

## **PRESENTER SYMPOSIUM:**

### **What works best, for whom? Using routine outcome monitoring systems to examine treatment outcomes and trajectories among diverse client groups**

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**Aim:** The objective of this symposium is to showcase a range of approaches to understanding treatment outcomes using common routine outcome measures collected during treatment. Participants will develop an enhanced understanding of important factors associated with changes during treatment and treatment outcomes among different client groups (e.g., women, young people, people with chronic pain) in different treatment settings (e.g., residential, community/outpatient). Participants will gain insight into the ways in which routine outcomes measures can be used and opportunities for improvement.

This symposium includes the following presentations:

1. Trajectories of psychological distress among clients in residential treatment for substance use disorders (Emma Hatton)
2. Gender differences in baseline characteristics and first month treatment changes among clients attending residential treatment for opioid use (Chloe Haynes)
3. Three-month polysubstance use patterns among people enrolled in outpatient treatment for methamphetamine use (Nina Pocuca)
4. Completion of drug and alcohol treatment among young people in New South Wales (Megan Wells)
5. Chronic pain and suicide-related behaviours in people engaging with alcohol and other drug services (Gabrielle Campbell)

**Discussion:** Participants will critique the ways in which routine outcome measures are currently collected and used by services and share examples of good practice. Participants will reflect on opportunities to enhance client outcomes using routine outcome measures, for example: enhanced data systems, benchmarking, quality improvement projects or enhanced feedback and collaboration with individual clients.

**Disclosure of Interest Statement:** This work was supported by the National Health and Medical Research Council (NHMRC) Meaningful Outcomes Centre for Research Excellence.

## **PRESENTATION 1: Trajectories of psychological distress among clients in residential treatment for substance use disorders.**

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**Introduction:** High psychological distress has been associated with ongoing substance use, relapse, and comorbid depression and/or anxiety. People seeking treatment for substance use disorders frequently report high distress at entry to residential rehabilitation, but little is known about changes in distress throughout treatment. This study groups clients based on trajectories of distress within a treatment episode and examines associations with client characteristics.

**Method:** A retrospective cohort of 1,492 adults who attended residential rehabilitation between February 2012-2023 were identified using New South Wales NADAbase data. Eligible participants were aged 18+ years and had completed at least three Kessler Psychological Distress Scale (K10) assessments in the first 90 days of treatment. Participants were grouped according to K10 trajectories using latent growth curve modelling (LGCM). Demographics, Severity of Dependence (SDS) and Quality of Life (QoL) across groups were explored as correlates of class membership using multinomial logistic regressions.

**Results:** Analyses indicated best model fit for five K10 trajectory classes. Age, gender, primary substance, QoL and SDS were significant correlates of class membership. Compared to the 'high-low' class (34.5%), the 'moderate-low' (45.4%) class were less likely to use cannabis, and more likely to identify as man/male, have lower SDS and higher QoL; the 'very high-high' (5.6%) class were more likely to identify as woman/female, be aged <25, have lower QoL and SDS; the 'very high unchanged' class (1.3%) were more likely to have lower QoL; and the 'very high-moderate' class (13.1%) were more likely to have lower SDS and use opioids.

**Conclusions:** Among this cohort with strong treatment engagement, there are distinct distress trajectories during residential treatment, with around 7% reporting sustained high levels of psychological distress.

**Implications for Practice or Policy:** High psychological distress that persists beyond the first month of treatment warrant review with the individual clients regarding treatment planning and supports.

**Disclosure of Interest Statement:** This research is partially supported by an Australian Research Training Program Scholarship for EH. MLL, RS and SE are employed by NADA. PK and BL hold research consultancies with NADA

## **PRESENTATION 2: Gender differences in baseline characteristics and first month treatment changes among clients attending residential treatment for opioid use**

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**Introduction:** Non-government alcohol and other drugs (AOD) services are the largest provider of residential rehabilitation (RR) in NSW. Opioids were the third most common substance of concern for RR episodes in 2022. This study examined gender differences at baseline and 30-days among clients attending NSW AOD RR for opioid use.

**Method:** Participants included clients in the NSW NADABase reporting opioids as principal substance of concern for their most recent RR episode in the last 10 years ( $N=3027$ , 29.6% women) and the subset of those with valid 30-day treatment outcome data ( $n=453$ , 28.2% women). Comparisons were made between men and women on baseline characteristics (e.g., age, country of birth, accommodation/living arrangements, income), substance use, and core outcome measures including psychological distress (K10), severity of dependence (SDS) and quality of life (EUROHIS QoL) using chi-square (categorical) and t-tests (continuous).

**Results:** On average, women had a younger age and shorter treatment duration. Women were more likely to live alone/with children, receive government benefits, and obtain service referrals from community/child protective services. Men were more likely to be born outside of Australia and receive referrals through the justice system. Significant decrease in K10 and increase in QoL scores at 30-days for both genders. No significant changes in SDS scores.

**Conclusions:** Men and women in RR for opioid use have gender-specific needs, priorities, and circumstances which may impact treatment engagement and outcomes. To advance patient-centred care in this area, the planning, provision and continuity of treatment should consider how best to accommodate these differences.

**Implications for Practice or Policy:** These findings are particularly important for mixed-gender RR where competing treatment needs may be present within the same service. Integration of additional services (e.g., housing/financial and childcare support) and tailoring of treatment programs is required to effectively meet the differing needs of men and women.

**Disclosure of Interest Statement:** CH is supported by a PhD scholarship provided by an Australian Government Research Training Program Grant. ML, SE and RS are all employed at NADA. PK and BL hold research consultancies with NADA.

### **PRESENTATION 3: Three-month polysubstance use patterns among people enrolled in outpatient treatment for methamphetamine use.**

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**Background:** Polysubstance use is common among people seeking treatment for methamphetamine use and is associated with greater co-occurring psychopathology and poorer treatment outcomes. However, research is yet to examine whether polysubstance use persists across time among people enrolled in treatment for methamphetamine use.

**Method:** Participants were  $N=1,508$  clients enrolled across 91 Lives Lived Well outpatient drug treatment programs between May 2021 and August 2022, who reported methamphetamine as their primary drug of concern. Past-month methamphetamine, alcohol, cannabis and tobacco use, and depression and anxiety symptoms were assessed at baseline, one-month, and three-months. PTSD and psychosis were assessed at baseline.

**Results:** Repeated measures latent class analyses examining probability of past-month substance use revealed five classes:(1) high and decreasing methamphetamine + stable-high alcohol, cannabis and daily tobacco ( $n=468$ , 31%);(2) stable-high methamphetamine + stable-moderate daily tobacco ( $n=361$ , 24%);(3) stable-moderate methamphetamine + stable-high alcohol and daily tobacco ( $n=314$ , 21%);(4) moderate-low and decreasing methamphetamine ( $n=229$ , 15%);(5) moderate-low and decreasing methamphetamine + stable-high daily tobacco ( $n=136$ , 9%). Probability of using substances other than methamphetamine remained stable across the three timepoints. Classes 2 and 3 had greater severity of amphetamine involvement at baseline and three-months, and greater baseline depression symptoms, than Classes 4 and 5. Class 2 continued to have greater depression symptoms than Class 4 at three-months.

**Conclusions:** Individuals enrolled in outpatient treatment for methamphetamine use report distinct substance use patterns, although daily tobacco use was ubiquitous (except for class 4). Most clients presented with polysubstance use that persisted across the three-month period. Clients with stable methamphetamine and polysubstance use had elevated severity of amphetamine use involvement and co-occurring psychopathology.

**Implications for Practice or Policy:** Services should consider polysubstance use among people enrolled in methamphetamine treatment. Transdiagnostic interventions concurrently targeting polysubstance use (including tobacco) and co-occurring psychopathology may be useful for a significant portion of clients.

**Disclosure of Interest Statement:** NP and this work was supported by the National Health and Medical Research Council (NHMRC) Meaningful Outcomes in Substance Use Treatment Centre of Research Excellence.

## **PRESENTATION 4: Completion of drug and alcohol treatment among young people in New South Wales**

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**Background:** Young people have high rates of early disengagement from alcohol and other drug (AOD) treatment, which has been associated with poorer treatment outcomes. This study aimed to identify factors associated with treatment completion among young people accessing AOD treatment.

**Method:** Routinely-collected data from the Network of Alcohol and Other Drug Agencies' client database (NADAbase) was used. Participants were young people aged <25 who accessed treatment between 2012-2023 (N=17,683). Only participants' most recent treatment episode was used. Multivariate binary logistic regressions examined associations between treatment completion and treatment characteristics (referral source, youth-specific services, treatment setting) and client characteristics (e.g. age, gender, living arrangements, substance use, severity of dependence (SDS), psychological distress (K10) and quality of life (EUROHIS-QoL)).

**Results:** Completion rate was higher in community- than residential- treatment (49% vs 37%). Across both settings, insecure accommodation, primary use of cannabis (compared to alcohol), and polysubstance use were associated with non-completion, and youth-specific services had higher treatment completion rates. Being older, primary use of opioids/sedatives, higher psychological distress, and injecting drug use were associated with lower treatment completion in community settings. In residential services, non-justice system referrals and engagement with employment was associated with treatment completion, and reporting primary use of psychostimulants was associated with non-completion.

**Conclusions:** Young people with more complex presentations require additional support to overcome barriers to treatment engagement. Youth-specific treatment services may more effectively meet the needs of this population and promote ongoing engagement.

**Implications for Practice or Policy:** Treatment non-completion was common among young people in AOD treatment, especially among those with complex and intersecting needs. Additional resources such as interdisciplinary care and case management may be particularly important to help these clients overcome barriers to engagement. It is important that services are sufficiently resourced to identify and provide additional support for people at high risk of dropout.

**Disclosure of Interest Statement:** MW was supported by an Australian Government Research Training Program (AGRTP) scholarship while conducting this research. MLL, RS and SE are employed by NADA. PK and BL hold research consultancies with NADA.

## **PRESENTATION 5: Chronic pain and suicide-related behaviours in people engaging with alcohol and other drug services**

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**Background:** Emerging research identifies chronic pain as an independent risk factor for suicide-related behaviours (ideations, planning and attempts). Although chronic pain is common among people with substance use disorders (SUD), limited research has examined suicide-related behaviours in people with chronic pain and SUD. This study examined the client characteristics associated with chronic pain in people engaging with alcohol and other drug (AOD) services and identified risk factors for suicide-related behaviours among this group.

**Method:** Between November 2020 and November 2022 approximately 12,128 people completed outcome measures at Lives Lived Well AOD treatment services. Prevalence of chronic pain and suicide-related behaviours, and associations with substance use, mental health and quality of life were examined.

**Results:** Approximately 40% of the sample reported chronic pain. The average age of the sample was 35 years (SD 11.5). Chronic pain was more common in females than males. There were no differences in primary drug of concern among people with chronic pain, compared to people without chronic pain. Recent suicide-related thoughts were significantly more likely in people with chronic pain (53%) compared with people without chronic pain (32%). Among people with chronic pain, recent suicide-related thoughts were associated with higher proportions reporting moderate-severe depression (93% vs 56%) and anxiety (99% vs 83%), compared to people with no recent suicide-related thoughts.

**Conclusions:** Chronic pain is common in people presenting to AOD services and there are elevated rates of recent suicide-related ideation and moderate to severe depression and anxiety in this group.

**Implications for Practice or Policy:** Screening for chronic pain among AOD treatment entrants, mental health conditions and suicidal ideation and behaviour is recommended. Referral to and/or collaborative care with pain and/or mental health services should be considered.

**Disclosure of Interest Statement:** GC and this work was supported by the National Health and Medical Research Council (NHMRC) Meaningful Outcomes in Substance Use Treatment Centre of Research Excellence.