*

*Not a methadone program because its even harder - it takes you a month to get off. (#013, 17 year-old Chinese-Australian male)*

Among their suggestions were more street-workers, ethno-specific services and bilingual workers:

*They should give us more information especially when kids are at school about heroin and that smoking is addictive. (#003, 18 year-old Vietnamese-Australian female)*

*Need more clinics to help addicts. More Asian youth workers, more information on help for addicts. More street workers. (#015, 20 year-old Laotian-Australian male)*

*They should have more street workers and things other than methadone programs. (#028, 17 year-old Vietnamese-Australian female)*

*More services for Asian people and more things in our language and workers that are for us. (#072, 19 year-old Vietnamese-Australian male)*

*They should have a medicated detox at Cabra because the one I went to at*

*Parramatta they gave me medicine but it doesn't work. (#013, 17 year-old Chinese-Australian male)*

While many were critical of methadone maintenance treatment, some Indo-Chinese young people were in favour of more liberal entry criteria to allow for easier under-age access to methadone and for greater access for those without identification and Medicare cards.

*Clinics for methadone so I can get in cause I'm only young and not the approved age. (#025, 14 year-old Vietnamese-Australian male)*

*A methadone clinic in Cabramatta and pills to help people quit is a good idea. (#018, 17 year-old Vietnamese-Australian male)*

*Methadone clinic in Cabramatta and easier to get access to regardless of age. (#021, 22 year-old Laotian-Australian female)*

*More methadone clinics in Cabramatta for easier access at any age. (#022, 17 year-old Vietnamese-Australian male)*

*More methadone clinics for us that easier to get in. (#034, 22 Vietnamese-Australian male)*

Comments made by respondents in the YAPP study were consistent with the findings of previous research that young Indo-Chinese heroin users rely on oral methadone to self-medicate during heroin withdrawal (Maher 1996c, Swift et al. 1997).

*They should let people get methadone for quitting so they don't get addicted - just use it to quit. (#079, 17 year-old Vietnamese-Australian male)*

*It should be easier for people that want to quit to get things like rohies and methadone to help them quit - even if they're under age. (#001, 16 year-old Vietnamese-Australian female)*

Several respondents also mentioned access to flunitrazepam (Rohypnol) as a way of alleviating the pain and discomfort experienced during heroin withdrawal.

*They should try and help people quit - like have somewhere to go to get away from Cabra and they should give us medicine when we hang out - like rohies because the pain very bad and that's why people give up. (#082, 17 year-old Vietnamese-Australian female)*

*Legal access to Rohypnol would help. (#044, 17 year-old Vietnamese-Australian female)*

*More methadone clinics and access to rohypnols .(#061, 17 year-old Vietnamese-Australian female)*

*More methadone clinics and easy access to rohypnol. (#067, 16 year-old Laotian-Australian male)*

Finally, a minority of respondents stated that they had no knowledge of treatment or where they could go to seek help with their heroin use and related problems.

*I really haven't thought about it because I never see information about things that can help addicts. (#030, 18 year-old Vietnamese-Australian male)*

*I don't know about these things. (#068, 19 year-old Laotian-Australian male)*

These findings confirm those of previous research (Swift et al. 1997, Maher and Dixon 1997) which indicates that Indo-Chinese heroin users face substantial barriers to accessing treatment and other services. In particular, our research suggests that older Vietnamese may constitute a truly hidden, population of heroin users who experience considerable social isolation and who have little or no experience of treatment. As one participant in a recent study, a 45 year-old Vietnamese-Australian male, told us:

*I have been on it for seven years and haven't thought to quitting because I didn't know any of these service. I'm too old and don't know good English to ask. (cited in Maher and Dixon 1997)*

## **PART III: DISCUSSION**

This section attempts to summarize the studies reviewed in terms of their implications for the current project.

### ***Prevalence of Heroin Smoking Compared to Injecting***

Although there is a dearth of epidemiological data on heroin use, there is some evidence to indicate a growing diversity of patterns of use in the developed world. Over the past decade, increases in non-injecting use have been documented in the UK (Parker et al. 1988, Pearson et al. 1986, Griffiths et al. 1992), The Netherlands (Buning 1990, Hartgers et al. 1991, Grund and Blanken 1993, van Ameijden et al. 1994), Spain (de la Fuente et al. 1996, Perez-Jimenez and Salvador Robert 1997), Switzerland (Haemmig 1995) and the United States (Des Jarlais et al. 1992, Frank et al. 1992, Ouellet et al. 1995).

While the developed world appears to be embracing a greater diversity of routes of administration, parts of the less developed world, and South East Asia in particular, appear to be experiencing an explosion of injecting drug use (Stimson 1993; McCoy 1994; Thomas and Day 1995). Although smoking or sniffing opium and increasingly, heroin, remain significant modes of consumption in the Golden Crescent and some neighbouring countries, in many parts of Asia there has been a sharp increase in injecting among populations who have traditionally used opiates by other means (Rana 1996). In Thailand there has been a gradual increase in injection in urban areas (Suwanwela and Poshychinda 1983) and in the far north there has been a rapid shift from smoking opium to injecting heroin among ethnic minority groups or hill tribes (Gray 1996). Recent increases in injecting drug use have also been reported in Myanmar, Sri Lanka, Vietnam, the North Eastern states of India, Yunan province in China, Laos, Malaysia and Nepal (Thomas and Day, 1995). Injecting is now the primary route of administration in Hong Kong, Malaysia, Myanmar and Thailand (Thomas and Day 1995).

Asia is emerging as an epicentre of HIV infection. HIV and other blood borne diseases have become endemic in many Asian countries as injecting becomes more common (Wodak et al. 1993). Injecting drug users represent 29 percent of HIV cases in the Western Pacific region, the single largest category in the region (WHO 1995). In Vietnam, where the commercial sale of blood is a common means of income generation among IDU, 80% of all cumulative HIV cases and 96% of cumulative AIDS cases are IDU-related (WHO 1995). While heroin is predominantly smoked in North Vietnam, injecting appears to be the dominant route of administration in the South, with HIV seroprevalence among IDUs in some parts of the South approaching 50%, compared to less than 0.5% in the North (Hong 1996). A recent study (Power 1993) found high rates of HIV risk-taking behaviours among Vietnamese IDU. Most injecting took place in shooting galleries, sharing of syringes and drug solution was widespread, and illicit pharmaceuticals such as diazepam and Phenobarbital were commonly mixed with opium and injected (Power 1993).

In Australia, injection has historically been considered the dominant route of heroin use, in all likelihood due to factors related to source, price, and purity. In 1989, a study of 2500 injecting

drug users in Sydney, Melbourne, Perth, and Brisbane (ANAIDUS 1989) reported that 39% of the sample had smoked, snorted, or swallowed heroin at some time. This figure dropped to 1% for non-injecting use in the most recent typical month, suggesting that non-injecting routes did not represent established patterns of consumption. A recent replication of this survey, which specifically asked about routes of administration, found that 80% of heroin users first used the drug intravenously and none reported smoking it on the first use occasion (Loxley et al. 1995).

By contrast, estimates of the prevalence of heroin smoking compared to injecting in the three studies reviewed here ranged from 28% to 62%. These studies suggest that Indo-Chinese heroin users in South West Sydney are more likely than Caucasian heroin users to commence heroin use by smoking the drug and are more likely to commence injecting with heroin. Indo-Chinese heroin users also appear more likely to smoke heroin on a regular or exclusive basis than their Caucasian counterparts (Swift et al. 1997).

### ***Differences in the Severity of Dependence Between Smokers and Injectors***

The London Transitions study found that heroin smokers were significantly less likely to be classified as dependent than heroin injectors according to the SDS (Gossop, Griffiths, Powis and Strang 1992). Only one of the studies reviewed here (Swift et al. 1997) examined the relationship between route of administration and severity of dependence. Virtually all (98%) of the Indo-Chinese respondents in the Heroin Transitions study expressed concern over their heroin use in the last year, as indicated by a dependence diagnosis on the SDS. However, because all but two of the respondents were classed as dependent and there was no difference in scores between smokers and injectors, there was little variation in responses. Coupled with the relatively small sample size, there may have been insufficient power to detect differences between smokers and injectors.

A recent comparison of these 100 Indo-Chinese with 100 Caucasian heroin users recruited as part of the same study (Swift et al 1997) found that Indo-Chinese respondents had significantly higher dependence scores than Caucasian respondents (9 vs. 8,  $t_{159} = -2.2$ ,  $p = 0.03$ ) and were more likely to be classified as dependent (unadjusted OR=13.5, 95%CI=3.1, 121.1;  $\chi^2 = 18.5$ , 1df,  $p < 0.0001$ ). There was no significant effect of route of use, with those who smoked in the last six months no more or less likely to be classed as dependent than those who had not (unadjusted OR=1.3, 95%CI=0.4, 5.6;  $\chi^2 = 0.1$ , 1df,  $p=0.72$ ). It would, however, be unwise to exclude the effect of route of use given the small sample size and the size of the upper bound of the confidence interval.

The ethnographic data indicate that there are perceived differences in severity of dependence between smokers and injectors. These differences were reflected in beliefs expressed by smokers that smoking heroin was less addictive than injecting and that heroin would be harder to quit if injected regularly.

*Injecting is dirty and more addicting because it goes in the blood. Smoking is less addicting because it doesn't go in the blood. (Stacey, 15 year-old Vietnamese-Australian female)*

*Shooting up is the Aussie way - the junkie way. Some Asian people use needles but mainly the customers do it that way. Smoking is less addictive and you can't die from it, like overdose and all that. (Duc, 17 year-old Vietnamese-Australian male)*

*In the Asian community it is less shameful to smoke than inject. People won't look down on you so bad and you won't get so addicted. (David, 15 year-old Vietnamese-Australian male)*

*I only smoke [Why is that?] The needle makes people very bad. You see a lot of Aussie junkie around here - the needle makes them very bad. We only sell to them to support our habits. Everyone in our group did Year 11. (Long, 17 year-old Vietnamese-Australian male)*

These findings are confirmed by a recent needs assessment of young Indo-Chinese heroin users in the Cabramatta area which found that smokers perceived injecting as more addictive. (Le 1996).

### ***Do Heroin Smokers Indicate a Need for Care?***

Research conducted in London and Madrid suggests that heroin smokers do present for treatment (Griffiths et al. 1994, Perez-Jimenez and Salvador Robert 1997). A recent Spanish report indicates a continuing decline in the proportion of individuals attending treatment centres for the first time who indicated injection as the preferred route of administration: from 50.3% in 1991 to 37.8% in 1993 (Plan Nacional sobre Drogas 1993, cited in Perez-Jimenez and Salvador Robert 1997). In Australia, where there is no uniform information collected on the preferred or current route of heroin use among those presenting for treatment, there is a dearth of trend data. Trends in patterns of illicit drug use among particular ethnic groups are even harder to detect or monitor (Maher 1996d).

However, of the 50 Indo-Chinese respondents currently in methadone maintenance treatment in the Heroin Transitions study, 34% were predominantly or exclusively smokers. The average length of use among the smokers in treatment was 2.7 years. Slightly less than one third of those in treatment (29%) had made a transition from smoking to injecting. Approximately half (52%) of those in treatment had previously attempted to moderate their use themselves. More than one-third of the injectors who had attempted to cut down (6/15) reported having used street methadone or benzodiazepines, whereas none of the smokers reported using diverted pharmaceuticals.

The ethnographic research indicates that young Indo-Chinese heroin users make repeated attempts to detoxify very early in their using careers, and do so without clinical supervision using diverted methadone and benzodiazepines. In general, they exhibit little faith or confidence in long to medium term substitution therapies which are associated with junkies, and Westerners. Indeed our research suggests that the current system of methadone maintenance is not attractive to Indo-Chinese IDUs and may be particularly unsuitable for

heroin smokers.

Related research does suggest however, that young Asian people in South West Sydney are eager for information on drug use and associated issues. A recent evaluation of a business card- sized resource designed to provide young people with tips on harm minimization and safer using found that information on heroin smoking was seen as a priority issue by many young people. In fact, when asked for their ideas on how to make the cards more useful, the most common suggestion was to produce cards on other topics, including (in order of frequency) information on smoking heroin, how to avoid overdoses, information on rohypnol, advice on how to quit and where to seek help (Maher and Patete 1997). During the evaluation interviews, many of the Indo-Chinese respondents expressed a desire for information in relation to the physiological effects of heroin use: *More about the heroin itself and the harm it makes, what it can do to your body, not just the stuff about the diseases*. (cited in Maher and Patete 1997). Several young Asian women also asked questions about the impact of heroin use on their reproductive systems and, in particular, changes in their menstrual cycles and breast sizes and issues around fertility and contraception.

The studies reviewed here suggest that Indo-Chinese heroin users, and especially injectors, are more socially isolated than their Caucasian counterparts. Overall, Indo-Chinese users appear to have less contact with services and to be more immersed in the drug market scene. Almost three-quarters of all the Indo-Chinese participants in the Heroin Transitions study (70%) reported having attempted detoxification without clinical supervision, compared to only 40% of Caucasians. Slightly less than half (48%) reported using diverted methadone to moderate or cease their consumption of heroin.

### ***Barriers to Presentation for Treatment***

Cultural variations in the construction of distress and illness may impede presentation, diagnosis, and treatment (Moore and Boehnlein 1991a; McKelvey 1994). Studies have found that many Asian patients somatize illness (Hoang and Erickson 1985; Moore and Boehnlein 1991b; Frye and D'Avanzo 1994) and cultural variation in child-rearing practices and parental values may also influence the expression of distress in children and adolescents (Lambert et al. 1989). These factors also influence presentation for substance use treatment. For example, the 1995 national census of clients in Australian treatment service agencies (Torres et al. 1995) indicates that only 13% were born outside Australia<sup>20</sup>; a finding which suggests that substance use problems are largely confined to the Australian-born population. However, by influencing the construction and presentation of health-related problems, cultural differences also impact rates of help-seeking and service utilization. Available data are thus a poor, or at the very least, unreliable indicator of actual rates of drug and alcohol problems among ethnic and cultural minority groups.

The Heroin Transitions study found that of 50 Indo-Chinese heroin users recruited from methadone maintenance programs, only 34% described their main route of use as smoking. However, the over-representation of IDU among treatment populations may also be a function of the association between length of using career and likelihood of seeking treatment. Injectors had been using heroin for significantly longer periods of time than smokers in both the Heroin

Transitions study (4.4 vs. 2.7 yrs;  $t_{95} = 3.1$ ,  $p = 0.003$ ) and the YAPP study (3.0 vs. 1.7 yrs;  $t_{95} = 4.3$ ,  $p < 0.0001$ ).

Ongoing ethnographic research suggests that there may be particular problems associated with presentation for treatment among Indo-Chinese heroin users, regardless of their route of administration.<sup>22</sup> Despite the stigma attached to intravenous use within the Indo-Chinese community, barriers to seeking treatment appear to be related to more general cultural factors which affect both smokers and injectors. Many of the barriers which prevent Indo-Chinese heroin users from seeking drug treatment also prevent or delay presentation for illness more generally among this population. A brief outline of these factors is presented here.

Many Indo-Chinese Australians retain a strong adherence to traditional forms of Chinese medicine and folk medicines and seek help from traditional healers.<sup>23</sup> For example, amongst the Vietnamese community these methods include coin rubbing (Cao gio), pinching the skin (Bat gio), cupping (Giac) and herbal steam inhalation (Xong) (Hoang and Erickson 1985). Additional therapies include the topical application and ingestion of herbal preparations and balms. These techniques are still practiced by the Vietnamese in Australia, particularly among the elderly, and most typically for the treatment of ailments such as flu, fever, and infections. There is a belief within the community that these treatments provide quicker and more effective symptomatic relief (see also Chung and Linh 1994).

Our research suggests that health promotion and disease prevention are alien concepts to many South East Asian migrants. Western concepts of preventative care may appear strange and meaningless to those who view the imbalance of ill health as a result of cosmic laws. The lack of awareness of preventative health care means that many people seek symptomatic relief so they can get back to work or get on with their lives. Others view preventative measures simply as a waste of money and time. Moreover, the greater significance attached to physical symptoms (cf. emotional or psychological problems) means that doctors or those in therapeutic roles who do not prescribe medication may be seen as bad doctors.

This reliance on traditional medicine has both positive and negative contributions to treatment outcomes. It may reduce unnecessary presentation for minor viral infections (e.g. common cold) and provide symptomatic relief and mental support. On the other hand, traditional medicine can jeopardize Western medical treatment by delaying presentation, making diseases harder to treat, and making their course more unpredictable.<sup>24</sup>

Health professionals who work with the Vietnamese community in the Cabramatta area frequently comment on their stoicism, tendency to bear misfortune and suffering silently, and their reluctance to reveal events which may be shameful to their families.

Participants in the ethnographic study indicated that the stigma associated with mental illness and drug addiction, affects not only the individual's status but the status of the family. Some families are reluctant to admit to the existence of these problems because such admissions may adversely affect the social and economic status of the family, or diminish the marriage prospects of other siblings (Niem 1989). The expectation that problems will be kept within and dealt by, the family unit, makes many young people reluctant to seek or accept help from outsiders. These features are exacerbated by a culturally based mistrust of government

agencies in many Indo-Chinese communities.<sup>xxxx</sup>

Indo-Chinese may also appear stoic, passive and reluctant to express strong emotions (McKelvey 1994). Pain and suffering are sometimes ignored or attributed to an inability to be righteous rather than to illness. These beliefs or attributes have obvious implications for the treatment of mental illness and substance abuse.<sup>xxxx</sup> Within the Indo-Chinese communities, there is a tendency to somatize illness and many Indo-Chinese develop somatic disorders which provide a legitimate reason to seek outside help and a more culturally acceptable way to signal distress (Gold 1992; Frye and D.Avanzo 1994). Many of the participants in our ethnographic study claimed that the concept of counselling did not exist in their culture.

Taken together, this system of beliefs about health and illness may serve to prevent or delay presentation for substance use treatment. The strength and persistence of these beliefs, even among the Australian-born, suggest that current (Western) models of drug and alcohol treatment will not be effective unless they take account of, and work with, indigenous concepts and beliefs (see also Boehnlein 1990).

### ***Indicators of a Preferred Treatment Modality***

After World War Two, many aging Chinese heroin/opium smokers in NSW were legally maintained on tincture of opium (Manderson 1993). However, there was no mention made of either tincture of opium or laudanum by any of the participants in the studies reviewed here. Serendipitous inquiries made during fieldwork in 1997 also failed to reveal any individuals with knowledge of this preparation.

Our research suggests that pharmacotherapies such as methadone may be unsuitable for this population given their age, lack of familiarity with concepts of health promotion and risk reduction, cultural preference for symptomatic relief, and associated lifestyle factors which may affect compliance with dosing regimes (see also Moore and Boehnlein 1991b). Participants themselves had little faith in the efficacy of substitution therapies such as methadone; from their perspective, the visible presence of Anglo-Australian methadone clients in Cabramatta was living testimony to the ineffectiveness of this treatment.

One way to determine the suitability of pharmacotherapies for this group is to include sufficiently large numbers in clinical trials which provide information, intensive supervision, and monitoring. This has been recognized by the Victorian agency Turning Point in its attempts to target Vietnamese, Cambodian, and Laotian opioid users for a feasibility trial of several alternative pharmacotherapies (Macfarlane Burnet Centre for Medical Research 1997:Appendix Two).

Home detoxification programs appear to present as a natural and logical choice for many Indo-Chinese heroin users. Some of the reasons for this have been elaborated above and include the stigma attached to heroin use and a strong desire to keep problems within the family, a distrust of government agencies, familiarity with self-medication, and a cultural propensity for symptomatic relief. However, the literature suggests that home detoxification programs are most appropriate for those with strong social support from family or friends (Campillo and Mabbutt 1996; see also Mattick and Hall 1996 for a review on detoxification).

The social isolation and stigma often experienced by Indo-Chinese heroin users may limit the potential benefits of home detoxification for this group and, in particular, for those who are young and without stable residential accommodation.

Young people also need support and effective follow-up during the post-detoxification period, especially those who have participated in home detoxification programs. There is a need for intensive case management approaches which incorporate relapse prevention, skills development, and alternative activities components (e.g. employment and training opportunities and recreation options). In the words of one young study participant:

*Quitting's easy but staying off is hard. I quit around 4 times in the last 3 months. It's too hard when all your friends are smoking it.* (Duc, 17 year-old Vietnamese-Australian male)

### **Transitions from Smoking to Injecting**

The studies reviewed here indicate that smoking is a popular route of heroin use, particularly among young people from South East Asian backgrounds. The proportion of those who reported exclusively or predominantly smoking the drug ranged from 28% to 62%. However, in each of the studies reviewed, more than one-third of respondents reported making a transition from smoking to injecting.

We found few socio-demographic correlates of the likelihood of making a transition to injecting. The Heroin Transitions study found that Indo-Chinese heroin users were marginally more likely than Caucasians to make a transition from smoking to intravenous use (Swift et al. 1997). This difference is likely to be a function of the fact that Indo-Chinese are more likely to commence heroin use by smoking. The London Transitions study (Griffiths et al 1992; 1994a) found that transitions were more likely among males. There were no gender differences in the likelihood of transitions in either the Heroin Transitions study or the YAPP study.

In contrast to the findings of overseas studies (Griffiths et al. 1994a, Grund and Blanken 1993), it would appear that reverse transitions are uncommon among this population. While none of the Indo-Chinese participants in the Heroin Transitions study reported making a reverse transition from injecting to smoking, one participant in the ethnographic study and 8 people in the YAPP study reported reverse transitions.

### **Factors That Might Prevent Transitions to Injecting**

Elsewhere in the world, ethnographic and qualitative studies have identified a number of socio-cultural factors which may influence the adoption of non-injecting routes of heroin administration. These include the social meaning of the chasing ritual, cultural proscriptions against injecting drug use, and fear of HIV infection (French and Safford 1989, Des Jarlais et al. 1992, Grund and Blanken 1993).

The cultural meanings and social statuses which attach to particular routes of administration clearly have important implications for intervention efforts. While none of the Indo-Chinese study participants mentioned fear of contracting HIV/AIDS as a factor influencing their route

of administration, those who exclusively or mainly smoked heroin believed that it was less .addictive, and .easier to quit, than injecting. Smoking heroin does not appear to be viewed as .using, by most Indo-Chinese. The term .using, appears to be reserved for intravenous or injecting use.<sup>6</sup> While smoking may serve to insulate Indo-Chinese heroin users from the label of .junkie,, for many heroin smokers injecting appears to be just over the horizon. However, the composition of user.s social networks and perceptions of social distance between different groups of heroin consumers (i.e. injectors and smokers, dealers and customers, .junkies, and users) may also play a role in facilitating or inhibiting transitions between routes of administration.

A recent Spanish study found that the most significant item determining the choice of the current route of use was achieving a .greater effect, with fear of contracting HIV the second most significant factor (Perez-Jiminez and Salvador Robert 1997). Our research also suggests that route of administration conditions bioavailability. The feasibility of heroin smoking as a stable route of administration yielding high bioavailability is dependent on the availability of reasonably pure heroin in a form suitable for smoking (i.e. heroin base). Two options are available: exerting pressure on the market to adapt in order to meet growing consumer demand for smokeable heroin and/or the widespread dissemination of a simple conversion process or .recipe, which would allow smokers to convert heroin from salt to base form.

The viability of continued involvement by young Asian people in heroin distribution may obviate economic needs to initiate intravenous use (see also Grund and Blanken 1993). The ethnographic research indicated that in the early stages of fieldwork, the relative abundance of dealing opportunities for young Asian people meant that they were in a better position to absorb the (perceived) wastage incurred by smoking the drug. The impact of recent changes in the street-level heroin market in Cabramatta suggest that this may be no longer the case. Indeed, the accounts presented here suggest that increased street-level law enforcement activity has created additional economic incentives to initiate injecting (see also Panda et al. 1997).

Finally, there is scope for intervention by health professionals in attempting to delay or prevent the transition to injecting. Resources could be directed at providing existing heroin consumers and potential consumers with a realistic appraisal of the relative risks or potential harms involved in both routes of administration. However, resources targetting current smokers should be developed as a matter of priority. It appears particularly important to debunk the myth that smoking is not .addictive, by informing young people of the risks of dependency irrespective of route of administration. Among this group, efforts should also be made to increase awareness of the potential health risks associated with intravenous use (e.g. risk of overdose, vascular problems, abscesses and infections). Educational materials could also be developed to target those .at-risk, of initiating heroin use- e.g. street-frequenting youth, school students in areas of high prevalence, and juvenile justice populations. Finally, health and treatment professionals could attempt to promote the role of non-injecting routes in reducing the spread of blood-borne viruses among existing IDU.

## **PART IV: CONCLUSIONS**

Although recent surveys of illicit drug use trends have identified heroin smokers in Sydney (Maher 1996d, O'Brien, Darke and Hando 1996) these studies have been unable to document the processes underlying the diffusion of non-injecting routes of administration. While South West Sydney has been subjected to extensive ethnographic study, we lack knowledge of how social, cultural, and economic factors may be implicated in the relative popularity of non-injecting routes in other parts of Australia.

The results of the studies reviewed here indicate that Indo-Chinese heroin users in South West Sydney are likely to commence heroin use by smoking the drug and to commence injecting drug use with heroin. However, the most common current route of use in two of the three studies was injecting, suggesting that many of those who initiate use by smoking make a transition to injecting.

These data indicate that, among this group, there is a small but significant risk for the transmission of HIV and other blood-borne viral infections. This risk may be related to a number of factors, including barriers to accessing clean injecting equipment, the circumstances of injecting (which may work to encourage riskier practices), and a lack of familiarity with risk-reduction messages. However, the research reviewed here also suggests that both the higher prevalence of smoking and the lower prevalence of concomitant drug use (primarily alcohol and benzodiazepine use) among Indo-Chinese heroin users may be protective factors against heroin overdose.

All three studies reviewed here indicate that Indo-Chinese heroin users experience significant barriers to accessing treatment and other health care services. Not only are most users unlikely to have accessed such services but many of those interviewed reported purchasing diverted supplies of methadone and benzodiazepines in an attempt to moderate their heroin use; suggesting that existing services are not delivered in a manner consistent with their needs and expectations. While home detoxification is a promising option, such programs may be most appropriate for those with strong social support from family or friends (Campillo and Mabbutt 1996, see also Mattick and Hall 1996). The social isolation and stigma experienced by many Indo-Chinese heroin users may limit the potential benefits of home detoxification programs for this group. Additionally, data from the YAPP study suggest that Indo-Chinese injectors may under-utilize existing NSEP programs, with 84% of injectors reporting that they mainly obtained needles and syringes from local chemists.

Existing services are clearly not geared towards heroin users from different cultural and religious backgrounds, especially those who are not fluent in English, or who have different attitudes and expectations in relation to drug use than the dominant Caucasian population. Efforts to disseminate safer using and harm reduction messages have not been successful in reaching the Indo-Chinese community. Data on HIV risk-taking behaviours among this group reported here and elsewhere (Louie et al. 1997) suggest that there is an urgent need for targeted education campaigns involving intensive outreach and peer education among Indo-Chinese heroin users.

To achieve these aims, the authors support recent calls for the establishment of a specialist Cambodian-Laotian-Vietnamese (CLV) Alcohol and Drug Service (Macfarlane Burnet Centre for Medical Research 1997). As outlined in the report of a National Consultation on Vietnamese Injecting Drug Use, such a service could be called upon to conduct action research on a range of issues, including user expectations of services, needs assessments, and projects aimed at improving service delivery to the target population, as well as direct service provision, appropriate referrals, the trial of new interventions and the provision of education and training to mainstream service providers on the specific needs of this group (Macfarlane Burnet Centre for Medical Research 1997:21).

On the research front, there are few studies which have examined patterns of illicit drug use among ethnic or minority cultural groups in Australia. In designing future studies, there is a need for research which combines ethnographic and epidemiological approaches in order to investigate the natural histories of heroin use among particular populations. The spread and patterning of heroin use and HIV, and other infectious agents, is clearly influenced by the social networks of injecting drug users. However, little is known about the structure, composition, and extent of variation in heroin users networks in and between particular areas, between different cultural and ethnic groups, and across different age groups - or how factors affect rates of initiation to heroin use and the spread of blood-borne viruses.

There has also been a lack of commitment to longitudinal research in the illicit drugs area. Prospective cohort studies that allow the detection and analysis of incident events may be time consuming and expensive but they are often the only way to obtain valid and reliable data about processes such as those involved in initiating heroin use and making transitions between routes of administration. Cohort designs that allow the identification of emergent processes as they occur can also provide a concrete basis for developing and implementing interventions designed to minimize drug-related harm.

This report indicates that little is known about the cultural lenses used to organize drug use in diverse ethnic communities. The ability of service providers to provide services which are culturally appropriate, age sensitive and, where necessary, drug specific, has been hampered by the lack of an integrated coordinated approach to research and resource development which takes seriously the needs, expectations, and experiences of drug users themselves. Ethnic minority and cultural groups are virtually absent from the research literature, although some evidence suggests that these groups tend to under-utilize services (Jackson and Flaherty 1994). These gaps in knowledge must be addressed before equity, in relation to both service provision and harm minimization efforts, can be established.

## **NOTES**

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<sup>1</sup> This reflects a more general state whereby non-English speaking communities are under-

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represented in research and tend to under-utilise services (Jackson & Flaherty 1994).

<sup>ii</sup> As noted by the author, .Many subjects named family and friends as services. (Liebman 1996:75).

<sup>iii</sup> While the parameters of this population remain unknown and the recruitment of subjects is not necessarily proportional to their distribution in the population, the sample selected for this study provides some representation of all the major segments of the street-level population identified. In this respect, careful ethnographic research and the use of mapping techniques to inform targeted sampling can ensure more accurate representation than survey research which relies on self-selected or opportunity samples (i.e. recruitment through snowballing, advertising in newspapers, notices in treatment centres).

<sup>iv</sup> Fieldwork suggests that heroin in Cabramatta is primarily distributed under a freelance model by individuals and multiple units of small entrepreneurs (mostly user-dealers) rather than mega-organizations or businesses. Entrepreneurial participation is relatively easy to accomplish but often short-lived and sporadic. Gang involvement in heroin distribution activities at the street level appears to be oriented toward the economic survival of individual members and may be best understood as a response to high levels of unemployment and economic and social marginality. In particular, the 5T, as a .cultural gang. (Skolnick 1989) would appear to exist prior to, and independent of, the illegal activities in which it is involved and is perceived by many young Vietnamese as familial resource which places strong emphasis on loyalty (brotherhood), reciprocity, respect, and physical protection.

<sup>v</sup> Two of the new injectors in this study were the victims of fatal .overdoses. during the study period. For a preliminary discussion of young people,s perceptions of, and reactions to, heroin-related deaths during this period see Maher 1996d. On the misleading nature of the term .overdose. in relation to heroin-related fatalities see Darke and Zador (1996).

<sup>vi</sup> In The Netherlands, the existence of cultural taboos in relation to injecting in the Surinamese community may have lead to an underestimation of the prevalence of injecting drug use among this population (Grund 1993:83).

<sup>vii</sup> These analyses are intended to be largely exploratory in nature, and thus no statistical adjustments were made for multiple testing. Any significant differences between groups should therefore not be considered definitive, but should be interpreted as areas worthy of further exploration.

<sup>viii</sup> Based on 322 samples of heroin obtained as undercover purchases or recovered from persons arrested for heroin possession in Cabramatta, Weatherburn and Lind (1995) estimated the mean purity to be 58.7% with nearly 80% of samples having a purity of at least 50%

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(range 13.2% to 79.8%) and an average price per gram of \$1,309 (range \$118 to \$11,667).

<sup>ix</sup> There appear to be at least two types of half-weights available for purchase in Cabramatta. Asian halves, which are reserved for Asian customers (usually dealers) typically consist of a weighed half gram - i.e. approximately 0.5gms. Aussie halves are closer to what is known as a streetie, and typically weigh between 0.3 and 0.4gms. The higher price and lower weight of Aussie halves, no doubt reflects the risks (as perceived by Asian weight dealers) involved in selling to Aussies. There is also a version of the half-weight in Cabramatta which is reserved for rank outsiders (i.e. non-Asian, non-regulars and non-locals). These tripper.s halves are the most expensive and may weigh less than 0.2gms.

<sup>x</sup> This is consistent with DEA estimates which indicate that the mean price for gram units of heroin dropped from \$450 to \$375 during 1995 (Hando et al.1996:34).

<sup>xi</sup> DEA estimates suggest that there was a decline in the average price of heroin purchased at the ounce level from \$9,100 to \$7,850 during 1995 (Hando et al. 1996:34). Our data and related research (Maher 1996d) suggest that ounces of heroin may sell for considerably less in Cabramatta.

<sup>xii</sup> A preliminary report on the Swiss program indicates that while injecting rooms have probably not been as successful as syringe exchange or methadone programs in preventing HIV infection, the benefits clearly outweigh the costs. (Dolan 1996).

<sup>xiii</sup> These data indicate that only 6% of treatment clients spoke a language other than English at home. This group were younger, more likely to be outpatients and less likely to have injected in the last year than their English speaking counterparts (Torres et al. 1995).

<sup>xiv</sup> Although Louie and colleagues (1997) found that 61% of Vietnamese injecting drug users in a Melbourne study (n=100) had previously sought treatment for their drug use, anecdotal reports suggests that the situation may be similar in Victoria where a recent call for participants in a feasibility study of alternative pharmacotherapies in Victoria noted that Vietnamese, Cambodian and Laotian opioid users current access drug and alcohol treatment services in Victoria in small numbers only. (Macfarlane Burnet Centre for Medical Research 1997:Appendix Two).

<sup>xv</sup> The situation is similar among Indo-Chinese populations in the United States (see Boehnlein 1990).

<sup>xvi</sup> Herbal remedies may also initiate cross reactions with western medicines, leading to atypical complications and making problems harder to diagnose. In other cases, alternative medicine simply is ineffective - which may put the patient in a dangerous position if the disease is treatable or controllable by Western medicine.

<sup>xvii</sup> Our research also indicates that Cambodian refugees are particularly reluctant to seek help

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for mental health problems (see also Frye and D,Avanzo 1994). In addition to a widespread belief within the Khmer community that mental illness is not treatable, refugees shy away from treatment in fear of being given ECT which was widely used in Cambodia under the Khmer Rouge regime. This group is especially likely to distrust doctors based on this experience, increasing the likelihood of self-medication.

<sup>xviii</sup> There is also a tendency in some South East Asian cultures to attribute certain physical and emotional disturbances to natural and supernatural forces. In particular, mental illness was frequently seen by young people as resulting from an offence against deity, spirits or demons and therefore interpreted as a punishment.

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