Turning Point
TREATMENT · RESEARCH · EDUCATION

SUBMISSION: INQUIRY INTO CRYSTAL METHAMPHETAMINE

Parliamentary Joint Committee on Law Enforcement

Turning Point
June 2015

Part of

easternhealth
GREAT HEALTH AND WELLBEING

Methamphetamine use and harms

Methamphetamine and its associated health risks has garnered substantial attention in Australia and internationally (1-4). Methamphetamine use is associated with a wide range of harms, including seizures, stroke, sudden cardiac death (5, 6), drug induced psychosis (7), suicide attempt (8) and violent behaviours (9). Methamphetamine is commonly available in the Australian drug market as powder ('speed'), base and crystal ('ice' - a high purity form of methamphetamine) (10). Ice users experience higher levels of harm than users of other types of methamphetamine, which has been attributed to heavier use and dependence among ice users (11). The public health burden of heavy methamphetamine consumption, which emphasises the impact of long-term crystal methamphetamine ('ice') use, is also detailed in the literature (4).

The Victorian story, where there has been concern about growing 'ice' use and related harms, provides a snapshot for what has become a national phenomenon of increasing harms over the past five years. Since 2010 in Victoria, there has been a sharp spike in harms related to methamphetamine, and particularly ice, across a number of data sources as well as anecdotal reports from alcohol and other drug (AOD) clinicians (3). There is evidence of a substantial increase in recent 'ice' use amongst people who inject drugs (36% in 2010 to 75% in 2014) (3,12) and regular ecstasy users (18% in 2010 to 34% in 2014) (3,13). Over a two-year period, a eight-fold increase in 'ice'-related ambulance attendances (136 in 2009/10 to 1112 in 2012/13) underpinned a substantial rise in stimulant-related attendances (445 in 2009/10 to 1394 in 2012/13) (14). The greatest surge in attendances occurred in young people aged 16 to 29 years; an Australian sub-population with a higher rate of heavy methamphetamine use and at increased risk of methamphetamine related harms (4). Other indicators also suggest increasing harms. From 2003 to 2012, methamphetamine-related episodes of care (EOC) provided by Victorian AOD specialist services increased by 113% (3026 EOC in 2003 to 6439 EOC in 2012), while methamphetamine-related calls to Directline, Victoria's telephone AOD helpline, increased by 139% (1,785 calls in 2003 to 4268 calls in 2012) during this period (unpublished analysis by Turning Point). This mirrors national trends, with upward patterns of methamphetamine use among people who inject drugs, regular ecstasy users and police detainees (10, 12, 13). Yet, while evidence suggests methamphetamine use and harms have risen amongst established drug-using populations during the 2000s (14, 16, 17), national surveys indicate relatively steady use in the general population (18).

Enhancing data to inform methamphetamine interventions and policies

Methamphetamine, and particularly ice, use and related harms are hard to estimate. Population-level AOD surveys are marred by poor response rates, under-reporting of consumption, data collection practices that limit participation by heavy users and hard to reach populations (e.g. homeless, institutionalised people and other disadvantaged groups). While administrative data, such as emergency department (ED) presentations and hospital admissions, are often used to measure drug-related harm, in isolation these datasets have limitations that impact their usefulness in AOD research. International Classification of Diseases (ICD-10) diagnostic codes used in hospital and ED data are limited to aggregated drug categories without capacity to distinguish specific substances (19). For example, amphetamine and caffeine are

combined in a single category, meaning sub-types such as ice cannot be examined in isolation. ICD-10 codes also rely on clinician identification (20) and documentation (21, 22) of drug intoxication, an oft-omitted occurrence in the emergency department and hospital setting when clinical priorities mean the outcome or injury is coded rather than the aetiology of the presentation. Specialist alcohol drug treatment data (23) provides detailed information about drug use. While this is vital in understanding use and harms in treatment-seeking clients, strong evidence indicates that a small proportion of people experiencing drug-related harm present to specialist services (24). Accordingly, research with a focus on AOD treatment clients excludes a large proportion of users, and overlooks the opportunities afforded by mainstream health care services to capture information about the broader population of AOD users.

Accordingly, to appropriately respond to changes in use patterns, novel approaches incorporating multiple data sources are needed to identify harms in the community. Adaptation of traditional public health surveillance methods to provide AOD early warning systems has becoming increasingly popular over the past decade. Early warning systems are defined as routine and timely reporting mechanisms collating data from numerous sources, including health services, media reports and drug users self-report, to capture emerging trends. Currently, several international early warning systems provide timely information about emerging trends in AOD use and harms, such as the Føre Var system in Norway. This system utilises a flexible, multi-methods approach (25) incorporating secondary data from law enforcement, emergency and health services, drug user self-report and information in the public domain (e.g. news media, internet, street press) (26). In Australia, surveillance systems detect overuse of prescription medications, including the Prescription Shopping Program, which covers all government-subsidised medications; and Project Stop, which specifically targets pseudoephedrine diversion.

An ongoing, world-first alcohol and other drug (AOD) ambulance attendance surveillance system has demonstrated the robust, timely capacity to monitor ice-related harms at a population level (14). The Ambo Project reports ambulance attendances directly related to AOD consumption within two months of occurrence in Victoria (3, 26). Coding capability includes reliable and valid identification of specific drug sub-types, including ice (3) meaning inherent biases in ICD-10 coding area avoided while a broader population of health care users – all people attended by ambulance – are captured. This project has been successfully piloted at a national level, however is not currently ongoing.

Once again, however, this data has its own set of restrictions, particularly an inability to explore definitive event diagnoses, treatments and outcomes. Australian research indicates that linkage of routinely collected data is a cost-effective way to enhance the utility and policy relevance of routinely collected data (27, 28). Record linkage offers a powerful and methodologically robust means to create AOD-related harm surveillance systems for a fraction of the cost of studies designed on the basis of primary and prospective data collection (29-31). The Ambo Project data has been successfully linked to ED and hospitalisation dataset to ameliorate these aforementioned limitations, with over 90% of attendances transported to emergency department successfully matched (32). Using amphetamine-related ambulance attendances as

Part of
easternhealth
GREAT HEALTH AND WELLBEING

an example, from 2004 and 2009, 79-82% of methamphetamine-related ambulance cases were transported to an emergency department, with only 14-16% admitted to hospital. Furthermore, use of ICD-10 codes that could potentially indicate the involvement of amphetamines was rare across emergency departments and inpatient hospital data for these patients. Successful linking of ambulance, emergency department and admission information enables access to a broader population of people experiencing harms, identification of the specific substances used down to a sub-type level, avoidance of other ICD-10 biases while capturing complications, treatment and final outcomes in the tertiary health care setting.

Reducing methamphetamine-related harms

It is fundamental to the treatment of drug use disorders that we understand and treat the full range of problems an individual may present with, rather than focusing on one single drug and its associated harms in isolation, particularly as drugs such as methamphetamine are used in combination with alcohol and other drugs. Many treatment strategies that apply to methamphetamine dependence also apply to the treatment of other drug-related problems that result in long-term morbidity and mortality, such as alcohol and opioid dependence.

Promoting early help-seeking

There is a large gap in our treatment service models for individuals with methamphetamine-related problems, particularly related to quality evidence-supported medical care. This is of concern given less than 10% of young people with alcohol and drug disorders seek professional help (33), while only about a third of individuals with significant methamphetamine use disorders appear to be presenting to treatment services (34).

Many people use this drug recreationally, and do not progress to a diagnosis of methamphetamine addiction or dependence. Current data suggests only about 15% of Australians who have used methamphetamine in the last year report using it daily or almost daily (35). However, even intermittent users may experience some harms associated with use, such as psychosis or other mental health problems (36, 37).

There is therefore considerable scope to intervene early with individuals who do not present to drug and alcohol treatment services. Since 2006, Turning Point has delivered free, live text-based alcohol and other drug (AOD) counselling across Australia via the Commonwealth funded service Counselling Online (www.counsellingonline.org.au). The service is available 24 hours per day, seven days per week and the site also includes interactive screening tools, self-help materials and information. The service is visited by 30-40,000 people a year and around 10% of those engage in an online counselling session. In 2013-14, 22% of counselling sessions were for people concerned about their methamphetamine use, a steady increase from 2008-9 when only 8.9% of sessions concerned methamphetamine use.

Originally funded under the National Illicit Drug Strategy, this initiative was designed to improve community access to quality drug treatment and referral, particularly in rural and regional areas, and to offer an early intervention response for individuals and families. With low rates of help-seeking for alcohol and drug problems across Australia, Counselling Online provides an

important treatment option for individuals who face barriers in seeking traditional forms of help – because of geography, concerns about anonymity and stigma, or difficulties accessing help during business hours. Counselling Online provides a secure confidential space for individuals or family members to talk about their problems with professional counsellors in a non-confronting easy to access environment that is available 24 hours a day. The service model addresses issues of anonymity and privacy, is convenient and accessible, and helps first time help-seekers to navigate the service system, as well as pursue further support. Indeed, more than half of the counselling sessions occur outside of business hours, with one third of those being between the hours of 6pm and midnight and a fifth between the hours of midnight and 8am. A similar successful telephone-based approach has also been delivered in Victoria on Turning Point's free 24/7 Directline service. In 2013-2014, methamphetamine was most commonly cited as the primary drug of concern for callers to Directline, with a total of 18,722 calls over this period. Recently, Directline expanded its range of accessible low cost interventions to include a 6-session structured telephone-based program for alcohol, gambling, methamphetamine and cannabis disorders, with encouraging early data demonstrating the acceptability and effectiveness of this approach (38).

Increasing specialist support and workforce development

People with methamphetamine use problems often present with a range of comorbid problems, and as such frequently present to other parts of the community health system such as primary care, needle syringe programmes, or mainstream mental health services (24). It is essential that frontline clinicians in such services are equipped to screen, assess and treat methamphetamine-related problems. In particular, workforce training and effective capacity building strategies are needed to enhance the ability of mainstream mental health services to deliver best-practice treatment.

The role of addiction medicine and psychiatry specialists in providing support to frontline workers has already been demonstrated through the statewide Drug and Alcohol Clinical Advisory Service (DACAS), operated by Turning Point in Melbourne, a 24/7 model that enables general practitioners and other health professionals to seek timely and expert clinical advice via a telephone/paging system. The service has wide-reaching ability to assist practitioners in rural and remote locations with current coverage across Victoria, Tasmania and the Northern Territory. The DACAS model has huge potential to add further value to the health sector by utilising telehealth technologies for specialist addiction medicine and psychiatry consultations. A challenge for DACAS, however, is the limited referral options, particularly in places like rural and regional Victoria, due to a very small addiction specialist workforce.

It is important to note however, that there is currently a workforce crisis in addiction medicine and in addiction psychiatry. The model of a strong secondary and tertiary medical system, where GPs can refer and share care with specialists, is well-established in most fields of medicine. The gap that must be addressed in any strategy to deal with emerging public alcohol and other drug health issues, such as we are seeing with crystal methamphetamine, is the existing precarious state of leadership and expertise in alcohol and drug medicine. There is little investment in addiction medicine and psychiatry training at both an undergraduate and

postgraduate level. This is compounded by a lack of funded trainee positions in addiction medicine and psychiatry, with the vast majority of existing training positions being funded under a model (the Specialist Training Programme (STP)) that is at imminent risk of being discontinued. A shrinking addiction specialist sector is also partly due to a Medicare remuneration scheme that is not feasible for addiction medicine physician consultations. While psychiatry has a more feasible Medicare fee structure, most psychiatrists still choose a career in fields other than addiction psychiatry, due to issues such as stigma and limited opportunities for funded training placements, despite the high prevalence of comorbid alcohol and drug disorders among patients with mental illness.

Psychosocial and medical treatment strategies

Clinical evidence to support medication-assisted treatment of methamphetamine use disorder is currently limited. While pharmaceutical options have been trialled—including psychostimulant medications such as dexamphetamine, the "wakefulness agent" modafinil, the opioid antagonist naltrexone and a range of other drugs—those that show promise need further investigation. Support for clinical trials and further research into pharmacotherapy options will be critical in informing a medically-assisted recovery model of treatment.

Psychosocial treatment options, including counselling, and residential rehabilitation, are very effective forms of treatment for individuals with methamphetamine use disorders. Turning Point conducted the *Patient Pathways* project (39) that highlighted that individuals who report methamphetamine as their primary drug of concern have positive outcomes on metrics such as length of abstinence or level of drug consumption following currently utilised low-intensity psychosocial treatments.

While psychosocial treatments are available in the community, accessibility and awareness of such services continue to be a barrier to accessing care. Many of these treatments are underfunded and have limited capacity to meet current need. Between 2008 and 2014, Turning Point delivered a stimulant-specific, medical specialist supported, counselling programme, *Access Point*. While many mainstream counselling services had developed with a focus on alcohol or heroin, *Access Point* specifically addressed the needs of methamphetamine and other stimulant using clients, and was demonstrated to be successful for this client group, and attracted a broader cohort than that seen in traditional alcohol and drug services. The *Access Point* experience suggested there is a role for targeted counselling interventions, led by clinicians with familiarity and expertise in the needs of this population.

It is extremely important that consultation with consumers and carers/ families be considered as part of planning for treatment services. Turning Point recently launched a Victorian methamphetamine-specific telephone helpline (the Ice Advice Line), with the vast majority (72.8%) of calls coming from concerned significant others, demonstrating a clear need for information and assistance for families. Indeed, methamphetamine use is associated with a broad range of harms to carers, families and the wider community, so it is important that their needs are taken into account. Community discussions about methamphetamine use need to be

underpinned by a strong evidence base and the high level clinical expertise of medical and psychosocial care providers.

Reducing harms in non-treatment seeking populations

We would advocate for ongoing support for harm reduction measures such as needle syringe programmes and peer education networks to address blood borne virus risk in injecting drug users. Incarceration has not been demonstrated to be, in and of itself, an effective means of addressing methamphetamine-related harms. Incarceration has been shown to be an independent risk factor for seroconversion of hepatitis C. It is therefore important that harm reduction measures be extended to custodial populations in order to address this risk.

Recommendations

- Most individuals who use methamphetamines also use other drugs. We would suggest considering the full range of problems an individual may present with, rather than focusing on one single drug and its associated harms in isolation.
- Expansion of the Victorian *Ambo Project* to be a national, sustainable ongoing early warning surveillance system for alcohol and other drug use, including ice, at a national level.
- Expansion of telephone and online services to support people experiencing problems with their own methamphetamine use, or the use of methamphetamine by significant others (family, partners and others) as a key treatment and referral modality. This approach provides services that can be anonymous, accessible 24 hours a day, accessible to all populations regardless of geographic location, and reduces stigma associated with help-seeking. This also allows population level monitoring of changing patterns of harm and need, and will help support the targeting of services to most effectively meet the needs of those affected by the adverse consequences of ice use.
- Introduction of a national surveillance system to monitor methamphetamine involvement in ambulance, emergency departments and hospitals, using data linkage.
- Greater focus on how people engage with different kinds of services (exposure to ambulance, police, helplines (alcohol and other drug, financial, and social support) emergency departments, general practitioners, and community/financial services) to identify population level responses to enhance treatment and support seeking and connection. This could be achieved through enhanced data collection, monitoring and linkage across different systems to identify key points of contact with services.
- Support for tele-health models of supervision and specialist support for rural and remote services.
- Education and training for frontline clinicians in non-AOD services in the assessment and treatment of methamphetamine use and related harms.
- Support for trainee and consultant addiction medicine and addiction psychiatrist specialist positions and appropriate Medicare item remuneration.
- Engagement of consumers and carers during consultation process.

- Ongoing support for harm reduction measures to address blood borne virus risk in injecting drug users.

References

1. Tanne JH. Methamphetamine epidemic hits middle America. BMJ 2006; 332(7538): 382.

2. McKetin R et al. The rise of methamphetamine in Southeast and East Asia. Drug Alcohol Rev 2008; 27(3): 220-228.

3. Heilbronn C et al. Trends in amphetamine-related harms in Victoria. Med J Aust 2013; 199(6): 395.

4. McKetin R & DI Lubman. Heavy stimulant use remains a significant health concern for Australia. Med J Aust 2011; 195(10): 565-6.

5. Phillips MC et al. Ischaemic stroke among young people aged 15 to 50 years in Adelaide, South Australia. Med J Aust 2011; 195(10): 610-4.

6. Kaye S et al. Methamphetamine and cardiovascular pathology: A review of the evidence. Addiction 2007; 102(8): 1204-1211.

7. McKetin R et al. Dose-related psychotic symptoms in chronic methamphetamine users: Evidence from a prospective longitudinal study. JAMA Psychiatry 2013; 70(3): 319-324.

8. Marshall BDL et al. Injection methamphetamine use is associated with an increased risk of attempted suicide: A prospective cohort study. Drug Alcohol Depend 2011; 119(1-2): 134-137.

9. McKetin R et al. Does methamphetamine use increase violent behaviour? Evidence from a prospective longitudinal study. Addiction 2014; 10.1111/add.12474.

10. Sweeney J & Payne J (2012). Drug use monitoring in Australia: 2009–10 report on drug use among police detainees. Canberra: Australian Insititue of Criminology

11. Kinner SA & Degenhardt L. Crystal methamphetamine smoking among regular ecstasy users in Australia: increases in use and associations with harm. Drug Alcohol Rev 2008: 27(3): 292-300.

12. Cogger S, Dietze P & Lloyd B (2015). Victorian Drug Trends 2014. Findings from the Illicit Drug Reporting System (IDRS). Australian Drug Trends Series No.130. Sydney, National Drug and Alcohol Research Centre, UNSW, Australia.

13. Truong A, Dietze P & Lloyd B (2015). Victorian Trends in Ecstasy and related Drug Markets 2014. Findings from the Ecstasy and Related Drugs Reporting System (EDRS). Australian Drug Trend Series No. 139. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

14. Lloyd B, Matthews S, Gao C (2014). Trends in alcohol and drug related ambulance attendances in Victoria 2012/13. Fitzroy, Victoria: Turning Point

15. NDARC (2013). Australian Drug Trends 2013, Findings from the Illicit Drugs Reporting System (IDRS) Key findings- Drug Trend Conference Handout. National Drug and Alcohol Research Centre (NDARC), Sydney: University of New South Wales

16. Degenhardt L, Roxburgh R & McKetin R. Hospital separations for cannabis- and methamphetamine-related psychotic episodes in Australia. Med J Aust 2007; 186(7): 342-5.

17. Degenhardt L et al. The epidemiology of methamphetamine use and harm in Australia. Drug Alcohol Rev 2008; 27(3): 243-252.

18. AIHW (2011). 2010 National Drug Strategy Household Survey report. Canberra: Australian Institude of Health and Welfare

19. AIHW. Australian Family of Health and Related Classifications – ICD-10-AM. Canberra: Australian Institute of Health and Welfare.

20. Cherpitel C et al. Clinical assessment compared with breathalyser readings in the emergency room: concordance of ICD-10 Y90 and Y91 codes. EMJ 2005; 22(10): 689-95.

21.Indig D et al. Why are alcohol-related emergency department presentations under-detected? An exploratory study using nursing triage text. Drug Alcohol Rev 2008; 27(6): 584-90.

22. McKenzie K et al. Identification of alcohol involvement in injury-related hospitalisations using routine data compared to medical record review. ANZJPH 2010;34(2): 146-52.

23. AIHW 2012/ Alcohol and Other Drug Treatment Services National Minimum Data Set 2012-13: specifications and collection manual. Drug treatment series no. 17. Cat. no. HSE 123. Canberra: Australian Institute of Health and Welfare.

24. Quinn B et al. An exploration of self-perceived non-problematic use as a barrier to professional support for methamphetamine users. Int J Drug Pol 2013; 24(6): 619-23.

25. Mounteney J & Leirvag S. Providing an earlier warning of emerging drug trends: the Føre Var System. Drugs: Educ, Prev Pol 2004;11(6):449-71.

26. Mounteney J, Haugland S. Earlier warning: a multi-indicator approach to monitoring trends in the illicit use of medicines. Int J Drug Pol 2009; 20(2): 161-9.

27.Brook EL et al. Public good through data linkage: measuring research outputs from the Western Australian Data Linkage System. Aust N Z J Public Health 2008; 32(1):19-23.

28. Roos LL et al. Policy analysis in an information-rich environment. Soc Sci Med 2004; 58(11):2231-41.

29. Bartu A et al. Mortality in a cohort of opiate and amphetamine users in Perth, Western Australia. Addiction 2004; 99(1):53-60.

30. Bird S. Over 1200 drugs-related deaths and 190,000 opiate-user-years of follow-up: Relative risks by sex and age group. Addiction Res Theory 2010; 18:194-207.

31. Degenhardt L et al. Mortality among clients of a state-wide opioid pharmacotherapy program over 20 years: risk factors and lives saved. Drug Alcohol Depend 2009; 105(1-2):9-15.

32. Lloyd B et al (2014). Ambulance Hospital Data Linkage Report. Fitzroy: Turning Point Alcohol and Drug Centre.

33. Reavley, Nicola J., et al. Help-seeking for substance use, anxiety and affective disorders among young people: results from the 2007 Australian National Survey of Mental Health and Wellbeing. Aust N Z J Psychiatry 2010; 44.8: 729-735.

34. McKetin R, Kelly E. Socio-demographic factors associated with methamphetamine treatment contact among dependent methamphetamine users in Sydney, Australia. Drug and Alcohol Rev 2007; 26 (2): 161-168.

35. AIHW (2014) National Drug Strategy Household Survey report. Canberra, Australia: Australian Institute of Health and Welfare.

36. Mcketin R et al. The risk of psychotic symptoms associated with recreational methamphetamine use. Drug Alcohol Rev 2010; 29(4): 358-363.

37. Quinn B et al. Methamphetamine use in Melbourne, Australia: Baseline characteristics of a prospective methamphetamine-using cohort and correlates of methamphetamine dependence. J Subst Abuse 2013; 18(5): 349-362.

38. Best, D et al. Development and Implementation of a Structured Intervention for Alcohol Use Disorders for Telephone Helpline Services. Alcohol Treat Q 2015; 33(1): 118-131.

39. Lubman, D. et al (2014). A study of patient pathways in alcohol and other drug treatment. Fitzroy: Turning Point.