A Retrospective Analysis of Clients Admitted to an Inpatient Unit for Support to Withdraw from Methamphetamine.

VICKI F.H. MACFARLANE, FELIX LAMARCHE vicki.macfarlane@waitematadhb.govt.nz phone +6421441257 published 9 November 2019.

Background/ Introduction

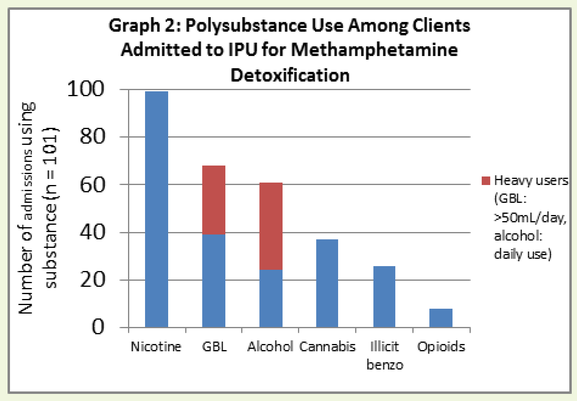
There are few studies to guide management of methamphetamine withdrawal. The aim was to report on characteristics and management of methamphetamine dependent clients admitted to an inpatient unit for withdrawal support and to consider factors that may contribute to high rates of early discharge.

Pitman House is the only inpatient withdrawal unit (IPU) for the greater Auckland region. Methamphetamine withdrawal is generally managed in the community and clients are only admitted if there is risk of medical or mental health complications or they require withdrawal support from other substances. Clients are usually admitted for 7-10 days and in most cases clients are discharged from the IPU to a community based social detoxification unit or to a residential treatment.

Aim

The audit was designed to answer several key questions: What are the demographics of clients? What is the pattern of methamphetamine and other substance use among these clients? How is medication used to manage withdrawal symptoms, in particular diazepam, baclofen and quetiapine? Are there any identifiable factors associated with clients discharging early?

Discussion



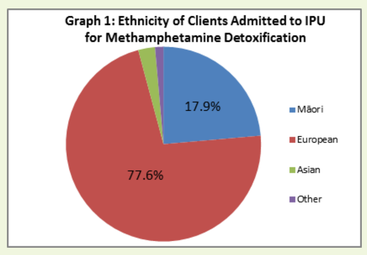


Table1: Break down of diazepam administration for various population groups

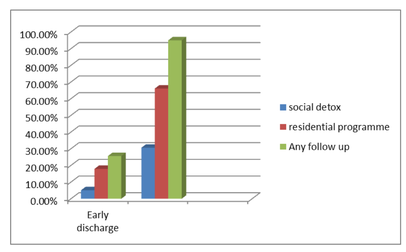
Population (Admissions without medication charts were excluded)	Number of admissions in this population	Mean dose of diazepam administered in first 24hrs (mg)	Mean duration of diazepam administration (days)
All admissions	98	53.47	5.41
Admissions using GBL	67	64	5.7
Admissions using > 50mL/day of GBL	28	67.7	6.21
Admissions using alcohol	60	57.2	5.4
Admissions using alcohol daily	36	46.4	5.27
Admissions on prescribed benzodiazepines	22	57	6.1
Admissions using illicit benzodiazepines	26	69.9	6.6
Admissions using benzodiazepines	42	64.4	6.3
Admissions using > 1 gram/day methamphetamine	33	53.7	5
Admissions using <1 gram/day methamphetamine	64	53.3	5.6
Admissions using only methamphetamine (nil other substance)	4	8.75	2.5
Admissions being prescribed baclofen	24	85	5.8

Table 3: DAMA Rate Among Different Demographics

Demographic	Number of DAMA in this demographic	% of this demographic that DAMA
All	39	38.6%
Male	16	43.2%
Female	23	36%
Māori	8	50%
Non- Māori	31	36.5%
GBL >50mL/day users	12	41.4%
Daily alcohol users	17	45.9%
>1 gram meth/daily	20	57.1%
<1 gram meth/daily	19	28.8%

Results

- We included all clients who were admitted over a 4 year period if one of their primary goals was to withdraw from methamphetamine.
- There were 67 clients and 101 admissions over the 4 years that met the criteria. 69% were only admitted once during the 4 year period.
- The mean age was 34.3 years old (20-58 years), with 52% aged between 25 and 34 years. Of the 67 clients, 27 were male and 40 were female. Ethnicity: 77.6% European, 17.9% Māori. 49.3% were NZ European females. 75% criminal history with 44% current charges.
- All drug use was self-reported on admission. The mean daily dose of methamphetamine among all admissions was 619mg. 44.5% of admissions reported recent IV methamphetamine use, and among this population the mean daily methamphetamine dose was 732mg.
- Only 5 clients reported only using methamphetamine and the mean daily use was only 440mg.
- Family and children were a common motivating factor in accessing treatment.
- Diazepam was prescribed to 95% of admissions and baclofen to 25% of admissions all of whom had been using GHB. Quetiapine was prescribed to 63.4% .
- The clients who had the highest diazepam requirements were those clients using GBL/GHB and non-prescribed benzodiazepines.
- Level of use of methamphetamine was not associated with amount of diazepam required.
- Use of baclofen did not result in lower diazepam requirement or less chance of DAMA.
- 38.6% of clients discharged AMA.
- Having a follow up plan was associated with a low risk of DAMA.



Despite reports of increasing prevalence of methamphetamine use in New Zealand the numbers of clients admitted to our withdrawal unit has remained stable. 92.5% of clients were using other substances primarily GHB and alcohol with a high percentage of non-Māori females A common motivating factor was family and children. There is no evidence based pharmacological treatment for methamphetamine withdrawal, but diazepam is effective in managing withdrawal from the substances most commonly used with methamphetamine. Baclofen was used to manage GHB withdrawal in some clients but it did not appear to make any difference to the amount of diazepam required or the rate of DAMA.

Heavy methamphetamine users are more likely to still be experiencing significant withdrawal symptoms on days 5 to 7 after admission correlating with a spike in discharges against medical advice. Providing heavy methamphetamine users with increased psychosocial and pharmacological support during this period could help prevent some of these discharges and ensure more clients engage with follow-up services. Having a robust follow up plan either social detoxification service or a residential programme was associated with a much lower early discharge rate.

Conclusion

Methamphetamine withdrawal remains a complex and difficult syndrome to manage. There is no specific pharmacological treatment for methamphetamine withdrawal, but diazepam appears to be being used to good effect to manage withdrawal from the substances most commonly used with methamphetamine. Having a robust follow up plan either social detoxification service or a residential programme was associated with a lower early discharge rate.

Photo by David Prentice

CADS COMMUNITY ALCOHOL & DRUG SERVICES Te Wai Awhina Rongoatia O Tamaki

Waitematā District Health Board

Best Care for Everyone