

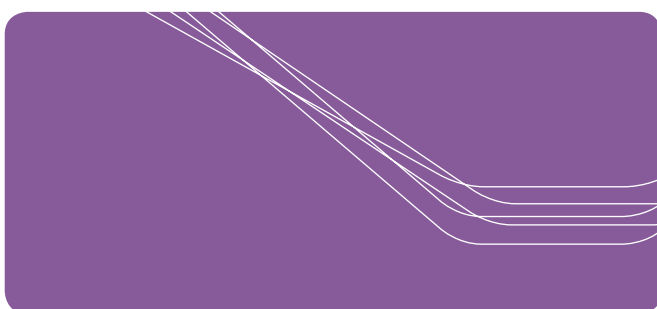


Turning Point
Alcohol & Drug Centre

**FINAL REPORT
NOVEMBER 2007**

ECSTASY, KETAMINE AND GHB

A REVIEW OF USERS AND VICTORIAN ALCOHOL AND OTHER DRUG TREATMENT INTERVENTIONS





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November 2007

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ACRONYMS

ACSO-COATS	Australian Community Support Organisation - Community Offenders Advice and Treatment Service
ADIS	Alcohol and Drug Information System
AOD	Alcohol and other drugs
COT	Course of Treatment
DHS	Department of Human Services
DPSB	Drugs, Policy and Services Branch of the DHS
EDRS	Ecstasy and Related Drugs Reporting System
EKG	Ecstasy, ketamine and/or GHB
ERD	Ecstasy and related drugs
GHB	Gamma hydroxybutyrate
GP	General Practitioner
MDMA	Methylenedioxymethamphetamine (Ecstasy)
NDSHS	National Drug Strategy Household Survey
STGA	Significant Treatment Goal Achievement/s
SP	Service Provider

GLOSSARY

Drug diversion: Entails diversion of drug users away from the criminal justice system into drug treatment (National Illicit Drug Strategy Diversion Initiative – Victorian State Reference Group, 2002). As part of the National Illicit Drug Diversion Strategy, the drug diversion programs operating in Victoria include: Police Illicit Drug Cautioning, Cautioning with Cannabis, Koori A&D diversion worker, Rural Outreach Diversion Workers (RODW), CREDIT Bail Support Program, Deferred Sentencing, Children’s Court Clinic Drug Program and the Drug Treatment Order (DTO) (VDHS, 2005). For the purposes of this report, drug diversion predominately refers to the Police Illicit Drug Cautioning (non-cannabis) program.

Police Illicit Drug Cautioning (non-cannabis) program: An early intervention for low-level users of illicit drugs other than cannabis (e.g. heroin, ecstasy, amphetamines) or first-time offenders. A person apprehended by the Police for use or possession of an illicit drug (non-cannabis) may be offered a caution on the condition that they attend a clinical drug assessment and attend at least one session of any prescribed drug treatment (National Illicit Drug Strategy Diversion Initiative – Victorian State Reference Group, 2002; VDHS, 2005).

Non-voluntary clients: Refers to all individuals referred to mandated AOD treatment by the criminal justice system (inclusive of drug diversion, ACSO-COATS and forensic clients).

Course of Treatment (COT): A COT is a period of service provision between a client and alcohol and drug worker/s, with specified dates of commencement and cessation (VDHS, 2002).

Client: A client refers to individuals, both drug users and non-drug users, who access DHS-funded specialist AOD services. Non-users may include a partner, family or friend of the primary drug user. A client may receive more than one AOD course of treatment, at more than one agency (VDHS, 2002). Note: ADIS data for this report is based on ‘drug users’.

Brief intervention (BI): Refers to the delivery of any intervention within a short duration (between 5 minutes and 2 hours) by a professional in an attempt to change a person’s drug use (National Centre for Education and Training on Addiction, 2004). It is based on the principle that a person can manage their own drug use and associated issues if they are provided with the appropriate information or other interventions at the right time (Australian Drug Foundation, 2001).

Motivational interviewing (MI): A counselling technique used to enhance intrinsic motivation to change by exploring ambivalence and considering possibilities for change.

It encourages clients to take responsibility for their decisions and prepares them for change. MI focuses on the attitude and values of the participant, exploring the positive and negative consequences of drug use, while facilitating decision-making towards positive behaviour change (Addy & Ritter, 2000; National Centre for Education and Training on Addiction, 2004).

Cognitive Behavioural Therapy (CBT): Therapeutic interventions aimed to help clients overcome irrational thoughts and develop coping and living skills. The theory aims to change the way people think about their own behaviour (Australian Drug Foundation, 2001; National Centre for Education and Training on Addiction, 2004).

Harm reduction strategies: Harm reduction recognises that most people regularly use drugs of some type, such as alcohol. Harm reduction focuses on reducing drug use or changing drug use behaviour so it is less harmful to the drug user. Harm reduction strategies include, but are not limited to, abstinence (Australian Drug Foundation, 2001).

Relapse prevention: Interventions aimed to teach and help clients develop cognitive and behavioural coping strategies that will enhance their capacity to manage high-risk situations that precipitate relapse (Dietze, Lanagan et al. 2004).

EXECUTIVE SUMMARY

In 2006, the Drugs, Policy and Services Branch of the Department of Human Services commissioned Turning Point Alcohol and Drug Centre to undertake exploratory research regarding ecstasy, ketamine and GHB (EKG) use in Victoria. Specifically, the study focussed on the prevalence of EKG use, the characteristics of EKG users, AOD treatment utilisation and service responsiveness in Victoria. A range of data was utilised, including information from AOD service providers, GPs and EKG users, and secondary data sources such as ADIS and the EKG literature.

In the five years between 2000/01 and 2005/06, 950 Victorian clients presented to AOD treatment with ecstasy as their primary drug of concern. Approximately 60% of these clients were referred via the criminal justice system for drug diversion sessions. During the same period, over 6,000 clients presented with ecstasy as a secondary drug of concern. Drug diversion clients comprised 23% of this group.

Ecstasy users were typically male, aged less than 40 years, and more than half were employed or full-time students. Polydrug use was common among this group, particularly where ecstasy was the secondary drug of concern. EKG users interviewed in this study had varied education backgrounds and drug use histories. Frequently polydrug users, participants swallowed, snorted and occasionally injected these drugs. While all EKG participants had used ecstasy, this drug was rarely considered the primary drug of concern, nor was it the motivation for seeking treatment. Most EKG users were aware of, and had accessed, AOD treatment, although a number of barriers to access were identified. These included a lack of confidence in treatment providers, confidentiality concerns and previous negative treatment experiences.

CCCC was the predominant treatment delivered to ecstasy users. Typically, CCCC treatment incorporated cognitive behavioural therapy (CBT), motivational interviewing, harm reduction strategies, and the provision of information and education. Clients' ambivalence about AOD treatment and a lack of confidence in service providers' knowledge of EKG treatment were two of a number of barriers to service access. Case studies illustrate the challenges of service provision to different EKG users groups.

EKG users did not generally perceive that their drug use warranted AOD treatment intervention. Improving user awareness of the harms of EKG use, and avenues of support were identified as a key area for attention. Public health promotion via non-treatment sector sites such as universities, schools, nightclubs, bars, Internet sites and peer education networks were identified as potential sites for delivering information. Improved client information resources regarding EKG were also required.

While the good work of AOD service providers was noted, workforce development around EKG use was another area for attention. Training needs analysis of the sector was

required, followed by targeted training and information dissemination. Raising the profile of EKG use and its harms was key to ensuring that service providers, as well as users, attended to EKG use.

This report has provided preliminary information about Victorian EKG users and AOD treatment. Greater awareness of, and attention to, the needs of Victorian EKG users and service providers will enhance service responsiveness to EKG users.

1 INTRODUCTION

1.1 Background

Anecdotal evidence indicates that ecstasy, ketamine and GHB (EKG) use is increasing among drug users in Victoria and across Australia. Particularly among young people, the use of EKG is resulting in greater physical and mental health concerns, and contact with the criminal justice system. A lack of evidence-based research to support such reports limits understanding of the prevalence and impact of EKG on users. In turn, knowledge of current service capacity and responsiveness to users' needs remains limited.

The risks associated with the use of these drugs have been well documented (Ferigolo, Machado et al. 2003; Green, Mehan et al. 2003; Britt and McCance-Katz 2005; Degenhardt, Copeland et al. 2005, Maxwell and Spence, 2005). Despite this, recorded access to specialist alcohol and other drug (AOD) treatment services by such clients remains very low. Only 0.4% of all Victorian Department of Human Services (DHS) funded AOD courses of treatment (COT)¹ (2004-05) were provided to clients² presenting with ecstasy as the primary drug of concern³ (Victorian Department of Human Services, 2007). National data from 2002-03 also indicates low rates of AOD treatment provision to clients where ecstasy was the principal drug of concern (AIHW 2005)⁴. Similarly, very few regular ecstasy users who took part in the 2006 Victorian Ecstasy and Related Drugs study (EDRS) reported utilising health and treatment services in relation to their drug use (Johnston, Quinn et al. 2007).

Knowledge about AOD treatment provision to clients with problematic ecstasy, GHB and ketamine use is limited. There exists little research examining the type of interventions sought by such clients, those interventions most appropriate to them, those provided within the context of an existing AOD service system and the effectiveness of these treatments.

In Victoria, and across Australia, attention is now being drawn to better understanding and responding to EKG users. The current research, commissioned by the Victorian DHS, aims to contribute to knowledge about EKG use, users and service responsiveness. It provides an opportunity to explore the issues related to AOD treatment for EKG users, specifically those relating to:

¹ The unit of analysis is course of treatment (COT) and not actual clients. The Victorian Department of Human Services defines a COT as the period of contact, within defined dates of commencement and cessation, between a client and a treatment provider or team of providers (VDHS, 2002).

² Clients of specialist AOD services include both drug users and non-users. Non-users may include partner, family or friend (VDHS, 2002).

³ Victorian treatment data (ADIS) does not individually identify ketamine or GHB as drugs of concern. A client's concern with ketamine and GHB may be captured under 'Other drugs, not further defined' or as 'Stimulants and Hallucinogens not further defined'. ADIS data aligns with the national standard in this respect (Source: DHS representative).

⁴ Based on closed treatment episodes.

- The prevalence of EKG use
- The characteristics of EKG users
- Harms associated with EKG use
- Treatment needs of EKG users
- Treatment access by EKG users
- Current treatment provision to EKG users
- Barriers to the treatment of EKG users
- Service system improvements required to meet the needs of EKG users

1.2 Research questions

This study takes an important first step in better understanding EKG users, their needs and AOD service system responsiveness. It contributes to policy and service development with a view to reducing AOD-related harms to ecstasy, ketamine and GHB users through service system improvements.

The study addresses the following specific questions:

1. What interventions (if any) do users of ecstasy, ketamine and GHB currently receive and from whom within the specialist AOD service system?
2. What interventions (if any) do users of ecstasy, ketamine and GHB currently want and don't receive?
3. What therapeutic interventions are currently provided to users of ecstasy, ketamine and GHB by GPs?
4. What are the real and perceived barriers:
 - For users of ecstasy, ketamine and GHB in seeking intervention
 - In providing interventions to users of ecstasy, ketamine and GHB
5. Do treatment services need to improve responses to users of ecstasy, ketamine and GHB and how should this occur?

Specific information sources were identified to inform each of the research questions. These are tabulated in Appendix 1 and outlined in detail below.

1.3 Method

This study used a mixed-methods design combining primary and secondary data sources. These included:

- A literature review
- ADIS data
- Semi-structured interviews with:
 - Service providers (specialist AOD clinicians and GPs) (N=15)
 - EKG users (treatment seekers and non-treatment seekers) (N=16)

Data sources were triangulated to strengthen the findings. Each data source is described below.

1.3.1 Literature Review

A search of international and national literature was undertaken, with a focus on key documents, seminal research, and reviews. Literature was largely sourced from the PubMed bibliographical database utilising key words relating to drug type, use and treatment intervention. Members of the Steering Committee also provided key documents. The literature review summarises profile and prevalence, harms and other issues related to the use of EKG and the provision of drug treatment to EKG users.

A number of key documents were identified in the literature review. These included:

- Dunn, M., Degenhardt, L., Campbell, G., George, J., Johnston, J., Kinner, S., et al. (2007). *Australian trends in ecstasy and related drug markets 2006: Findings from the Ecstasy and related Drugs Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre.
- Degenhardt, L., Darke, S., & Dillon, P. (2002). GHB use among Australians: characteristics, use patterns and associated harm. *Drug and Alcohol Dependence*, 67(89-94).
- Lankenau, S. E., & Clatts, M. C. (2005). Patterns of Polydrug Use Among Ketamine Injectors in New York City. *Substance Use and Misuse*, 40(9-10), 1381-1397.

- Ferigolo, M., Machado, A., Oliveira, N. B., & Barros, H. (2003). Ecstasy intoxication: the toxicological basis for treatment. *Revista do Hospital das Clínicas*, 58(6), 332-341.

These documents provided key and recent reference material for the literature review.

1.3.2 Alcohol and Drug Information System (ADIS) data

ADIS data is collated by the DPSB, DHS from information provided by Victorian DHS-funded AOD treatment providers. Only data for ecstasy were available, as Victorian treatment data (ADIS) does not individually identified GHB and ketamine as drugs of concern. Treatment data related directly to ketamine or GHB may be captured under 'Other drugs, not further defined' or as 'Stimulants and Hallucinogens not further defined'.

ADIS data informed the research in two ways:

1. By identifying Victoria's 15 largest AOD service providers based on clients treated for ecstasy (primary drug of concern) between 2004/05 and 2006/07. This list formed the basis of service provider and EKG user recruitment.
2. By providing aggregate data on number of clients and/or COT⁵ (2000/01-2005/06) where ecstasy was reported as the primary or secondary drug of concern for a number of key variables. These data were used to describe the characteristics of ecstasy clients and the AOD treatment provided to this group.

1.3.3 Semi-structured interviews

The inclusion of a range of interview participants ensured that a variety of perspectives were represented. Interviews were conducted with service providers and EKG users.

1.3.3.1 Service providers

Two groups of service providers were invited to participate in this study. These included:

1. Specialist DHS-funded AOD service providers who provided treatment to clients presenting with a primary drug concern relating to ecstasy⁶
2. General Practitioners (GPs) who provided AOD treatment to ecstasy, GHB and ketamine users

⁵ ADIS provided data by client and/or COT. The use of two units of analysis is deliberate as COT is the best measure for point in time variables such as age and region, whereas Client is generally used for fixed variables such as gender and country of birth.

⁶. Only data for ecstasy were available, as ADIS does not individually capture treatment data on GHB and ketamine.

Fifteen DHS-funded specialist AOD treatment services were selected based on their provision of treatment to ecstasy users⁷. Focusing on the largest providers of AOD treatment to ecstasy users ensured the experiences of workers with the most exposure to this client group would be drawn upon.

Ten specialist AOD services, including nine adult services and one youth specific service were successfully recruited to the study. The manager of each of the participating services nominated senior clinicians who had provided an episode of care to clients where the primary drug of concern was ecstasy. Semi-structured interviews were conducted with 12 staff (11 interviews) from the participating services. Clinicians with a range of experience and expertise were interviewed including:

- Forensic clinicians (n=6)
- CCCC clinicians (n=5)⁸
- Clinical nurse consultant (n=1)

A group of GPs was identified in consultation with the Project Steering Committee. GPs provide primary care to users of EKG, and offered scope for exploring treatment access, service provision and issues pertaining to these patients. Three GPs were successfully recruited to the study.

In total, 15 service providers were interviewed, exceeding the original target of 10 (see Appendix 2). Participation involved a semi-structured interview (see Appendix 3) of approximately 45 minutes. Service providers also supported the study by displaying an EKG user recruitment poster in the service waiting area (see Appendix 4).

1.3.3.2 Ecstasy, ketamine and/or GHB users

The project aimed to recruit 20 EKG users for participation in semi-structured interviews. Two groups of users were sought: EKG clients attending AOD treatment, and EKG users concerned about their drug use, but who had not sought treatment. A recruitment strategy to capture these user groups was developed and implemented. It included displaying recruitment flyers at 10 specialist AOD services (via recruited service providers), one community health centre and one university health service. Ten EKG users responded to the recruitment poster placed at participating services.

Notices were also posted on three websites: spraci.com, smilepolice.com, and clubvibes.com. These websites provide information to people about entertainment events and access to online forums, and had proved successful for recruiting illicit drug users in

⁷ These 15 services were identified in ADIS data as treating the highest number of clients where ecstasy was the primary drug of concern.

⁸ Four CCCC clinicians worked with forensic and voluntary clients; one worked with voluntary clients.

previous research undertaken by Turning Point Alcohol and Drug Centre. Only four EKG users responded to the Internet postings.

Participants were also recruited via 'snowball' sampling. This approach relies upon research participants passing on details about the study to their peers (Bryman, 2001). Snowball sampling is commonly used to access illicit drug users (Dunn et al, 2006) and in the current study two participants were recruited via this method.

Overall, EKG user recruitment to this study was disappointing. The low number of respondents raised questions about the effectiveness of the recruitment strategies and the appropriateness of the recruitment notice wording. Refer to the Limitations section below for further discussion of this issue.

To be eligible for this study, user participants had to be aged 16 years or older and self-identify concerns about their use of ecstasy, ketamine and/or GHB. Having sought or considered treatment was not a requirement. Participation in the semi-structured interview was entirely voluntary and included a reimbursement of \$30.

Semi-structured interviews were conducted with a total of 16 EKG users (face-to-face interviews: n=7; phone interviews: n=9). Interviews explored general demographics, drug use, concerns about EKG and access to services (see Appendix 5). Qualitative interview data were thematically analysed using Nvivo 7™, and quantitatively analysed via SPSS to produce descriptive statistics.

1.3.4 Project Steering Committee

A Project Steering Committee supported the data collection, analysis and reporting phases of this project. The Project Steering Committee brought together members representing DHS, DPSB, the AOD treatment sector, Addiction Medicine, RaveSafe and an expert researcher. The role of this group was to guide and inform the design phase of the project and assist in identifying service providers, data sources, recruitment sites and other information. The group met four times during the course of the project to discuss the scope, methodology and preliminary findings. A final meeting focused on providing feedback on the draft report, validating the data and discussing the findings within the policy context, with a view to future directions.

1.3.5 Limitations

Data collection for this project was limited by low recruitment. Despite their efforts, the project team encountered significant challenges in recruiting a broad range of service providers and EKG users to the project. The total of 16 EKG users recruited was four short of the original target.

Among the EKG user group, the low number of responses may be partly due to the wording of the recruitment poster and web-based notices. The poster had been designed to recruit people concerned about their EKG use. The question 'Do you have any concerns about your ecstasy, ketamine and/or GHB use?' was prominently displayed in the recruitment poster and web-based notices.

The use of the word 'concern' may have contributed to the slow and low response rate of EKG users. During the interviews, the researchers found that EKG users related better to terms such as 'worried' or 'problems', rather than 'concern'. Users reported either that a) use of one or all drugs (EKG) had no negative impact on them, or b) EKG use did have a negative impact on their life, but not enough to be concerned about. Clearly, where users do not perceive their EKG use to be a concern, recruitment posters or notices using this language will be limited in their effect.

More effective recruitment would frame posters and notices to explore whether EKG use has a negative impact on the user's daily activities and overall sense of wellbeing, with particular attention to known disorders (e.g. sleep, appetite, mood, memory, relationships). Targeting more frequent users i.e. people who use at least weekly may be another way of enhancing research recruitment.

Although the target of 20 was met, the service provider group does not represent the diversity sought. Only three GPs were recruited, with the remainder of the group predominantly CCCC AOD counsellors. There was, however, a good split between voluntary and forensic clinicians, reflecting work with both voluntary and non-voluntary client user groups.

The findings of the current research must be considered within the limitations outlined above. This research is the first to explore EKG users' needs and AOD service system responsiveness. The value of exploratory research such as this lies in its capacity to provide a snapshot of EKG use, treatment provision and barriers within the current context of the Victorian treatment service system.

2 LITERATURE REVIEW

The use of, and public health response to, EKG continues to raise questions for researchers, policy makers and health professionals. While the use of ecstasy has increased, population based data are limited for ketamine and GBH. However, annual surveys of regular ecstasy users and other targeted research provide an indication of ketamine and GHB use.

The most recent Australian general population survey, the 2004 National Drug Strategy Household Survey (NDSHS), puts the rate of 'ever' use of ecstasy at 7.5% of the Australian population aged over 14 years of age. The rate of 'recent'⁹ use was reported to be 3.4% (AIHW 2005a). This was an increase from 2001 where 6.1% of the population had ever used ecstasy and 2.9% had recently used ecstasy (AIHW 2002). The 2004 NDSHS reported that approximately 1% of the Australian population had ever tried ketamine, with 0.3% using recently. GHB has been used by 0.5% of the Australian population, with 0.1% having used recently (AIHW 2005a). Prior to 2004, ketamine and GHB were not individually recorded by the NDSHS but combined under the category of 'ecstasy and other 'designer' drugs' (AIHW 2005a).

This review examines the profile, harms, and other issues related to the treatment of EKG users.

2.1 Ecstasy

2.1.1 Profile and Prevalence

Ecstasy (methylenedioxymethamphetamine, MDMA) is a synthetic psychoactive drug, often referred to as a party or club drug due to its strong association with use at nightclubs or raves (Degenhardt, Barker et al. 2004; Jenner and McKetin 2004). Ecstasy was synthesised in the early twentieth century but did not become illegal in the United States until 1985 (Department of Justice 2005). Ecstasy is an indirect serotonin agonist that induces the release of serotonin and also blocks its re-uptake to the brain. Serotonin neurons are responsible for regulating mood, sexual activity, sleep, sensitivity to pain, memory and temperature regulation (Degenhardt, Copeland et al. 2005). Ecstasy also affects the regulation of dopamine and noradrenaline (Shulsin 1986). The effects of ecstasy are generally observed between 20 and 60 minutes after ingestion. Peak ecstasy plasma levels occur two hours after oral administration and residual effects occur for up to 24 hours from the last dose (Ferigolo, Machado et al. 2003).

Ecstasy can be taken orally, intranasally, rectally and, less commonly, intravenously (Ferigolo, Machado et al. 2003). It has both stimulant and hallucinogenic properties. Ecstasy produces stimulant-like effects of increased energy, well-being, euphoria,

⁹ Recent refers to use of the drug in the 12 months prior completion of the survey (AIHW, 2005).

increased extroversion and self-confidence. It is also understood to induce feelings of understanding, empathy, intimacy, moderate derealisation and slight perceptual changes (Ferigolo, Machado et al. 2003; Green, Mechan et al. 2003; Levy, O'Grady et al. 2005). It is also reported to increase the sensuality of sexual experience for both men and women but decrease the ability to reach orgasm (Degenhardt, Copeland et al. 2005).

Ecstasy is the third most widely used illicit drug in Australia (AIHW 2005a). According to the most recent NDSHS, 20-29 year olds are the most likely age group to use ecstasy, with the average first age of use 22.8 years. Of recent users of ecstasy, 47.5% report use once or twice a year and 6.3% report use daily or weekly. The age range of 14-19 years reports the highest weekly use of ecstasy (12.1% compared to 5.5% for 20-29 year olds). Males are more likely to use ecstasy than females and 76.3% of recent ecstasy users average 1.5 pills per session (AIHW 2005a). There is some research to suggest that ecstasy use has spread beyond the 'club culture' (Duff, Johnston et al. 2007). The 2004 NDSHS found that 63.3% of recent ecstasy user had taken ecstasy at raves and dance parties (with many also reporting use at public establishments (57.5%), private parties (53.3%) and at home (47.9%) (AIHW 2005a).

The demographic data of participants in the 2006 Ecstasy and Related Drugs Reporting System (EDRS), a study of 'regular' ecstasy users, are consistent with those reported in the NDSHS (AIHW 2005a). The EDRS national sample were well educated and either studying or employed at the time of survey. Few had criminal histories or had been involved in drug treatment. The mean age at which ecstasy was used for the first time in this sample was 18, with regular use commencing at age 19. Bingeing on ecstasy was commonly reported by regular users (45%) over a median length of three days (Dunn, Degenhardt et al. 2007).

Ecstasy is frequently used concurrently with other drugs as part of polydrug patterns of use (Degenhardt, Barker et al. 2004; Levy, O'Grady et al. 2005; Carlson, McCaughan et al. 2004). The most recent EDRS shows that 93% of the sample reported usually using other drugs with ecstasy (Dunn, Degenhardt et al. 2007). The findings from the 2004 NDSHS also reflected high levels of polydrug use, with 82.6% of ecstasy users reporting using alcohol, 56.8% using cannabis, and 38.5% using amphetamines, concurrently with ecstasy (AIHW 2005a).

2.1.3 Harms

It is difficult to estimate the prevalence of acute ecstasy related harms, as it is so often used in combination with other drugs. The adverse effects of ecstasy are known to be acute intoxication, neurotoxic effects, increased blood pressure, hypertension, hyperthermia, hyponatremia, tremors, cognitive disturbances, irritability, fatigue, nausea, vomiting, decreased appetite, weight loss, and trismus (Ferigolo, Machado et al. 2003; Green, Mechan et al. 2003;; Degenhardt, Copeland et al. 2005). Psychiatric

disturbances such as hallucinations, flashbacks, panic attacks, anxiety, depression, thought disorder and psychosis have also been associated with ecstasy use, although it is likely that these disturbances emerge in individuals who are already 'at risk' for mental health problems (Britt and McCance-Katz 2005). Maxwell (2005) noted that those with a higher risk of developing problems from ecstasy are those with a family history of heart condition or psychiatric disorders, or those taking anti-depressants, weight-loss or blood pressure medication.

A review of ecstasy fatalities in the UK showed that of 202 fatalities from 1996 to 2002, 17% involved only ecstasy while the remaining deaths involved ecstasy with one or more other drugs (Schifano, Oyefeso et al. 2002 cited in Maxwell 2005). Deaths from ecstasy have been attributed to dehydration, stroke, hyperthermia and hyponatremia (Koesters, Rogers et al. 2002, cited in Degenhardt, Copeland et al. 2005). Between 2001 and 2004, 51 deaths in Australia were attributed primarily to drugs sold as ecstasy. Fowler and Kinner (2007) report that the number of deaths was relatively few given the prevalence of ecstasy use in the general population.

Those who inject ecstasy are likely to be at increased risk of harm arising from more rapid onset of effects, which increases the strain on the cardiovascular system and liver. Injecting drug use also carries the risk of vein damage and blood-borne virus transmission (Dean and Whyte 2004; Degenhardt, Barker et al. 2004). The Victorian EDRS sample identified physical harms, psychological harms and neuropsychological harms as perceived risks associated with their own use of ecstasy (Johnston, Quinn et al. 2007). Other harms reported by ecstasy users included financial, occupational and relationship problems (Dean and Whyte 2004).

A survey of regular ecstasy users in Australia revealed that 90% of the sample perceived some risks associated with ecstasy use. The most prevalent risk was that of consuming a substance of unknown content (White, Degenhardt et al. 2006). Similarly, the vast majority (96%) of the 2006 Victoria EDRS sample identified perceived risks associated with their own use of ecstasy. However, harms related to illicit status (unknown purity/contaminants) was the fourth most common response, listed by 29% of the sample. Based on a composition analysis of illicit tablets seized in Victoria, 88% of tablets identified as ecstasy contained only MDMA. The remaining 12% of ecstasy tablets contained multiple substances (Quinn 2004). Given there is no fixed recipe for illicit drugs, the composition of some ecstasy tablets will continue to vary.

Many ecstasy users recognised the harms associated with the drug (Levy, O'Grady et al. 2005). In a study looking at young people's ecstasy and related drug (ERD) use in Victoria, researchers found that users described a positive linear relationship between harms and drug use. Heavier use was associated with more harm. However, users also tended to perceive no harms for themselves (Duff, Johnston et al. 2007). According to a study by Panagopoulos and Ricciardelli (2005), ecstasy users actively employ a range of

harm-reducing strategies that are both drug-specific and behavioural. Similarly, Levy and colleagues (2005) found that ecstasy users had a basic understanding of the content of pills and the effects on brain and bodily functions. Despite this, most users report that the benefits of use outweigh the negatives, and felt that they would not be at risk if they just used 'for a few years' (Levy, O'Grady et al. 2005).

2.1.3 Treatment

There are conflicting views about whether dependence (and therefore withdrawal) is possible with ecstasy. The psychopathological consequences of ecstasy are not well understood and the treatment approach is complicated by a lack of research in this area (Akhondzadeh and Hampa 2005).

Although treatment seeking is not typical among ecstasy users, there is evidence emerging that some people are experiencing problems related to their ecstasy use (Degenhardt, Barker et al. 2004; Soar Turner et al 2006). In Australia in 2003-04, there were 508 presentations to treatment services where ecstasy was the principle drug of concern, reflecting 0.4% of total presentations to treatment services. Importantly, 198 of these presentations were in Victoria, which had the highest rate of presentations for ecstasy in Australia (AIHW 2005b). Regular ecstasy users who took part in the 2006 Victorian EDRS reported minimal use of health and treatment services. Six percent of the sample was currently in drug treatment at the time of the survey and 22% of participants had accessed a general health or medical service. Of this 22%, most spoke with GP (59%) (Johnston, Quinn et al. 2006).

Internationally, a file review of 15 years of presentations to a Texan treatment centre revealed 1398 presentations where ecstasy was cited as a primary, secondary or tertiary concern. The number of such presentations increased from nine in 1989 to 409 in 2003 (Maxwell and Spence 2005), suggesting that treatment demand for ecstasy may be increasing markedly in this jurisdiction. This review also revealed that ecstasy users completed treatment 39% of the time, which was the third highest treatment completion rate among club drugs (following GHB and Rohypnol) (Maxwell and Spence 2005).

DirectLine, a 24-hour telephone counselling service, information and referral service provides assistance to Victorians affected by AOD issues. In 2005, DirectLine responded to 401 calls where ecstasy was identified as a drug of concern, accounting for 0.90% of the total calls made to the service. The proportion of ecstasy-related calls was down from previous years (1.06% in 2004 and 1.17% in 2003) (VDHS, 2007).

There is no antidote for ecstasy overdose (Maxwell and Spence 2005). It is recommended that emergency treatment for ecstasy overdose deliver supportive care similar to treatment for amphetamine overdose. Temperature reduction is recommended and presenting agitation and seizures should be treated with benzodiazepines such as

diazepam (O'Connor 1994 cited in Britt and McCance-Katz 2005). Management of drug-induced stress should occur along standard symptomatic lines (Seivewright, McMahon et al. 2005).

There is very little written about ecstasy withdrawal in a clinical setting, as it is rarely a presenting drug issue. There is no documented withdrawal phase for ecstasy but there is a 'coming down' period similar to that of a hangover. This hangover (caused by depletion of serotonin) is characterised by insomnia, fatigue, depressed mood and dysphoria (Ferigolo, Machado et al. 2003; Morton 2005). This period of low mood generally persists for one to several days and has been known as the 'midweek blues' or 'blue Tuesday' (Morton 2005). Despite this, there is some data to suggest that in a small number of ecstasy users, persistent effects can last up to 2 weeks (Ferigolo, Machado et al. 2003). Other studies suggest that an increase in aggression and anger occurs after taking ecstasy, peaking four days after use (Parrot, Buchanan et al. 2002).

According to Baker et al (2004), because ecstasy users do not generally present for treatment, interventions need to be opportunistic. One approach identified by the authors was the brief intervention, designed to motivate the individual and promote behaviour change. Settings for these opportunistic brief interventions included emergency departments, primary health care, law enforcement settings, dance parties and popular Internet sites. In general, psychosocial treatment approaches appropriate for cocaine and amphetamine users would also be likely to be suitable for ecstasy users (Baker, Gowing et al. 2004).

Marsden et al (2006) examined a psychosocial approach for the treatment of ecstasy. This randomised trial evaluated a brief motivational intervention versus written health risk information only, provided to young ecstasy and cocaine users in the UK. There were no significant differences in abstinence outcomes for the cocaine or ecstasy group compared to the control group. The authors suggested that research contact, involvement and assessment with study personnel had positive reactive effects for both groups (Marsden, Stillwell et al. 2006). It is important to note that the participants in this study were not 'dependent' users, but 'users', which may explain the lack of suitability for this type of intervention for non-dependent or problematic users.

In a review of pharmacotherapies trialled for psychostimulant dependence (with psychostimulants being defined by the authors as cocaine, amphetamine and ecstasy), Shearer and Gowing (2004) made no specific reference to any medications trialled for the use of ecstasy, but noted that many have been trialled for cocaine and amphetamine.

In 2004, Turning Point Alcohol and Drug Centre was commissioned to provide training on 'Party Drugs'. This included providing in-depth information on ecstasy, ketamine and GHB. Training was conducted in 2004-05 with a total of 107 staff working in DHS-funded specialist AOD services across the eight Victorian health regions. More recently, a new

national training program has been developed to assist health professionals such as medical practitioners, nurses and AOD workers to manage and treat users of psychostimulants. Commissioned by the Commonwealth Department of Health and Ageing, and developed by Turning Point, 'From GO to WHOA' is a training package on psychostimulant drugs, including ecstasy (Turning Point, 2007).

2.2 Ketamine

2.2.1 Profile and Prevalence

Ketamine is an hallucinogen used as an anaesthetic for humans and animals since the 1960's and was first used for non-medical purposes (i.e. recreation) in the early 1980's (NIDA, 2004). The use of ketamine leads to a blockade in calcium flow, and is also associated with increased dopamine release and activation of serotonin systems (Cotman and Monaghan, 1987 cited in Britt and McCance-Katz 2005). The primary subjective effects of ketamine use is a feeling of disassociation (Lankenau and Clatts 2005), physical immobilisation, social detachment, distorted sense of space and indistinct awareness of time, usually lasting up to an hour (Maxwell 2005). Ketamine is also reportedly used to aid relaxation, enhance mood and heighten sexual experiences (White, Degenhardt et al. 2006).

Ketamine comes in various forms including a liquid, pill, and powder. Ketamine can be snorted, swallowed, smoked and injected (NIDA, 2006). Most users snort ketamine 'bumps', which are small snorts usually measured by a tiny spoon provided with the container in which it is purchased (Topp et al. 1998 cited in Degenhardt, Copeland et al. 2005). Dillon and colleagues (2001) found that for 85% of the sample of 100 ketamine users, snorting was the preferred route of administration, although 11% reported that their preferred route of administration was intravenous. Overall 29% reported ever having injected ketamine, while 6% had injected ketamine in the six month preceding the study. Reports of intravenous and intramuscular injection of ketamine are increasing according to a study conducted in the United States (Lankenau and Clatts 2005).

The 2004 NDHSH reported that 164,000 Australians have 'ever' used ketamine in their lifetime (1.0% of the general population). As with ecstasy, 20-29 year olds are the most likely age group to use ketamine, with the average first age of use at 23.7 years. Males are twice as likely to use ketamine as females. Of recent ketamine users, 50.1% use the drug once or twice a year and 6% use daily or weekly (AIHW 2007). Thirty-five percent of the national EDRS sample reported to ever use ketamine and 14% had used ketamine in the six months prior to interview (Dunn, Degenhardt et al. 2007). The Victorian arm of the EDRS found that between 2003 and 2006, the lifetime and recent use of ketamine had decreased among regular ecstasy users (Johnston, Quinn et al. 2006). According to the national EDRS sample, ketamine was used in a range of locations including friends'

homes (48%), nightclubs (43%), participants' own homes (33%) and raves (23%) (Dunn, Degenhardt et al. 2007). Similarly, Dillon and colleagues (2001) found that raves and dance parties (47%), clubs (26%), private homes (16%) or friends' places (10%) were the main settings in which ketamine was used. This provides support for the view that ketamine is being used as a recreational drug away from the club and rave environment (Lankenau and Clatts 2005).

The use of ketamine also occurs in the context of polydrug use. In 2004, 58.3% of ketamine users combined it with Viagra, alcohol (52.9%) and methamphetamines (45.6%) (AIHW 2005a). Ecstasy, MDMA, speed, cannabis, alcohol or cocaine were among the main drugs used with ketamine according to the sample of 100 ketamine users in NSW (Dillon, Copeland et al. 2001).

2.2.2 Harms

One of the principle physical dangers of ketamine is the unintentional injury that can occur when the user is in a confused state or insensitive to pain (Rome, 2001 cited in Britt and McCance-Katz 2005; Degenhardt, Copeland et al. 2005). Potential injuries include falls, drowning, burns, traffic incidents and being the victim of crime (Copeland and Dillon, 2004). The tranquilising properties of ketamine have led to it being implicated in sexual assaults in the United States (DEA, 2004 cited in Britt and McCance-Katz 2005).

Acute adverse effects of ketamine include increased heart rate, hypertension, impairment of motor functioning, respiratory depression, nausea, blurred vision, anxiety, panic attacks, mania, depression, flashbacks, delirium, paranoia, insomnia, nightmares, aggression and amnesia (Rome, 2001 cited in Britt and McCance-Katz 2005). Repeated use of ketamine has been linked with chronic impairments to episodic memory (Morgan, Riccelli et al. 2003). The impairment of other cognitive functions has also been associated with the use of ketamine (Maxwell and Spence 2005), as have other negative effects such as difficulty with relationships, employment, finances and criminality (Degenhardt, Copeland et al. 2005).

There have been very few recorded deaths attributed to pure ketamine overdose. Of 87 deaths linked to ketamine in New York City, none were from ketamine alone (Gill and Stajic 2000). The enhanced toxic effects of ketamine combined with other drugs was found in one animal study, where Hayase et al (2006) found that the lethal effects of cocaine and methamphetamine were increased by the co-use of ketamine. A study of 100 recreational ketamine users in Australia found that one in five had experienced a 'severe side effect' (self-defined by the respondent), which included vomiting and passing out (Dillon, Copeland et al. 2001).

According to Degenhardt, Copeland et al (2005), the harm related to ketamine use that warranted the most concern and further investigation was the association between

ketamine and risky behaviour. Such behaviour included injecting and unsafe sex, the neurotoxic effects of ketamine use, and accidental injury or death caused by impaired cognition.

2.2.3 Treatment

It is understood that tolerance to ketamine develops rapidly but there is little evidence of any physical dependence associated with its use. Rather, psychological dependence accompanied by cravings is more common (Degenhardt, Copeland et al. 2005; Lankenau and Clatts 2005). Indeed Lankenau and Clatts (2005) contend that ketamine is more likely to draw users into periods of psychological dependence than any other psychedelic drug. One of the few reports to indicate the potential of ketamine to produce dependency was an Australian study of 100 recreational ketamine users. The report by Dillon and colleagues (2001) found that that 22% of the 100 participants met the lifetime criteria for substance abuse disorder for ketamine based on the DSM-IV.

There is no Australian data detailing the number of presentations to treatment agencies relating specifically to ketamine. Ketamine use is not recorded separately, but is included in an 'other drugs' category (AIHW 2005b).

Overseas, a review of presentations to a Texan treatment centre (1988 to 2003), revealed only 7 admissions where ketamine was cited as a drug of primary, secondary or tertiary concern. Admissions rose from 1 in 2001 to 6 in 2003 (Maxwell and Spence 2005), suggesting that the demand for ketamine treatment remains low.

There is no documented antidote for ketamine overdose, but recommendations for acute care include paying special attention to cardiac and respiratory functions and using benzodiazepines for agitation. Acute adverse reactions appear to often resolve in time without needing intervention (Weiner, Vieira et al. 2000 cited in Britt and McCance-Katz 2005; Maxwell and Spence 2005). Treatment protocols for cocaine and amphetamine dependence were reportedly suitable for ketamine dependence (Maxwell and Spence 2005).

2.3 GHB

2.3.1 Profile and Prevalence

Gamma hydroxybutyrate (GHB) is a neuro-chemical compound that occurs naturally in the brain. GHB is a powerful central nervous system depressant that inhibits dopamine release and acts with tyrosine hydroxylase to increase central dopamine levels (Galloway, et al 2000 cited in Britt and McCance-Katz 2005). GHB was originally synthesised in the 1960s and in the 1990s began to be marketed for illicit use in weight control management, and by body builders for its purported anabolic properties (Michael and Hall 1994 cited in Dillon and Degenhardt, 2001). Recently GHB has been trialled with some potential for the treatment of opiate and alcohol withdrawal. It has also been investigated for the treatment of narcolepsy, obesity, depression, alcohol addiction and sexual dysfunction (Anderson, Kim et al. 2006).

GHB is sold as a clear liquid contained in a glass vial or a crystal powder (Degenhardt, Copeland et al. 2005). It is very dose dependent and a small increase in dose can increase risks dramatically (Galloway, 1997). The effects of GHB are generally felt within 10 to 15 minutes after taking the drug and wear off within three hours (Dillon and Degenhardt 2001). Determining the safe dose of GHB is considered to be one of the most dangerous aspects of recreational GHB use. At lower doses, GHB produces euphoria and well being similar to ecstasy, but also affects coordination and speech, and causes drowsiness similar to alcohol (Chin, Kreutzer et al., 1992 cited in Dillon and Degenhardt 2001).

In 2004, 85,100 Australians (0.5% of the general population) had 'ever' used GHB. As with ecstasy and ketamine, males aged 20-29 years were the group most likely to use GHB. For males and females combined, the average age of first use was 23.7 years. Over half (55.5%) of GHB users used the drug once or twice a year and 6% reported daily or weekly use (AIHW 2005a). According to Degenhardt et al (2005) GHB users appeared to typically be a well-functioning, educated, poly drug using group. According to the 2006 EDRS, the use of GHB was highest in NSW and Victoria. The median dose of GHB used in a typical episode was 4mls, with 6mls constituting a heavy session. GHB was primarily used in friends' homes (58%), nightclubs (56%), participants' own homes (42%) and raves (31%) (Dunn, Degenhardt et al. 2007).

As with ecstasy and ketamine, GHB is a drug that is commonly used concurrently with other drugs. According to the 2004 National Drug Strategy Household Survey, 45.6% of GHB users combined it with cannabis use in the preceding 12 months. Forty-three percent had combined it with Viagra, 41.3% had used GHB concurrently with methamphetamine and 33.3% had consumed alcohol when using GHB (AIHW 2005a). Among a sample of 76 recreational GHB users in Australia, 58% reported that they typically used ecstasy with GHB. Other drugs used in combination with GHB were alcohol, amphetamine, cannabis and ketamine (Degenhardt, Darke et al. 2002).

In recent times, restrictions on the use of GHB in many countries have reduced its supply and availability (Nicholson and Balster, 2001 cited in Degenhardt, Copeland et al. 2005). In the face of this, there have been increasing reports of the use of alternative drugs such as 1,4-butanediol (1,4-B) and gamma-butyrolactone (GBL) (Ingels, Rangan et al., 2001 cited in Degenhardt, Copeland et al. 2005).

2.3.2 Harms

According to Degenhardt et al (2005), there is mounting evidence to suggest acute and long-term risks associated with the use of GHB. GHB was reportedly responsible for 13% of overdoses reported by the 2006 EDRS sample (Dunn, Degenhardt et al. 2007). The most commonly reported side effects associated with GHB were drowsiness, dizziness, confusion, headache, nausea, vomiting, hallucinations, agitation, decreased respiration, gastrointestinal symptoms, tremors, myoclonic jerking and short-term coma (Chin, Kreutzer et al. 1992; Degenhardt, Darke et al 2002). GHB has also been associated with sexual assault due to the level of intoxication it produces (Britt and McCance-Katz 2005).

A survey of 76 Australian GHB users revealed that 53% had experienced a GHB overdose where they had lost consciousness, and a smaller number had overdosed more than three times. Many reported that they did not necessarily see this as a negative thing; in fact many felt overdose was not dangerous (Degenhardt, Darke et al. 2002). In Melbourne between March 2001 and September 2003, the Melbourne Ambulance Service attended 150 GHB overdoses (Barratt et al. 2005). According to a study being conducted at a metropolitan hospital, GHB, ecstasy, and amphetamine were primary drugs implicated in presentations to the emergency department. One of the most concerning factors is the extent of polydrug use, namely the combination of the depressants GHB, ketamine and alcohol (Munir 2004).

Between 1994 and 2001, presentations to U.S. emergency departments relating to GHB increased from 56 to 4969 (Maxwell 2005). A recent US study reported that the main four risk-taking behaviours associated with GHB-related hospital treatment were 1) co-ingestion of GHB and ethanol; 2) driving under the influence of GHB (this group was three times more likely to require hospitalisation); 3) using GHB alone (almost doubles the risk of treatment); and 4) people who used GHB to treat withdrawal symptoms (Kim, Anderson et al, 2007).

The Drugs Enforcement Agency in the U.S. documented at least 71 GHB-related deaths (Britt and McCance-Katz 2005). A review of fatalities caused by GHB in Australasia over a three-year period found 10 GHB associated deaths, with eight considered directly attributable. It is likely, however, that this number was greatly under-estimated as GHB is metabolised very quickly. GHB can only be detected in blood for 8 hours and in urine for 12 hours (Caldicott, Chow et al. 2004), meaning that it cannot be differentiated from background blood and urine levels if post-mortem analysis does not occur immediately

(Anderson, Kim et al. 2006). The majority of GHB-related fatalities appear to have been associated with the use of GHB in conjunction with alcohol and/or other drugs (Dillon and Degenhardt 2001).

2.3.3 Treatment

While it appears that tolerance (both physical and psychological) and dependence can occur more rapidly with GHB than with ecstasy or ketamine, there is little information on the treatment for GHB dependence (Degenhardt, Copeland et al. 2005). Severe withdrawal symptoms have been reported amongst people dependent on GHB but such symptoms are often ill-managed due to the lack of understanding about GHB withdrawal by treatment staff (Maxwell and Spence 2005). For withdrawal, McDaniel and Miotto (2001) recommended high doses of short-acting benzodiazepines to induce sleep, as well as barbiturates, mood stabilisers and anti-psychotic medications.

As with ketamine, there is no Australian data detailing the number of GHB presentations to treatment agencies, as it is recorded as an 'other drug' (AIHW 2005b). GHB presentations to a Texan treatment centre increased from 2 in 1997 to 21 in 2003, with a total of 45 presentations over 15 years. The average treatment completion for GHB users over this time was 52.3%, representing the highest treatment completion of all 'club drugs' (Maxwell and Spence 2005).

2.4 Conclusion

The population level use of ecstasy, ketamine and GHB remains relatively low. The harms reported by users of these drugs are not excessive and mortality is minimal (Degenhardt, Copeland et al. 2005). While there is an abundance of literature detailing the profile and prevalence of these drugs in Australia, research is limited regarding the treatment needs and appropriate treatment care for users of these drugs. The literature indicated that the users of these drugs typically use multiple substances and are more likely to present to treatment with poly drug problems and/or dependence. 'Club drug' users have shown promise in rates of treatment completion where treatment has been accessed in the U.S. (Maxwell and Spence 2005).

Treatment access for EKG users is low. There are two possible reasons for this a) the use of these drugs is largely occasional and unproblematic and therefore the number of people developing dependence is minimal, or b) users who could benefit from treatment are not accessing treatment due to limited knowledge of the services.

In 2004, the Commonwealth Department of Health and Ageing funded an enquiry into the barriers to treatment for illicit drug users. Injecting drug users identified many personal, interpersonal, organisational and social barriers. These included individuals being uninformed about treatment options, having negative attitudes towards orthodox medical treatment, inappropriate services offered, social stigma of AOD treatment,

discriminating and unhelpful attitudes of service providers and conflicting treatment philosophies (Treloar, Abelson et al. 2004). Some of these barriers might help explain why EKG user presentations in Victoria and Australia are low.

Most of the existing literature recommends treatment protocols for ecstasy, ketamine and GHB consistent with amphetamine and cocaine treatment. It is clear, however that the chemical structure of ecstasy, ketamine and GHB differ from one another and from stimulants such as cocaine and amphetamine. Similarly, the dependence and withdrawal syndromes for each drug indicate a range of adverse effects. In the absence of individual protocols for the treatment of EKG, attention should focus on developing specific protocols addressing both medical and psychosocial aspects of dependence (Maxwell 2005). Only by exploring the treatment needs and barriers to treatment for the use of EKG can we gain a better understanding about how to improve access to, and outcomes for, treatment.

3 RESULTS

Presentation of the research data, below, informs discussion of the key research questions. Included are results regarding the Victorian EKG user profile, AOD treatment access and motivation, and real and perceived barriers in seeking AOD treatment. Case studies are presented to reflect sub-groups of EKG users.

A range of data sources informs these results. These include ADIS data¹⁰, interviews with AOD service providers (SP) and EKG users (EKG). Data sources are appropriately referenced throughout the text.

3.1 Ecstasy, ketamine and GHB users

3.1.1 Demographics

According to ADIS data 950 clients¹¹ completed AOD treatment where ecstasy was the primary drug of concern between 2000/01 and 2005/06. Just over 70% of clients were male and the vast majority (96%¹²) were under 40 years of age. Close to half (49%) of the clients were aged less than 21 years and approximately half (47%) were aged between 22 and 39 years. The majority (83.8%¹³) of clients were born in Australia with two percent identifying as Aboriginal or Torres Strait Islander. Almost half (47.4%) were employed¹⁴, 35% were unemployed¹⁵, and 12% were full-time students. A large proportion (78%¹⁶) resided in metropolitan areas of Melbourne (32% in North-West; 27% in Southern; 19% in Eastern).

Over the same time period, 6,081 clients¹⁷ completed AOD treatment and nominated ecstasy as a secondary drug of concern. As above, two-thirds (68%) of clients were male and the overwhelming majority (97%¹⁸) were under 40 years of age (0-21 years: 51%; 22-39 years: 46%). Clients were mainly born in Australia (90%) and few identified as Aboriginal or Torres Strait Islander (3.4%¹⁹). Sixty percent of clients were unemployed, one quarter was employed and 8% were studying full-time²⁰. The majority of clients (71%²¹) resided in metropolitan areas (32% in North-West; 23% in Southern; 17% in Eastern).

¹⁰ Note that ADIS data relate to clients seeking treatment for their own ecstasy use (i.e. as primary AOD client).

¹¹ Based on clients that have completed AOD treatment (ACSO COATS assessment excluded)

¹² N= 1075 COT

¹³ N=897 Clients

¹⁴ Includes full-time > 30hrs per week, part-time < 30 hrs per week and self employed.

¹⁵ N=1075 COT

¹⁶ N=897 Clients

¹⁷ Based on clients that have completed AOD treatment (ACSO COATS assessment excluded)

¹⁸ N=8526 COT

¹⁹ N=5292 Clients

²⁰ N=8526 COT

²¹ N=5,292 Clients

In comparison to the national and Victorian EDRS study (treatment and non-treatment ecstasy users), ADIS data in this study indicate that in-treatment ecstasy users have a higher rate of unemployment and lower rates of employment and study. This is likely a reflection of a specific sub-group of ecstasy users experiencing drug use difficulties and coming in contact with AOD treatment services. Table 1, below, compares employment status among ecstasy users in the current study to the samples of the national and Victorian EDRS.

Table 1: Employment status: Current study, Victorian and National EDRS

	ADIS July 2000-June 2006		EDRS 2006	
	Ecstasy primary drug COT = 1070	Ecstasy secondary drug COT = 8526	Victorian EDRS ²² N=100	National EDRS ²³ N=752
Employment	47%	26%	62%	60%
Unemployment	35%	60%	20%	16%
Full-time study	12%	8%	16%	22%

Source: ADIS data (VDHS, DPSB), Victorian EDRS data (Johnston, Quinn, et al. 2007) and National EDRS data (Dunn, Degenhardt et al, 2007)

Service providers were asked to describe a typical EKG client. Clients represented an even mix of males and females, aged between 16 and 40 years, with varied employment and education histories. EKG users referred to AOD treatment through the Police Illicit Drug Cautioning (non-cannabis) program²⁴, also referred to as drug diversion clients, were predominantly male, aged 19 to 35 years and either employed or studying. These clients were considered to be reasonably high functioning individuals, who were well presented and had good social and family support networks.

Among the EKG user sample (N=16), three-quarters were male (75%) with an average of 24 years (Range: 17-42 years). All reported English as their main language and 75% identified themselves as Australian. Seven participants (44%) had left school before completing year 12 and one person was still attending secondary school. Eleven (69%) participants had commenced post-secondary school education (university 44%; trade/technical 19%; TAFE 6%).

²² Victorian EDRS – 6% (N=100) of this sample reported being in drug treatment at the time of the interview (Johnston, Quinn, et al. 2007).

²³ National EDRS - 4% (N=752) of this sample was currently in drug treatment (Dunn, Degenhardt, et al. 2007).

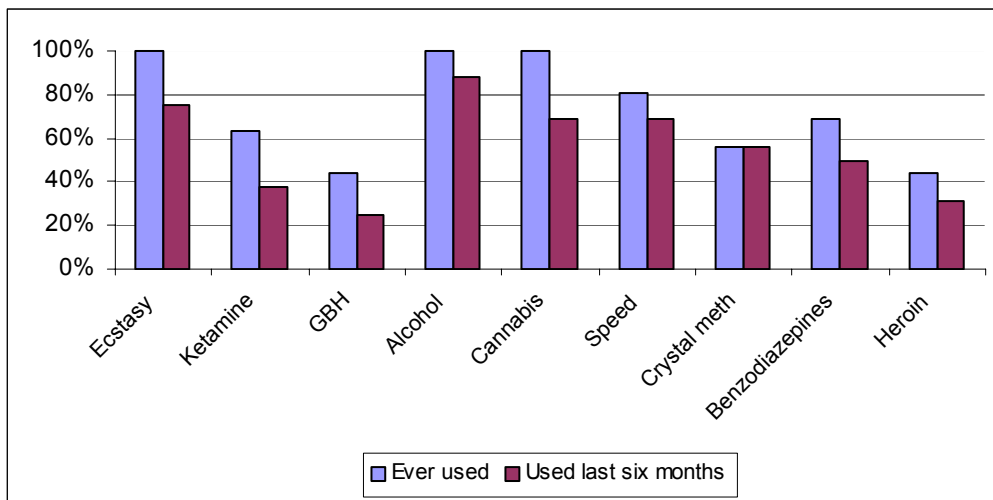
²⁴ These clients are required to complete two mandatory treatment sessions to expiate their caution.

Of the EDRS Victorian sample, the majority (87%, N=100) had completed high school education (Johnston, Quinn, et al., 2007, pg 6) and 74% of the national sample had completed year 12 or above (Dunn, Degenhardt et al, 2007:7).

3.1.2 Alcohol and other drug use

EKG users provided information on their lifetime and recent AOD use. From a list of 20 substances (see Appendix 5), participants were asked if they had *ever* used a drug, and if they had used it *in the last six months*. All EKG users (N=16) reported having ever tried ecstasy and 75% (n=12) had used ecstasy in the last six months. Figure 1 below, shows EKG user reports of drug use: *ever* or *in the last six months*, across a range of substances (N=16).

Figure 1: AOD use by EKG user participants (N=16)



As shown in Figure 1, above, all EKG users interviewed in this study (100%, N=16) reported having ever tried alcohol and cannabis and most reported using these drugs recently, that is, in the last six months (88%, n=14 and 69%, n=11, respectively). The majority (81%, n=13) reported ever using speed and 69% (n=11) had used speed recently. Over half (56%, n=9) of EKG users reported ever using crystal meth, and all nine had used in the last six months. Sixty-nine percent (n=11) of EKG users had ever used benzodiazepines, and half (n=8) had used in the past six months, while 44% (n=7) had ever used heroin, with 31% (n=5) having used in the past six months. Half (n=8) of the EKG user group reported injecting one or more of the following drugs: heroin, amphetamines (speed and ice) and ecstasy.

As shown in Figures 2 and 3, below, EKG users' lifetime and recent use of ecstasy, alcohol and cannabis was reported at high levels, consistent with the Victorian EDRS sample (Johnston, Quinn, et al., 2007). In contrast to the EDRS, the current study found higher levels of heroin and benzodiazepine use among the sample. This is likely reflective

of the problematic drug use of the current sample, as indicated by their AOD treatment status.

Figure 2: Ever used drug: Current study (N=16) and EDRS sample (N=100)

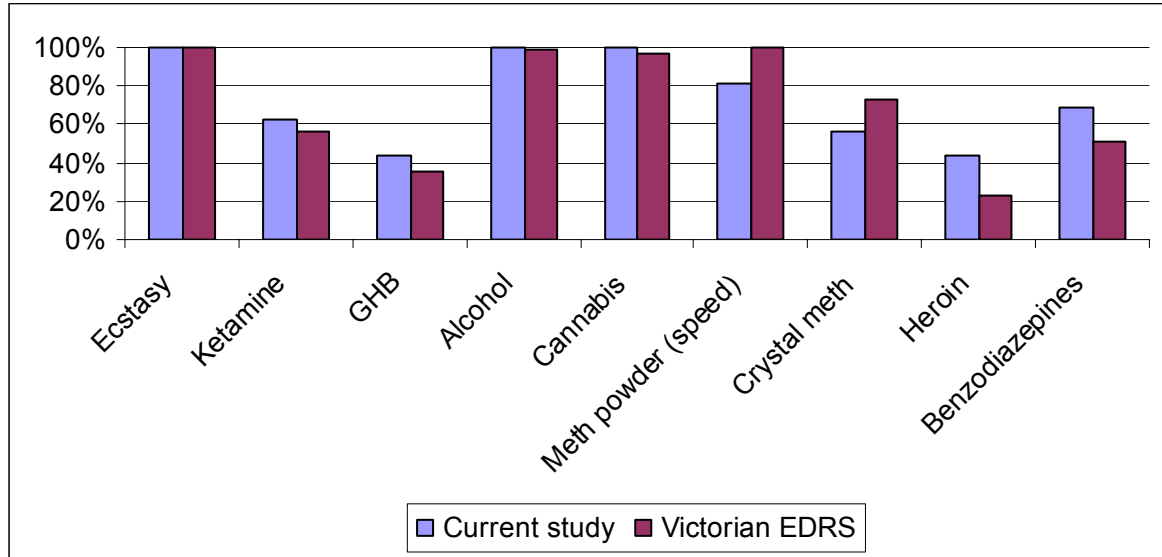
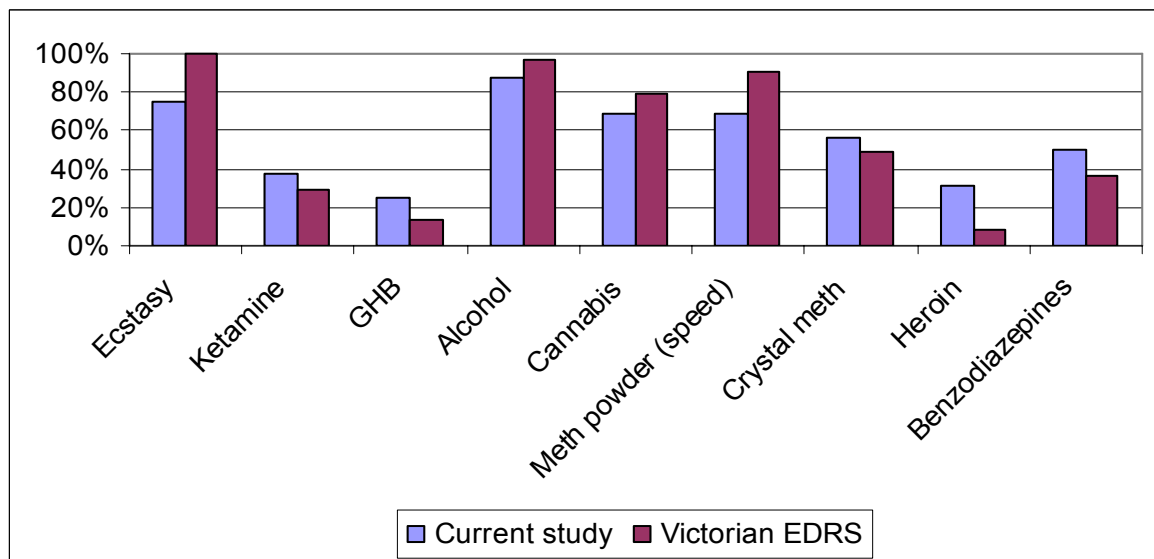


Figure 3: Recent drug use: Current study (N=16) and EDRS sample (N=100)



3.1.2.1 Polydrug use

In the current study, 31% (n=5) of participants had ever used ecstasy, ketamine and GHB, and 13% (n=2) had used all three drugs in the last six months. Forty-four percent (n=7) had ever used two of the three drugs, and 38% (n=6) had used two of the three drugs in the last six months.

Based on ADIS data, half of all clients²⁵ (50%, N=897) who nominated ecstasy as the primary drug of concern were polydrug users. This proportion increased to 80% (N=5292) when ecstasy was nominated as the secondary drug of concern. The average number of drugs ever used by the EKG user sample was 10.7²⁶ while the average number of drugs used in the last six months was seven. Service providers also reported that the majority of their EKG clients were polydrug users, with alcohol most commonly associated with use. The findings from the 2006 Victorian EDRS also reflected high levels of polydrug use as 97% of the sample reported to typically²⁷ use other drugs in conjunction with ecstasy. Other drugs most commonly used in combination with ecstasy include alcohol (76%), methamphetamine powder (69%) or cannabis (38%) (Johnston, Quinn, et al. 2007).

3.1.2.2 Route of administration

EKG users in the current study reported that swallowing ecstasy (81%, n=13) was the most common route of administration. Injecting (13%, n=2) and snorting ecstasy (6%, n=1) were reported to a lesser extent. These data were consistent with EDRS participants, who reported swallowing (94%), snorting (4%) or injecting (2%) ecstasy in the previous six months (Johnston, Quinn, et al., 2007, p.17).

In the current study's sample, 63% (n=10) had ever tried ketamine and 44% (n=7) had ever used GHB. Among those few who had used ketamine in the six months prior to the interview (38%, n=6), four had swallowed and two had snorted ketamine. Among participants who had used GBH in the previous six months (25%, n=4), most had swallowed it, although one person reported injecting GHB. Among the Victorian EDRS sample, recent ketamine users (n=29) most commonly snorted (90%) ketamine, although some reported swallowing it (28%). All participants who had used GBH six months prior to the interview reported swallowing the drug (Johnston, Quinn, et al., 2007).

3.1.2.3 Level of use

EKG users in the current study reported that the median number of ecstasy pills taken in a 'typical'²⁸ session was two (range 1 to 5). In a 'heavy'²⁹ session it was four pills (range 2 to 10). These findings are also consistent with those of the 2006 Victorian EDRS, where a median of two ecstasy pills (range 0.5 to 6) was consumed in a typical session. In the participants' heaviest session, a median of four pills (range 1 to 12) was reported (in the last six months).

²⁵ Clients are user only (brokerage not included)

²⁶ The number of drugs reported includes 'others' identified by participants.

²⁷ Typically defined as on two-thirds or more occasions of their ecstasy use in the preceding six months (Johnston, Quinn, et al. 2007:17)

²⁸ Typical – people were asked about an average night out.

²⁹ Heavy indicates a big weekend or event.

3.1.2.4 Frequency of drug use

According to service providers, EKG clients reported using ketamine and GHB only rarely. In contrast, ecstasy use ranged from every weekend to a few times a year. Drug diversion clients were described by service providers as occasional ecstasy users who engaged in low-level use (1-2 pills per use occasion; n=4). These clients were considered to be largely naïve to the more entrenched drug scene (n=3).

One service provider questioned the drug diversion initiatives that drew into treatment the infrequent EKG user.

It's across the board. Clients are not presenting with just ketamine or GHB, but they are using many different drugs (SP 02).

They are recreational ecstasy users who are occasional users... I would like to see them (the police) targeting *less* the people who go out once every six months but going more for the harder core people, the ones who party every weekend. I don't see that group. And don't be targeting them at midnight on Saturday, but Sunday morning at 9 am and (at) the day clubs. It's a bit strange, I think we are missing out on seeing this group (of heavier users) (SP 03).

For the few clients who did not fit the above profile, use of EKG was often combined with problematic amphetamine and/or opiate use. Service providers reported that such clients typically had longer substance misuse histories.

3.1.2.5 Recent changes to drug use

In the current study, 36% (n=6) of users had decreased their recent use of ecstasy, and four EKG users had stopped using ecstasy³⁰. Two ketamine users had recently decreased their use and the remaining four users reported infrequent use. Reduced use of ecstasy was attributed to the negative experience of comedowns or overdoses, or reaching a point where users no longer enjoyed the effects of the drug. Changes in ecstasy use were predominantly self-directed with many EKG users neither accessing AOD treatment (31%, n=5) nor specifically discussing their ecstasy use with a service provider (25%, n=4). Two EKG users said their patterns and levels of ecstasy use fluctuated depending on social events and peer associations.

It fluctuates all the time, depending on who I'm hanging out with and how much money we have. Might have more, might have less (EKG 08).

It was more of a self-realisation I guess. For some reason I was at a club and I was high and my mind just kicked in and I was like, 'it's 4 am, what the fuck am I doing here!' I guess I'm over the stage of using (EKG 28).

³⁰ Behaviour change reported here was not attributed to AOD treatment.

Three participants reported that their drug use had increased in the six months prior to the interview. Increased ecstasy use (n=2) was related to socialising more and becoming more tolerant to the effects of the drug. GHB use increased for one participant due to a possible dependency.

I increased GHB despite wanting to change. Once you start to get into daily use, it's hard to stop (EKG 04).

Four participants reported that their use of one or a combination of ecstasy, ketamine and GHB had not changed over the last six months. This group was typically occasional users.

3.1.3 AOD treatment awareness

Twelve EKG users were aware of AOD treatment options available in Victoria, with most (56%, n=9) listing more than one treatment option. Users reported knowledge of specific AOD agencies (n=7), as well as a range of treatment types. These included AOD treatment available via residential rehabilitation (n=6), GPs (n=4), counsellors (n=3), help lines (n=3), psychologists (n=2), hospitals (n=1), self-help groups (n=1), and ambulance assistance (n=1). Family (n=2), friends (n=2) and Ravesafe (n=1) were also identified as sources of support and information. Four EKG users (25%) were unaware of any options for people concerned about ecstasy, ketamine and/or GHB, although three of the four reported accessing a health service due to mental health concerns or opiate use. When asked to comment on whether they knew where to access AOD treatment, one participant reported:

None at all. Didn't think there were places out there for that [EKG treatment] (EKG 29).

3.1.4 AOD treatment access

The majority (69%, n=11) of EKG users had, at some time, accessed an AOD treatment service, GP and/or psychologist regarding their AOD use. More than half (56%, n=9) of these contacts were with specialist AOD treatment services, including residential rehabilitation services (n=4), drug diversion counselling (n=1), and online counselling services (n=1). Others had made contact with GPs (n=6) and psychologists (n=2). Most users (56%, n=9) had sought treatment from more than one treatment provider. Five EKG users were currently receiving support from a service (specialist AOD treatment services, n=4; psychologist, n=1).

Interestingly, two participants reported they did not directly discuss their EKG use with their service provider. Two others only briefly discussed their EKG use in the context of broader drug use. Discussion about drug use was more often related to concern about other drugs, such as heroin, or a belief that the service provider's knowledge and understanding of EKG use would be limited.

I don't really talk about the ecstasy, but mainly about the gear and smoking dope (EKG 24).

Four participants had been admitted to hospital in relation to their drug use. Two had overdosed on ecstasy and two had overdosed on GHB. One person had been admitted to an emergency department on multiple occasions due to overdosing on GHB.

In Victoria during 2004-05, 470 inpatient hospitalisations were attributed to stimulant use, including ecstasy. A further 118 hospitalisations were due to hallucinogens, including ketamine and GHB. Stimulant use accounted for seven percent of all illicit drug hospitalisations and 0.02% of the total number of hospitalisations. Due to the current coding scheme used in hospitals (ICD10), data specifically for ecstasy, ketamine and GHB were unavailable (VDHS, 2007).

EKG users (n=11) had entered into treatment³¹ via a number of pathways. These included:

- Referral by the criminal justice system (n=4)
- Referral by their AOD worker (n=3)
- Walk-in (n=3)
- Referral by a health service (n=2)
- Information obtained from the Internet (n=2)
- Family member made appointment (n=1)
- Referral by a friend (n=1)

3.1.5 Motivation to seek treatment

For the majority of participants, making contact with a service was motivated by a desire to address their overall drug use and enhance their sense of wellbeing. Those who had accessed treatment (n=11) reported wanting to make changes to their life, address feelings of depression and anxiety, and satisfy legal requirements to attend AOD treatment.

³¹ Note that most participants had contact with multiple services.

I wasn't happy within myself. I was just abusing drugs and I wasn't actually having fun with them. I didn't like the person I was at the end of the day (EKG 13).

School performance was dropping considerably and people around me could notice that I was acting differently. I was feeling paranoid and it was starting to get worse after a big weekend. I was getting over-excited for no reason and I was feeling depressed (EKG 21).

EKG users who had accessed GPs and psychologists (n=8) typically sought to address high prevalence mental health issues such as anxiety and depression. This group was taking prescription medications comprising anti-depressants, benzodiazepines or sleeping pills.

While all EKG participants had used ecstasy, this drug was rarely considered the primary drug of concern, nor was it the motivation for seeking treatment. Service providers also reported that many clients failed to see the link between their EKG use and difficulties they were experiencing, such as sleep disorders, physical and mental health issues and relationship difficulties. More often, treatment was sought for assistance with other alcohol or drug issues, with 44% (n=7) of EKG users accessing an AOD service regarding concerns about their use of one or a combination of heroin, alcohol, amphetamines and benzodiazepines. Key stakeholders in the Victorian EDRS also noted that 'few ecstasy-related drug (ERD) users receive treatment for ERD use and, compared to users of other drugs, such as heroin, people are less likely to seek help for their ERD use' (Johnston, Quinn et al. 2006:119).

Other EKG users reported that their search for information on the Internet provided them with enough information to "justify" continued drug use. Two users reported proactively researching the harms of GHB on the Internet and finding no evidence regarding the long-term effects of the drug.

Like, if I knew it [GHB] would make me sterile or something like that I would stop straight away, but there is no evidence that it is hurting you (EKG 04).

Among the five EKG users who had not accessed AOD treatment, four had stopped or significantly reduced their use of ecstasy. These participants reportedly reduced or stopped drug use on their own, with support from friends. One regular ketamine and GHB user, who had previous contact with services, spoke of 'going cold turkey' with the support of his family. The support of friends and family was important to many participants, who noted that friends and family provided a good indication of when it was time to reduce drug use.

Non-treatment seekers and those EKG users lacking motivation to change their drug use behaviour (63%, n=10), reported that they would seek out a service if they developed a dependency or they felt they couldn't cut down on their own.

If I became dependent on it, like if I needed it to function, that is when it becomes an issue. If you are only using it once or twice a week and you can stop and start whenever you want, personally I don't think that is a problem. If you had to use your last dollar to get a tab, that's when things have gone too far (EKG 24).

There is always help if you want it, but a lot of people don't want to look for it. It's up to the individual. I know myself that there is help out there (EKG 24).

3.1.6 Real and perceived barriers for users seeking interventions

A range of barriers to seeking AOD treatment were identified by EKG users. These most commonly pertained to a lack of confidence in treatment providers, concerns about revealing AOD use, previous negative treatment experiences, concerns about confidentiality and the potential for legal implications, and the influence of friends and family.

Many EKG users (44%, n=7) reported that a lack of confidence in AOD treatment providers discouraged them from seeking AOD treatment. Concerns were particularly related to GPs' knowledge and understanding of drugs. For example:

I have found that most people, and I mean counsellors and GP, don't know much about ketamine and GHB (EKG 20).

I doubt there is a doctor who knows about it [GHB]. Someone said there are a few around Prahran, but you're not going to see a doctor advertising that they are a GHB doctor (EKG 04).

And he [GP] said 'I hope that the next time I see you that you will be able to say that I take the occasional pill and this and that but not 'G'. I actually thought after that session that he knew nothing about 'G' I was like 'whatever', and just collected my scripts...I don't think I would bring it up with the doctor again (EKG 01).

Some (n=4) felt they would be judged or lectured to by GPs and, in some cases, this concern was informed by a prior negative experience.

Wouldn't talk to a GP about drug use because I feel he would think worse of me and lecture me and I don't need the guilt trip (EKG 21).

With doctors I'm careful with the way I ask my questions. I reckon if I told them why I really wanted them [valium] I would probably get a lecture about it (EKG 08).

Three EKG users reported concerns about revealing drug use to treatment providers. The possible legal ramifications of revelations of illicit drug use presented a barrier to treatment access for them. This contrasts with other client feedback that treatment confidentiality is assured.

Peer and family relationships represented another potential barrier to treatment seeking by EKG users. For two EKG users, drug using peers had not supported the need to access, nor the value in obtaining, AOD treatment. Another was worried about the potential for conflict with friends if they decreased their drug use. Two EKG users were conscious of the negative repercussions of their family finding out about their drug use, while another had an unsupportive parent who would not transport them to a treatment service for fear of being recognised.

Friends say “no, you don’t need to see a drug and alcohol counsellor, you don’t need to go and do that. They are not going to help you anyway” (EKG 15).

Finally, one EKG user believed that clinicians who had experienced drug use would better understand the needs of drug users. Similar life experiences provided a basis upon which service providers could really understand a client’s situation.

Needs to be someone who has been down that road. Someone with life experience. People need to take the first step themselves (EKG 10).

3.1.6 Summary: EKG users

Between 2000/01 and 2005/06, 950 Victorian AOD treatment clients reported ecstasy as their primary drug of concern and over 6,000 reported ecstasy as a secondary drug of concern. Ecstasy users in AOD treatment were typically male and aged less than 40 years, and more than half were employed or studying full-time. Consistent with the Victorian EDRS sample, EKG users in this study had used a range of drugs, and the main route of administration was swallowing. While all EKG participants had used ecstasy, this drug was rarely considered the primary drug of concern, nor was it the motivation for seeking treatment. Most EKG user participants were aware of AOD treatment services and the majority had accessed treatment based on a motivation to reduce or cease drug use and improve their health and wellbeing. Barriers to treatment related to a lack of confidence in treatment providers, confidentiality concerns and previous negative treatment experiences.

3.2 The EKG client in AOD treatment: Three case studies

In much the same way as other drug users, EKG users represent a heterogeneous group that may or may not attend, engage and benefit from AOD treatment. Those that do attend AOD services experience their treatment in a range of ways. For service providers, the need to offer tailored care, suited to clients' individual needs, is essential. The following case studies describe just three of the myriad scenarios reported by service providers in the course of this project.

3.2.1 Case study 1: The occasional ecstasy user

Jamie was referred to AOD counselling via drug diversion. He had been caught with an ecstasy pill in his possession outside a nightclub. He goes out once every two months and takes one 'E'. He arrived at treatment well presented and in a suit. Jamie has good relationship with his family, completed university, and is currently working in the business sector. He was quite shocked about being caught, and had not given much thought to the consequences of using illicit drugs. In the past, he had used some cannabis, consumed alcohol and used drugs on a social level. He had no AOD dependency issues and had not used drugs intravenously.

Jamie's first session was about assessing where he was at. We tried to ascertain what his understanding was about his drug use, and was there anything he wanted to change. We talked about the pros and cons of drug use, such as coming down, and how that can impact on relationships and employment. Most clients are quite insightful about the way drugs impact on their life, although Jamie didn't think his drug use was a problem.

The second session was purely around harm reduction and information. That is all I would do with someone like him. He was very engaged, very open to learning and I explained that I'd hope he would share this knowledge with his wider social network. He said he was happy to do that because he is a bit concerned that some of his friends might be getting out of control.

3.2.2 Case study 2: The regular ecstasy user

Wendy was a 24 year old female busted by police one weekend and told to contact an AOD service, although she was not given a caution notice. The police took the view that she was on a "slippery slope" and wanted to do something for her. Wendy was from a middle class background with a supportive family who had never been involved in any illicit substance use. She had recently graduated from university and was working part-time.

Wendy would start her weekends drinking and then she would go out to particular clubs with friends. With her peers, she would take whatever substances were around. We explored the amount she was using which had started at once every few months, then every month, then every weekend. This went on for a couple of months, but she wasn't just taking one on the weekend, she was taking up to six ecstasy pills a night.

Presenting with extremely low self-esteem, Wendy felt quite depressed and had been prescribed anti-depressants by her GP. She had very few peers/friends who were not drug users and she didn't have any idea of what to do if she gave up hanging out with her drug-using friends.

Wendy hadn't connected her drug use with feeling terrible on Monday, Tuesday and Wednesday. She hadn't realised that Sunday was wiped out when she first tried drugs, but now she was wiped out for three days. Once we talked about that, it was like an eye-opener. She was quite amiable and open to having a conversation about her use.

We discussed issues around self worth, self-esteem and sleeping patterns. We went through the dangers of mixing different drugs, and ways to manage the come down. We're looking at natural ways to enhance sleep, things like avoiding caffeine. She is still attending counselling.

3.3.3 Case study 3: The regular GHB user

Joel was a 25 year old male on a 12 month community based order (CBO) for dealing amphetamines. He presented for forensic counselling. He had a history of polydrug use starting at the age of 12 using cannabis, before moving on to amphetamines, heroin and GHB. He reported using GHB daily for 2 years, taking 30-40mls per day and needing GHB every four hours because he was experiencing withdrawal symptoms. He presented with a number of health concerns, including vein damage, a lot of complications with swelling of limbs, poor circulation and some pain. He reported a few occasions where he collapsed and woke up on the kitchen floor. Joel said he wanted to stop dealing drugs and take up some study.

Joel was very reluctant to address any of his drug issues and so I had to do quite a bit of motivational interviewing around that ambivalence. He eventually moved to a contemplative stage where we looked at the "cons" around the "G" and decided to plan towards being abstinent. He certainly was not interested in addressing his amphetamine use, and he felt that the "G" was causing more immediate problems.

Before going to a residential drug withdrawal unit, we worked on harm reduction strategies around reducing the immediate harm of passing out. I also linked him in with a GP. He was really anxious about how much experience the withdrawal unit had with GHB withdrawal. He was in the withdrawal unit for four days before he left prematurely.

I saw him again for a few sessions and we did some cognitive behavioural therapy and then his engagement dwindled, to the point that there was none. I couldn't get him on the phone, and I don't actually know what the outcome was there.

3.3 AOD treatment for users of EKG

3.3.1 Service utilisation

According to ADIS data, courses of treatment (COT)³² provided to clients where ecstasy was the primary drug of concern accounted for 0.4% of the total treatments delivered in Victoria in 2004-05 (VDHS, 2007). Between 2000/01 and 2005/06, specialist AOD services³³ provided treatment to 950 ecstasy clients (1,075 COT)³⁴. Approximately 60% of treatment delivered to clients over this period was drug diversion³⁵. For the same period, ACSO-COATS assessments were conducted for 151 clients (155 COT) where ecstasy was nominated as the primary drug of concern.

The number of clients treated by specialist AOD services increased to 6,081 (COT 8,526) when ecstasy was nominated as the secondary drug of concern. The proportion of drug diversion clients as a total of all clients where ecstasy was the secondary drug of concern increased from 14.6% in 2000/01 to 30.0% in 2005/06. The average number of drug diversion clients where ecstasy was the secondary drug of concern for the six-year period was 23%. The number of ACSO-COATS assessments where ecstasy was the secondary drug of concern was 765 clients (774 COT).

Where ecstasy was the secondary drug of concern, cannabis was the primary drug in 40% of the cases. Amphetamine was the primary drug of concern for 19% of the clients, a further 18% were primarily concerned about alcohol, and 17% concerned about heroin.

AOD service providers (n=12) reported limited contact with clients who expressed concern about EKG drug use. Contact with EKG users was primarily through drug diversion programs. GPs (n=3) also reported little contact with individuals concerned about their ecstasy, ketamine and/or GHB use. Their clients did not typically seek specific treatment for EKG, although use of these drugs was occasionally examined in the context of other, more problematic, drug use. One GP noted that this limited contact mainly occurred with clients in the emergency department of a hospital.

I've only seen one person who has been concerned about their ecstasy use (SP 09).

Generally ecstasy, ghb and ketamine are a minor part of a person drug use (SP 22).

³² The unit of analysis is course of treatment and not actual clients. The Victorian Department of Human Services defines a course of treatment as the period of contact, within defined dates of commencement and cessation between a client and a treatment provider or team of providers (VDHS, 2002).

³³ ACSO-COATS assessment excluded.

³⁴ Where ecstasy was identified as the primary drug of concern.

³⁵ Count of drug diversion clients where ecstasy was the primary drug of concern was calculated from source of referral and program type data. Note this may be an under-representation of drug diversion clients due to issues of data quality.

3.3.2 Service type accessed

Ecstasy users typically accessed three service types within Victorian AOD specialist services³⁶ (ADIS, 2000/01-2005/06). These comprised:

- Counselling, Consultancy and Continuing Care (CCCC; 61.4%)
- Outreach (22.3%)
- Drug withdrawal services, including residential, outpatient and home-based (8.1%).

Where ecstasy was nominated as the secondary drug of concern (n=8,526 COT), the most common services were again CCCC (43.4%), outreach (22.6%) and drug withdrawal services³⁷ (19.7%). This data indicates lower CCCC and higher drug withdrawal service provision to clients with ecstasy as a secondary drug of concern.

Based on COT (n=1,075), where ecstasy was the primary drug of concern, the average length of stay in treatment was 6.8 weeks for CCCC, 6.2 weeks for outreach, and 2.5 weeks for withdrawal services (residential 0.9 weeks; outpatient 3.1 weeks; home-based 3.6 weeks). Average length of stay in treatment where ecstasy was the secondary drug of concern (n=8,526 COT), was generally longer than when ecstasy was the primary drug. Length of stay was 7.4 weeks for CCCC, 7.6 weeks for outreach, and 2.7 weeks for withdrawal services (residential 1.1 weeks; outpatient 3.4 weeks and home-based 3.6 weeks).

Regardless of the voluntary or non-voluntary nature of EKG clients, service providers reported using a variety of treatment interventions³⁸. These included:

- Brief interventions such as Motivational Interviewing (MI)
- Cognitive Behavioural Therapy (CBT)
- Harm reduction strategies
- Relapse prevention
- Education and information
- Natural therapies such as meditation, shiatsu, yoga and naturopathy.

³⁶ Where ecstasy was identified as the primary drug of concern.

³⁷ Includes residential, outpatient and home-based.

³⁸ See Glossary for definitions of these interventions

Overall, service providers felt that this range of interventions was useful for all AOD clients, regardless of the drug of concern.

In terms of working with this group, I think we have adapted what is already available. I wouldn't say there is one particular formula that we use (SP).

MI, harm minimisation, education and advice, different therapeutic intervention around behaviour change like CBT, or basic counselling supporting individuals. I think it is pretty consistent across the board (SP).

GPs also reported providing general education and information, harm reduction strategies and brief interventions.

Generally I discuss how they use the drug and, if they are injecting, go through safer injecting practices (SP).

A lot of the time they just want a quick chat and a bit of information and they just want to think about things. Some people want to know about the risks of things, and how likely it is that they will get a psychosis or what is happening about the driving laws...as a general rule we try and keep our lines of communication open so they feel like they can come in just in case something happens or they feel like they want to do something about it (SP).

A number of EKG participants (n=3) talked about receiving good information during their drug treatment. Typically, this pertained to harm minimisation messages, safer using techniques and information about the risks and consequences of drug use. For example:

Safety is one of the main things that I learnt, that even if you are going to do it [inject drugs], know what you are doing. And that is probably the one thing that I learnt really well in detox because there are things that you just don't realise.... I also learnt what is in 'G' and how bad it actually is and the same with ecstasy as well. I think you learn more when you are in front of someone, like instead of reading it and looking through facts. You seem to gain a lot more from a conversation with someone. And we watched a movie about drug use and that was good information. I think watching something is better than reading it (EKG 13).

We talked about things like removing myself from the situation or leaving my key card at home so I'm not tempted to buy stuff, and staying with friends who don't do drugs or even friends who will tell you 'don't do that, have a drink instead' (EKG 21).

Service providers typically explored the impact of EKG use on a client's day-to-day functioning, such as eating and sleep behaviour, and found this a useful way to identify any areas of concern. Outlining the immediate and long-term effects of drugs was another component of treatment.

Service providers reported exploring the strong association between peer group activities and drug use. For many clients, ceasing or reducing drug use was hindered by their connection with drug-using peer groups. The main challenge for these clients was to move away from such social groups and find alternative, non-drug using peers and activities. Service providers reported providing information about the triggers for drug use and discussing relapse prevention strategies. They also supported clients in identifying alternative drug-free social networks and activities.

A number of service providers stressed the importance of working from a client-centred approach, tailoring interventions to meet the needs of the clients and providing a non-judgemental treatment experience for clients. This is consistent with the views expressed by a number of EKG users that a supportive and non-judgemental service provider and service environment is essential to engaging clients in treatment.

It's focused on what the client's issues are (SP 02).

I would say by providing them with a non-judgmental framework around providing education, helping clients to identify when their use might become problematic (SP 11).

They're [service provider] open and I feel I can tell them anything, and they give good advice. I've had heaps of workers and they look at you sideways when you tell them you are still using, but I relate better to these guys (EKG 24).

Service providers working with forensic clients reported focusing on providing information and education, safer using information, and harm minimisation messages delivered within a non-judgemental approach. The initial drug diversion session was typically structured around an assessment of a client's AOD, physical and mental health and welfare needs, while the second session focused on the provision of AOD education and harm reduction strategies. The latter generally assisted clients to identify triggers, informed clients about safer drug use and outlined the dangers of polydrug use. Generally, sessions focussed on what clients wanted to do with their drug use, such as reducing, stopping or using more safely.

Drug diversion is about making them aware of the future ramifications of ongoing drug charges. If they get busted again, that seems to be enough to shake a lot of them up. You just adapt those strategies you use as a counsellor, you still look at harm min, looking after yourself, and drug education. Those extra strategies may be around identifying risky times, when they are going out, where there is a big group of them, are they using anything to help them come down and minimise the withdrawals (SP).

The reluctant nature of many non-voluntary clients created additional challenges for service providers. In such cases, treatment was tailored to where the client 'was at'.

They are not identifying that their drug use is a problem. To acknowledge where they are at, and to sit with that and give them an experience where it is non-judgmental, supportive, and where they are not coming into counselling where someone has an agenda, or someone is going to tell them what to do with their drug use. It's really about empowering the service user in a way and seeing it as a window of opportunity for that person to have a positive experience with support and counselling (SP 05).

A number of service providers reported that drug diversion clients often failed to see the negative impact of their drug use on their day-to-day functioning (n=3). Use of EKG typically manifested in moodiness, fatigue and problems with work. For these clients, the two drug diversion sessions also comprised a brief intervention such as motivational interviewing.

Service providers also noted that for many involuntary clients, drug diversion represented a client's first contact with the criminal justice and the AOD treatment system. As a result, clients often presented to treatment with high levels of anxiety. The anxiety expressed by many of these clients meant that the first session often involved detailing the drug diversion requirements and consequences of non-compliance.

3.3.3 Treatment outcome indicators

Service providers identified good outcome indicators of AOD treatment as:

- Positive life changes including reconnecting with family, engaging in non-drug using activities and social groups, resuming employment, increased self-esteem/confidence, no involvement with the criminal justice system (n=5)
- Changes in drug use (abstinence or reduced use) (n=4)
- Increased support networks (around sustaining change) (n=4)
- Client self-reflection (n=3)
- Awareness of relapse prevention (identification of triggers, risks, choices) (n=2)
- Retention in treatment and retention beyond mandated sessions (n=4)

Some have found it useful and I've even had some that have then continued on; the holy grail of drug diversion (SP 07).

- Positive treatment experience (client feeling they could re-engage) (n=4)

It's about providing a window of opportunity for that person to have a positive experience with support and counselling. So if they ever shift to a stage where they identify they have a problem they will know there is support available (SP 05).

According to ADIS data (2004/05–2005/06) the main significant treatment goal (STG)³⁹,⁴⁰ attained by ecstasy users in AOD treatment was reduced substance use (58%). Other STGs attained included improved physical health (15%), reduced criminality (14%), improved levels of connectedness (11%), and improved emotional and psychological wellbeing (8%).

Where ecstasy was reported as the primary drug of concern, 76% of COT (July 2000 - June 2006) were completed. A further 11% of COT ceased without explanation from the client. Over the same period, where ecstasy was reported as the secondary drug of concern, 62% of COT were completed and a further 13% of treatment ceased without explanation (ADIS).

3.3.4 Real and perceived barriers in providing interventions

A number of real and perceived barriers in providing treatment to EKG users were identified by service providers. These included limited EKG user presentations to treatment, challenges associated with the reluctant non-voluntary client, poor information resources and limited after-hours treatment access.

Service providers (n=7) reported little contact with clients presenting with concerns related to EKG use. In the absence of a strong evidence-base around good practice, the low number of EKG users accessing AOD treatment limits the development of experiential practice wisdom regarding these drugs across the sector.

One barrier would be that we have limited contact, so if you have such limited contact, you don't necessarily know or understand the characteristics or the needs of the group (SP 04).

As outlined above, low treatment presentations were thought to be due to EKG users not perceiving themselves as 'drug users' or in need of drug treatment. This supports feedback from EKG users that drug use was not a problem and/or the impact of use on their lives was not serious enough to warrant treatment. Service providers reported that those EKG users that did attend treatment had hit 'rock-bottom' or had been mandated to attend treatment.

³⁹ N=1182 STGs. Up to five significant treatment goals can be reported per COT.

⁴⁰ A significant treatment goals cover five key areas: reduced crime indicators; improved level of connectedness; improved physical health indicators; reduced substance abuse indicators; and improved emotional and psychological well-being indicators. A broad range of goals is included under each indicator, and the goals vary according to service type (VDHS 2002; Berends & Norman 2005).

I think the attitude is that they are having such a good time and they don't want to stop. It's like pulling a lollypop out of a child's mouth (SP 08).

Non-voluntary clients, in particular, brought additional challenges to the treatment environment. Service providers reported that the reluctance of many drug diversion clients was a barrier to providing effective treatment interventions.

While a number of service providers (n=4) reported that drug diversion did offer an opportunity to provide clients with a positive experience of treatment, low levels of clinical exposure to this group were problematic. The development of clinical expertise in dealing with EKG users, and in particular, harmful GHB users, was limited by the number of clients presenting. This was, in turn, perceived as a barrier to service providers who wanted to develop and practice a suite of effective interventions with EKG users.

Service providers (n=2) also noted that the quality of client information resources regarding EKG was poor. For some, the existing brochures on EKG lacked the level of detail and design appeal required by clients. One clinician described the production of more targeted in-house information, which included the artwork of service clients. This material proved popular with clients because of its eye-catching artwork. It was proposed (n=3) that improving such material would assist with information provision to clients.

Overall, the level of the information available on ketamine and GHB was reported to be limited. Service providers noted that this was frustrating for clinicians as well as clients. One other service provider noted that the cost of brochures could limit the number of resources available at a service.

Other barriers to effective interventions included:

- No or limited after-hours services, especially with a client group characterised by full-time work or study commitments (n=4)

We don't have after-hours access and that is a great barrier for everyone, especially when people have jobs. If they are working full-time I try and work around their schedule as much as I can (SP 08).

- Client concerns about the confidentiality of information provided to service providers and the potential for legal consequences should drug use be disclosed (n=2)

3.3.5 Do treatment services need to improve responses to EKG clients?

There was general support for the existing AOD treatment service system, with an acknowledgement that service provision was good. The general consensus was that most AOD services operated within best practice. However, both service providers (n=5) and EKG users (n=3) acknowledged the need for workforce development around EKG, especially ketamine and GHB.

You still have good clinical practice, the information will change according to the substance, but the way you deliver the information is standard (SP 09).

Some practices can always improve: better information, better knowledge, better strategies, new strategies (SP 11).

EKG users who had accessed AOD treatment reported both positive (n=5) and negative (n=6) treatment experiences. Positive feedback included feeling supported and genuinely cared for by the treatment provider (n=3), and feeling comfortable in the knowledge that treatment was confidential (n=1). Some participants felt they could tell their worker anything (n=3) while others appreciated that the counsellors did not 'treat them any differently' (n=1). Two EKG users spoke positively of service providers' capacity to listen and provide helpful advice and information.

I felt that the workers actually cared for you and they were not in it for the money (EKG 13).

Treatment provided a unique opportunity for some EKG users (n=4) to step back and reflect on their life, often for the first time. Some gained a better understanding of the impact of drugs on their relationships, work, health and other life domains. These insights, informed by the individual's treatment experience, resulted in changes to attitude, behaviour and overall outlook.

Put myself into rehab and this was for all drugs...for the first time in my life I am being honest about my drug use and what I am doing. And this has been a key part of my recovery, being honest (EKG 05).

In addition to the positive treatment experiences reported by EKG users, a number also reported poor treatment experiences (n=6). The concerns of users related to a perceived lack of knowledge about GHB among GPs (n=2) and 'most' AOD service providers (n=1).

GPs in general, I have found don't know enough about drug and alcohol work really. I have found that most people don't know much about ketamine and GHB. I haven't really had a conversation with a GP about the use or possible long term effects (EKG 20).

Other concerns pertained to a perceived lack of understanding by service providers of clients' situation (n=3), the need to re-tell one's 'story' to different workers (n=1), a lack of information provision or assistance (n=1) and not feeling supported by service providers (n=1). The burden of attending drug diversion sessions during working hours was also noted, particularly for clients with work commitments (n=1).

EKG respondents (n=12) reported a need for a variety of interventions, strategies and information sources. There was a perceived need for more information regarding:

- The long term effects of EKG (n=5), especially GHB (n=3)

And the long-term effects, it's always good to know what the long-term effect of heavy use is. You don't want to get to 30 or 40 and be depressed and scattered for the rest of your life (EGK 08).

- Strategies around stopping/reducing use (n=3)
- The content of drugs, especially ecstasy pills and GHB (n=3)
- Places to receive help and support (n=3)

EKG users also reported a need for greater public awareness of:

- Treatment types available for EKG users (n=5). This is despite reasonably good knowledge of treatment options available among the interviewed EKG sample.
- The confidential and non-judgmental nature of AOD treatment (n=4).
- Access to a range of service types (e.g. AOD withdrawal, youth outreach, Youth AA, NA) (n=3).

EKG users also wanted:

- Ongoing support for heavy users (n=2)
- Access to peer workers (n=1)
- Access to pill testing (n=2)
- Access to safer injecting demonstration and safer using information targeting young people (n=1)

EKG users proposed that access to a range of information sources would be helpful. Such sources included AOD clinicians/psychologist (n=2), pharmacists (n=1) and via multimedia (DVDs, TV, radio) (n=2).

3.3.6 Increasing awareness of treatment services

As reported above, EKG users identified a need for greater public awareness of treatment options available to EKG users. Enhancing the knowledge of treatment agencies and service types may serve to increase access by EKG users in need of treatment, education, information and support.

Service providers reported they did not actively promote the service to EKG users. Two reported that their service was involved in general promotional activities, including participating in Drug Action Week and advertising in the local paper, while two others had worked in conjunction with GPs to raise public awareness of general health services.

Service providers (n=4) suggested that providing outreach and Needle and Syringe Programs were effective ways of promoting a service to potential clients. 'Word of mouth' was also noted (n=2) as a way to increase the public's awareness of AOD services. Two service providers noted the limited financial capacity of services to advertise.

In terms of possible future promotional activities, clinicians suggested:

- Advertising services through a range of different media sources such as community radio, free newspaper, Internet and television (n=3)
- Attending or holding information sessions at high schools and universities (n=2).
- Developing and/or enhancing peer education networks (n=2)
- Creating and distributing business cards or flyer to local business such as clothing and music stores (n=1)

Service providers (n=2) highlighted the importance of matching information provision and design with the demographic profile of EKG clients. Consultation should occur with EKG users in order to tailor the language, style and overall message.

Some EKG users (n=4) suggested that graphic images of drug use and its consequences were needed. Two reported that previous exposure to graphic information had a significant impact on them and encouraged them to critically reflect on their drug use for the first time.

They need to have more graphic stuff so people will actually look at it and think 'oh my god, what am I doing to myself'. The more graphic the better because that is what woke me up (EKG 15).

Maybe a more in-depth health warning like more of a consequence should be highlighted, I mean a lot of information has your street names but people already know that, they don't

need to be told other names, maybe adverse effects on your health. Like the way they are going with the smoking warning now. Need more graphic and realistic information (EKG 20).

Two EKG users considered scare tactics an ineffective way to deliver health messages to people who used drugs such as EKG.

3.3.7 Summary: AOD treatment for EKG users

Between 2000/01 and 2005/06, 1,075 COT were provided to Victorian AOD clients who identified ecstasy as their primary drug of concern. Approximately 60% of this treatment was delivered to drug diversion clients. More than 8,500 COTS were delivered where ecstasy was nominated as a secondary drug of concern.

Information, education, harm reduction strategies and brief interventions were typically provided to EKG users via CCCC treatment. Drug diversion clients were identified as more challenging due to their treatment ambivalence. Both clients and service providers reported a general lack of confidence in service providers' knowledge of EKG and appropriate treatment. A range of barriers to providing good treatment was noted and areas for service development identified. These included increasing EKG user awareness of treatment availability, service provider knowledge about harms related to EKG use and appropriate AOD treatment.

4 SUMMARY AND SERVICE IMPLICATIONS

The current study represents a preliminary exploration of EKG use, users and AOD treatment utilisation and responsiveness in Victoria. A range of primary and secondary data sources informed the key research questions, including a literature review, ADIS data, and semi-structured interviews with service providers and EKG users. The report examined the prevalence and profile of EKG users, including demographics, AOD use and treatment access, motivation for treatment seeking, and real and perceived barriers to EKG users accessing treatment.

Case studies demonstrated the experiences of clients and service providers within the treatment environment. Three different EKG user profiles were presented and the challenges of service provision explored in the context of service responsiveness to client need and client ambivalence to treatment.

The report also examined service utilisation by EKG users, information about AOD service types accessed, and appropriate treatment outcome indicators. Real and perceived barriers to treatment provision were explored and areas for improved service responsiveness identified.

Users of EKG received treatment from a range of specialist AOD service types. These included treatment from specialist AOD services such as: CCCC, Outreach, Drug Withdrawal (residential, outpatient and home-based), residential rehabilitation and online counselling services. EKG users also accessed GPs, psychologists and hospital emergency departments.

Interventions provided to EKG users by specialist AOD services included: Cognitive Behavioural Therapy (CBT), brief interventions such as Motivational Interviewing, harm reduction and relapse prevention. Also provided were general drug education and information and, to a lesser extent, natural therapies such as meditation, shiatsu, yoga and naturopathy.

GPs represented another source of information and education to EKG clients. Typically, harm reduction strategies were outlined and motivational interviewing delivered. Medication (anti-depressants, benzodiazepines or sleeping pills) were prescribed where EKG users presented with high prevalence mental health disorders such as anxiety and depression.

Good treatment practice comprised EKG information and education, according to service providers and clients. Information and education complemented the provision of specific and targeted interventions such as those noted above. Good practice was defined by service providers with significant EKG knowledge, and clinical experience and expertise in providing appropriate interventions to EKG clients. Service providers should also be good

listeners, supportive, caring, and non-judgemental in their approach, and able to tailor treatment to individual client needs. The confidential nature of AOD treatment was important to EKG users, particularly among the non-voluntary client group. The absence of any of these components of good practice served as barriers to treatment seeking by EKG users.

The perception by many EKG users that they did not have a drug use problem, or that their EKG use did not warrant AOD intervention represented another significant barrier to treatment seeking. Such views contributed to the low number of EKG presentations across specialist AOD treatment, at just 0.4% of all treatment provided in DHS-funded specialist AOD services. This, in turn, limited the capacity of the clinical workforce to develop the necessary skills and expertise that contribute to practice wisdom in the delivery of EKG interventions.

Service providers and EKG users noted the good work being undertaken by AOD service providers in Victoria. However, increasing and improving the profile of AOD treatment services was seen as critical to raising awareness and attracting EKG users into treatment. Central to this process are the following activities:

- Identification of the EKG training needs of Victorian AOD service providers
- Targeted training of a limited number of service providers (preferably forensic clinicians delivering drug diversion sessions in metropolitan and regional settings)
- The development of a body of EKG knowledge and expertise among particular service providers
- Utilisation of these service providers as EKG resources within their service and across the AOD sector
- Increased service provider attention to EKG issues for all clients, regardless of primary drug of concern

The need for ongoing workforce development around EKG remains central to better meeting the needs of those clients presenting with EKG concerns. Increased workforce capacity will enhance client treatment, and may also generate higher treatment access by EKG users currently lacking confidence in the sector. However, given the views of many EKG users that they do not need AOD treatment, the capacity of these measures to improve service access is unclear and should be monitored over time.

Strategies for improving user awareness of the harms of EKG use include increasing public health promotion at non-treatment sector sites. Convenience advertising has been used to great effect at strategic locations such as universities, schools, nightclubs, bars

and other licensed venues. Such advertising allows the delivery of key harm reduction messages to the target user group. Information dissemination via key Internet sites and peer education networks also taps into existing peer networks. Aligned with this is the need for improved client information resources regarding EKG. Such resources should be appealing as well as informative to the user group and readily available across the AOD service system and beyond.

This report has outlined a range of issues relating to the EKG drug user group and AOD sector responsiveness. As a preliminary step in better understanding Victorian EKG users and treatment, it is useful. However, given the limited scope of the research, these findings are indicative rather than conclusive and further research is required. Ongoing attention to the specific treatment needs of Victorian EKG users will contribute to greater awareness of the needs of the client group, the capacity of the AOD service system to deliver services, and appropriate service improvements.

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Appendix 1: Key research questions and data sources

Key research question	Data source
<p>What interventions (if any) do users of ecstasy, ketamine and GHB currently receive and from whom within the specialist AOD service system?</p>	<ul style="list-style-type: none"> • ADIS data • Service provider interviews • EKG user interviews
<p>What interventions (if any) do users of ecstasy, GHB and ketamine currently want and don't receive?</p>	<ul style="list-style-type: none"> • EKG user interviews
<p>What therapeutic interventions are currently provided to users of ecstasy, GHB and ketamine by GPs?</p>	<ul style="list-style-type: none"> • Service provider interviews • EKG user interviews
<p>What are the real and perceived barriers:</p> <ul style="list-style-type: none"> • For users of ecstasy, GHB and ketamine in seeking intervention • In providing interventions to users of ecstasy, GHB and ketamine 	<ul style="list-style-type: none"> • Service provider interviews • EKG user interviews
<p>Do treatment services need to improve responses to users of ecstasy, ketamine and GHB and how should this occur?</p>	<ul style="list-style-type: none"> • Service provider interviews • EKG user interviews

Appendix 2: List of service providers interviewed

Service providers who participated in the study and consented to be listed in the report are included in the table below. The names of EKG users interviewed are not included.

Name	Organisation
Sally Fountas	ACSO-COATS
Mark Tatti	ACSO-COATS
David Conti	Western Health DASWEST
Patty Etcell	Taskforce Community Agency Inc
Deb Homburg	Buoyancy Foundation
Angela Lanigan	Moreland Hall
Greg Lewis	Youth Substance Abuse Service (YSAS) Box Hill
Melissa Brown	Inner South Community Health Service
Jessica Sander	Inner South Community Health Service
Pauline Clarke	Eastern Health Primary Health & Alcohol and Drug Service
Marcia Perry	Eastern Health Primary Health & Alcohol and Drug Service
Stephen Mihaly	Barwon Health: Drug and Alcohol Service
Malcolm McRae	Mountview Corner House
Fran Bramwell	Health Works
Benny Monheit	Southcity Clinic

Appendix 3: Interview guide for service providers

1. Have you provided a therapeutic intervention to someone concerned about their ecstasy, ketamine or GHB use in the past two years. (Prompt: What drug, which intervention?)
2. To the best of your knowledge, what interventions are currently provided to people who use ecstasy, ketamine or GHB? Who are the key providers?
3. (For each provider) Who do they target and what do they provide? Who is providing best practice in this area and what do they do?
4. Approximately how many cases do you see each year where people present with issues relating to their ecstasy, ketamine or GHB? In terms of your overall workload, roughly what percentage of clients is that?
5. Can you please describe the profile of these clients (Prompts: age, gender, socioeconomic status, mental health, general health)
6. Please describe how you make your services known to people using these drugs?
7. Have you taken any specific steps to market your service to people who use these drugs?
8. How do you/your service typically engage someone using these drugs. (NB. 'Engage' means what do you do with them once they are in the door)
9. What would be the ideal treatment you could provide to them?
10. Can you walk me through your last case where someone presented with issues relating to ecstasy, ketamine or GHB.
11. For you, what would you call a good outcome from this therapeutic intervention?
12. Do you think there are any barriers generally to providing treatment to users of these drugs? Have you experienced any of these barriers? Tell me about the situation.
13. Do you think clinical practices need to change in relation to people who use ecstasy, ketamine and/or GHB? How?
14. Do you have anything else you want to tell me that should be in the report?

Appendix 4: Poster and Internet notice

Do you have any concerns about your ecstasy, ketamine and/or GHB use?

Are you over the age of 16 and live in Victoria? Turning Point Alcohol and Drug Centre wants to hear about your experience for a research project for the Department of Human Services.

They are conducting confidential and anonymous interviews in person or over the phone and will pay you \$30 for your time.

Please contact Janette Mugavin on ekg@turningpoint.org.au or 03 8413 8406 for more information.

Appendix 5: Interview guide for the users of ecstasy, ketamine and GHB

1. Age:
2. Sex:
3. Ethnic/cultural background:
4. What is the main language you speak at home:
5. What grade of school did you complete:
6. Have you commenced or completed any course after school? (circle): No; Trade/Technical; University/College
7. Have you ever used the following drugs? Have you used them in the past six months? How much would you use in a typical session? How much would you use in a heavy session? How do you normally take that drug? (fill in together)

	Ever used <i>tick/cross</i>	Used in the past six months <i>tick/cross</i>	Typical session amount	Heavy session amount	Route of administration <i>inject, snort, swallowed, shaft, smoke</i>
Ecstasy					
Methamphetamine powder (speed, goey, whiz)					
Methamphetamine base (paste, pure)					
Crystal methamphetamine (ice, Tina, shabu)					
Pharmaceutical stimulants (Ritalin/dex)					
Cocaine					
LSD					
Mushrooms					
MDA					
Ketamine					
GHB type substance (specify if GHB/14B or GBL)					
Amyl nitrate					
Nitrous oxide					
Cannabis					
Alcohol					
Heroin					
Methadone					
Other opiates					
Tobacco					
Benzodiazepines					
Other _____					

8. Have your patterns of using these drugs changed over the past six months? What changed?
(Prompt for changes in all 3 drugs)
9. In the past, have you ever gone to first aid or a hospital because of ecstasy, ketamine or GHB?
What happened?
10. What sort of options are you aware of for people who are concerned about their ecstasy,
ketamine or GHB use (ie want to cut down or stop using)?
11. What were your concerns about your ecstasy, ketamine or GHB use?
12. In the past six months, have you done anything about your concerns with ecstasy, ketamine or
GHB before?
 - a. Anything you've done by yourself? (describe)
 - b. Anything that you've done with the help from family or friends? (describe)
 - c. Anything involving a professional? (describe)
13. What prompted you to do that?
14. Walk me through exactly how you ended up at that treatment place (i.e. checked Yellow Pages,
made appointment etc.)
15. What did you think of it?
 - a. Are there things you liked about it?
 - b. Are there things you didn't like about it?
16. Are you receiving any other help, support or treatment at the moment, can you describe it to
me?
 - a. What do you think of it?
 - b. Are there things you like about it?
 - c. Are there things you don't like about it?
1. *(If never received treatment)* Can you think of a situation where you would seek out help, support
or treatment relating to your drug use? What would have to happen for you to consider this?
17. For you, what would be a good outcome for getting this help, support or treatment?
18. Are there other types of help, support or treatment that you would like to have access to? Can
you think of any other types of help, support or treatment that would be helpful to someone else
who is concerned about ecstasy, ketamine and GHB?
19. Have you ever felt there were things getting in the way of you seeking help, support or
treatment? Have you wanted help in the past and not been able to get it? Are there any other
things that might stop someone from getting help, support or treatment relating to their drug
use?
20. Do you think services need to change to meet the needs of users of these drugs? Why? (Prompt
for clinical practices)
21. Do you have anything else you want to tell me that should be in the report?

About Turning Point

Turning Point strives to promote and maximise the health and wellbeing of individuals and communities living with and affected by alcohol and other drug-related harms. We aspire to be a world leading service delivery and research and development centre. In working toward our goals we will ensure the safest possible environment in relation to alcohol and other drug problems today and into the future.

How to order publications

Copies of the Clinical Treatment Guidelines can be ordered from Turning Point Alcohol and Drug Centre. Contact Turning Point for a complete catalogue of publications.

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