Characteristics of Admissions to an Australian Residential Substance Use Treatment Programme using the Addiction Severity Index

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Abstract

Introduction and Aims: This study describes the characteristics of individuals entering residential substance abuse treatment programmes of The Salvation Army. It compares these characteristics with a large inpatient sample in the USA as well as previous Australian samples. **Design and Methods:** The ASI was administered to 1105 residents at intake to an Australian residential substance abuse programme. **Results:** Younger age groups showed a higher frequency of abuse of substances other than alcohol. ASI composites revealed substance abuse rates were more severe than a normative sample from the USA. Participants also experienced high levels of psychiatric illness compared to the normative sample. **Discussion and Conclusions:** Clients have multiple complex needs associated with their substance abuse, psychiatric co-morbidity, and difficulties in other life domains.

Key Words: *Addiction Severity Index, substance abuse, residential treatment, depression, anxiety*

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Over fifteen years have passed since characteristics of treatment-seeking individuals in Australian residential substance abuse settings have been systematically analysed and published (1-4). In that time, patterns of substance abuse may have changed (5). Additionally, recent international research confirms that psychiatric co-morbidity is consistently found among those who abuse alcohol and other drugs at high rates (6-9), something not considered in the dated Australian data. There are few Australian studies addressing the complex difficulties related to the co-occurrence of substance abuse and psychiatric disorders (10-11). This article describes the general characteristics of a large sample of residential substance abuse clients through the use of the Addiction Severity Index (ASI). The study also assesses the extent to which residential treatment programmes attract clients with multiple, enduring, and complex problems related to their substance abuse.

Characteristics of Australian Substance Abuse Inpatients

No studies were found that investigated characteristics of Australian residential substance abuse agency clientele since the early 1990's, with the exception of Ross et al. (10). Research prior to 1992 is described briefly below.

Webster *et al.* (4) surveyed 431 substance abuse treatment agencies throughout Australia in the country's first ever national substance abuse census. It included residential and non-residential clients. Clients' mean age was 34.7 years. They were generally male (70.6%) and unemployed (62.2%). Approximately 10% of this sample was indigenous. The primary presenting problem was alcohol (55.2%), followed by opiates (26.9%).

Hall *et al.* (3) conducted a review of admissions to a residential centre (the Buttery) over a 12-year time frame, from 1980-1992. Final year data showed males comprised 70% of the sample, with a mean age of 32.1 years. Primary presenting problems were opiates (85%).

Alcohol (37%) and stimulants (20%) were the other primary substances of addiction, suggesting that poly-drug dependence was common in the sample.

Darke *et al.* (1) conducted a four year review of residential drug admissions (1988-1992) from the Clients at Residential Agencies (CARA) database. Their large sample (n = 6940) of drug abusers were primarily unemployed (83%) males (69.9%), with a mean age of 27.9 years. Alcohol was not included in this report. The primary substance addictions for this sample were opiates (65%), stimulants (16.1%), and cannabis (8.7%). A review of alcohol-only inpatient admissions for the same period was conducted by Kelaher *et al.* (2), utilising the same database. Admissions were most likely to be male (87.7%) with a mean age of 32.9 years. Unemployment was again a problem (83.6% unemployed).

The first prospective study of heroin-using clients in residential treatment in Australia involved data from 180 respondents (10). Consistent with previous findings, clients were most likely to be male (63%) and were similar age to those in the studies cited above (27.8 years) with a generally low (Yr 10) level of education. Ross *et al.* also found that 64% of their sample experienced severe psychological distress, with 29% meeting DSM-IV criteria for major depressive disorder at the time of the study. Close to half of the sample (44%) had attempted suicide in the previous 12 months. Females were more likely than males to experience these negative outcomes.

Together these data indicate several issues that provide the rationale for the present study. Previous trends indicate that unemployed males in their late twenties to early thirties are most likely to be in treatment for substance abuse. This study will examine the extent to which this trend is consistent two decades after previous research. Second, *Ross et al.* (10) highlighted that the needs of these clients are highly complex, owing to psychiatric co-morbidity among their specific target population. Because of the lack of currency for most of the published data, there is little known about characteristics of present treatment seeking

substance abusers in residential services beyond those in a heroin abuse population, particularly in relation to psychiatric co-morbidity. Only Ross *et al.* (10) collected data in relation to domains beyond substance abuse. In short, there is a lack of data about those presently entering residential treatment centres for substance abuse regarding issues beyond the specifics of their drug problem. Further to this, the variety of measures used in obtaining the data described above is relatively limited. Use of a validated and broadly accepted and utilised measure will allow for a more comprehensive description and clearer comparisons between studies. This study will utilise the Addiction Severity Index (ASI) to facilitate such comparisons.

The ASI is one of the best known measures of addiction severity (5). McLellan *et al.* identify the ASI as an essential element to major addiction study protocols worldwide and it is utilised as 'part of standard clinical practice and treatment evaluation studies' both in the USA and internationally (p. 113). The ASI is a semi-structured interview which assesses seven domains (e.g., medical, psychiatric) to understand the nature, depth, and difficulties associated with a person's addiction. While the ASI is used broadly throughout the world, to our knowledge this is the first published study that utilises this measure with an Australian sample.

Method

Participants

From November 2008 until April 2011, the ASI was administered to 1105 participants within 14 days of admission to a residential drug and alcohol rehabilitation service operated by The Salvation Army. This process took place across eight individual service locations in NSW, Queensland, and the Australian Capital Territory, catering for mixed gender, men only, and women only. Participants provided informed consent before participating in this study and all protocols received review and approval of the University of Wollongong

Human Research Ethics Committee. Males comprised 83.1% (n = 918) of the sample. Participants' ages ranged from 17 years to 73 years (M = 35.53, SD = 10.61).

Measures

Upon admission to the residential care facility, the Addiction Severity Index, version 5 (12), was administered to all participants. The ASI is a semi-structured interview that assesses the extent of client addiction severity in seven domains: medical history and status, employment, alcohol and drug use and history, legal issues, family and social relationships, and psychiatric history and status. The ASI is designed to elicit information from participants about their involvement in each of these domains for the past 30 days, and also their lifetime experiences. Thus, 30-day timeframes give an indication of recent problems a client has experienced, including frequency and intensity, while lifetime timeframes allow for the duration of problems to be assessed, as is severity. The ASI offers good validity, and is used widely as an assessment of addiction severity (4-5, 12-14).

Procedures

The Salvation Army Staff participated in a one-day ASI training session that was delivered by the research team (PK). The training was based on the Addiction Severity Index Module of the United Nations Drug Dependence Treatment Training Package (15). It involved a combination of a didactic presentation, group discussion, and participant role-plays. A follow-up booster session was conducted approximately 6-months after the initial training.

The ASI was incorporated into the routine operating procedures of each of the recovery service centres. Case managers were instructed to complete the ASI during the person's first 4-days at the unit. Due to work demands in routine clinical practice, often there were delays in the interview being completed. Thus our analysis allows a timeframe of up to

two weeks for ASI's to be completed. All data were entered into The Salvation Army Management Information System and downloaded for analysis in SPSS.

Results

Table 1 provides an overview of demographic characteristics of the present sample, along with means (and SD's) of each of the various groups that will be compared. It also provides descriptive data in relation to each of the ASI domains.

Description of Present Sample

The largest proportion of the present sample was male, which is consistent with prior gender differences in treatment seeking samples (13). Participants were most likely to be Anglo-Australian, with participants identifying as Aboriginal or Torres Strait Islander people having the next highest representation among respondents (9.3%). Only 6% of the sample were married or living as married, with the remainder identifying as single. Just under one third of the sample had not completed their high school education. Approximately 10% of participants had completed technical or university qualifications. The data showed no differences between males and females in relation to substance use. Smoking tobacco was reported by 603 participants (54.57%). Mean number of cigarettes smoke per day was 13.00 (*SD = 11.87).*

Substance Use and Psychiatric Illness

Interviewers coded participants' primary presenting addictions as follows: alcohol (54.8%), amphetamines/stimulant usage (15%), cannabis (13.6%), and heroin (8.2%). All other substances were reported as primary problems at rates of 1.6% or less. In the 30 days prior to admission, alcohol was the drug most likely to be consumed (8.45 days), followed by marijuana (5.05 days). This was followed by a substantial drop to other drugs including amphetamines (1.66 days),

Table 1

Demographic Characteristics and Lifetime ASI Data from a Normative Sample and the Current Study

	Inpatients McLellan et al. 2006 *N* = 8,429	All* (Current sample) *N = 1105*	Male** (Current Sample) *N = 918*	Female *** (Current Sample) *N = 185*	18-29 yrs § (Current Sample) *N = 362*	30-44 yrs §§ (Current Sample) *N = 499*	44+ yrs §§§ (Current Sample) *N = 239*
Age yrs *(SD)*	36 *(10)*	35.5 *(10.61)*	35.38 *(10.57)*	36.28 *(10.78)*	24.22 *(3.33)*	36.33 *(4.0)*	50.98 *(5.88)*
Gender % Male	61%	83.1%			84.3%	84.4%	79.5%
Ethnicity							
% White	48%	73.6%	74.4%	69.7%	72.9%	75.5%	71.1
% Black or African American	28%						
% Aboriginal/Torres Strait Islander		9.3%	8.5%	13%	11.6%	9.2%	6.0%
% New Zealand		2.7%	2.6%	3.2%	1.9%	2.4%	4.7%
% English		3.3%	3.9%	.5%	2.3%	2.8%	6.0%
% Other/Unknown		10.9%	8.3%	6.6%	8%	6.7%	10.1%
Marital Status							
% Never married	48%	66.3%	67.2%	62.2%	86.7%	68.9%	30.5%
% Married or living as married	14%	5.8%	5.2%	8.1%	3.3%	5%	10.4%
% Separated or Divorced	32%	23%	21.4%	26.5%	3.6%	23%	52.3%
% Satisfied with marital status	63%	57.4%	56.4%	62.7%	66.3%	51.5%	56.5%
Years of education							
% < 12 years	36%	31.3%	33.7%	19.5%	38.7%	28.1%	27.4%
% High school Graduate	47%	56.8%	55.8%	61.6%	53.9%	59.1%	56.5%
% Technical college/Trade/TAFE	11%	4.2%	3.4%	8.1%	3.6%	4.8%	3.8%
% University graduate or higher	5%	6%	5.3%	9.7%	2.8%	5.6%	11.7%
Substance use							
% Previous drug and/or alcohol treatment		77.2%	76.7%	80.5%	68.7%	28.1%	85%
% With past history of overdoses	15%	26.9%	26.9%	27.8%	25.1%	33.8%	15.5%
% Used heroin	22%	26.5%	25.8%	30.3%	36.2%	27.2%	10.8%
% Used cocaine	61%	59.3%	58.7%	62.7%	73.2%	64.6%	27.6%
% Used amphetamines	26%	67.2%	67.5%	66%	79%	71.4%	40.6%
% Polydrug users	62%						
Personal health: medical							
% Reporting a chronic medical problem	32%	32.1%	31.5%	34.6%	20.2%	31.5%	51%
% Taking medications	26%	26.3%	24.9%	32.4%	15.7%	23.2%	48.1%
Personal health: psychiatric							
% Previously treated	26%	47%	44.3%	61%	48.6%	46.1%	46.9%
% Taking medications	31%	35.9%	33.6%	47%	34.8%	36.3%	36%
% Lifetime history of depression	63%	79.3% ‡	77.5%	88.1%	77.3%	81.2%	78.2%
% Lifetime history of anxiety	58%	81.8%	79.8%	91.4%	79.8%	84%	80.3%
% Lifetime history of suicide attempts	20%	36.9%	34.5%	48.1%	39.5%	35.9%	34.7%
Social functioning: Employment							
Employment pattern, past 3 years							
% Working (full-time or part-time)	72%	28%	29.5%	20%	27.1%	28.9%	27.6%
% Unemployed	20%	23.6%	25.4%	14.6%	28.5%	23.6%	16.3%
Social functioning: family/social							
Living situation past three years							
% With sexual partner	34%	28.1%	26.8%	35.1%	22.3%	29.8%	33.1%
% With family	29%	23.2%	21.8%	30.8%	33.7%	21.4%	11.8%
% With friends	7%	8.8%	9%	7.6%	11.6%	7.8%	6.7%
% Other living situation	27%	39.9%	38.2%	24.3%	27.3%	38.2%	43.5%
% Satisfied with living situation	54%	48.1%	47.7%	50.3%	49.7%	45.3%	51.9%
% Reporting physical abuse in lifetime	48%	62.4%	59.4%	77.3%	62.7%	66.5%	52.7%
% Reporting sexual abuse in lifetime	28%	30.8%	23.6%	65.9%	28.5%	34.1%	26.8%
Social functioning: legal							
% Convicted of crime	62%	62.3%	65.9%	44.3%	64%	68.2%	47.3%
% Incarcerated in lifetime	59%	42%	46.6%	18.9%	44.5%	47.3%	27.2%

Note. * *N* varies from 735 (cocaine usage) – 1103 (gender) ** *N* varies from 593 (cocaine) – 918 (gender) *** *N* varies from 140 (cocaine) – 185 (gender) § *N* varies from 259 (lifetime heroin use) – 362 (gender) §§ *N* varies from 330 (cocaine) – 499 (gender) §§§ *N* varies from 138 (cocaine) – 239 (gender)

heroin (.87 days), and cocaine (.28 days). Over three quarters of the sample had been previously treated for substance use or abuse.

Approximately 80% of those admitted for treatment indicated either a history of depression or anxiety. More than half of the sample reported experiencing serious depression in the 30 days prior to admission, and 70% had experienced serious anxiety or tension in the same timeframe.

Gender, Substance Use, and Psychiatric Illness

T-tests were conducted to analyse gender differences in substance use and psychiatric illness. There were no significant gender differences in ASI composite scores for alcohol use or other drug use. A significant gender difference was obtained for the ASI psychiatric composite score, with females scoring significantly higher than males for psychiatric illness (t (917) = -4.17, $p < .001$). Chi-square analysis revealed females were significantly more likely than males to have experienced severe symptoms of depression in the previous 30 days (67%, 52.8%), χ^2 (1051) = 11.36, $p = .001$ and anxiety (80%, 67.3%), χ^2 (1048) = 13.12, $p < .001$.

Age, Substance Use, and Psychiatric Illness

Two one-way ANOVAs were conducted to assess age group differences in substance use and psychiatric ASI composite scores. Participants were grouped into three age categories: 18-29 years, 30-44 years, and 45 + (13). There were no significant differences between age groups on any psychiatric measures tested. Alcohol (F (2, 998) = 21.99, $p < .001$) and drug (F (2, 608) = 27.57, $p < .001$) composite scores differed significantly between age groups. A least significant difference (LSD) test was conducted to identify where the differences were among the three age groups occurred. The older age group scored

significantly higher than the 30-44 year age group on the alcohol composite, and the 30-44 year age group was significantly higher than the youngest age group on the alcohol composite (all *p's* < .001). For the drug composite, the youngest age group (18-29) scored significantly higher than the 30-44 year group ($p = .02$) and significantly higher than the oldest group ($p < .001$). The middle age group also scored significantly higher than the 45 + group on the drug composite ($p < .001$).

Comparison with Normative Data

Descriptive comparisons were made between our data and the normative data provided by McLellan et al. (5). As Table 1 illustrates, the present sample had similar demographic and lifetime characteristics to the normative sample for several variables. They were similar in age, educational achievement, medical status, crime convictions, and present family and social functioning. The present sample had a higher proportion of males (83%) compared to the normative sample (61%). It also had a higher proportion of people identifying as single (90% vs. 80%). Physical abuse was reported in the current sample (62%) at higher levels than in the normative sample (48%), though sexual abuse was not. Psychiatric scores were also uniformly higher in the present sample (depression 79%; anxiety 82%) when compared with McLellan *et al.* (depression 63%; anxiety 58%).

Table 2 denotes some differences that appear in relation to 30-day data. Scores of greater than .1 are highlighted, as are comparisons of substance use and psychiatric data. Generally, medical issues appear of greater concern in the present sample, particularly for females. Similarly, the current sample scored higher on employment issues and family/social functioning, indicating greater problems. Differences on the two substance use composites fell within close proximity to the normative data. A large difference was found in relation to the present sample presenting with co-morbid psychiatric/substance use symptoms. Scores for participants in the present study suggest far greater depression and anxiety severity

Table 2

ASI Comparison Data: Summary Scores and Past 30-Day Data by Age, Gender, and Normative Sample

	Inpatient McLellan et al. 2006 *N* = 8,429	All * (Current sample)	Male ** (Current Sample)	Female *** (Current Sample)	18-29 yrs § (Current Sample)	30-44 yrs §§ (Current Sample)	44+ yrs §§§ (Current Sample)
Substance use							
Alcohol composite score	.33 (.27)	.41 (.30)	.41 (.31)	.44 (.27)	.34 (.29)	.42 (31)	.51 (.28)
Mean days of alcohol drinking	8 (10)	8.45 (9.27)	8.42 (9.43)	8.45 (8.35)	6.80 (8.59)	8.51 (9.40)	10.67 (9.48)
Mean days of heavy drinking†	5 (9)	7.66 (9.04)	7.71 (9.24)	7.26 (7.91)	8.03 (8.08)	7.73 (9.21)	9.84 (9.55)
Drug composite score	.11 (.14)	.14 (.13)	.14 (.12)	.15 (.13)	.17 (.12)	.15 (.13)	.07 (.10)
Mean days of heroin use	2 (8)	.87 (3.63)	.93 (3.68)	.62 (3.44)	.84 (3.61)	1.22 (4.27)	.07 (.73)
Mean days of cocaine use	3 (8)	.28 (1.74)	.31 (1.91)	.12 (.62)	.44 (1.82)	.25 (1.99)	.01 (.08)
Mean days of marijuana use	2 (6)	5.05 (8.57)	5.22 (8.76)	4.21 (7.59)	6.22 (9.16)	5.28 (8.64)	2.39 (6.63)
Mean days of amphetamine use		1.66 (4.62)	1.66 (4.63)	1.72 (4.65)	2.01 (5.28)	1.87 (4.72)	.51 (2.37)
Personal health: medical							
Medical composite score	.16 (.29)	.30 (.33)	.28 (.33)	.40 (.35)	.24 (.31)	.29 (.33)	.41 (.35)
Mean days of medical problems	4 (9)	6.32 (10.52)	5.92 (10.37)	8.44 (11.11)	5.14 (9.55)	5.92 (10.13)	8.89 (12.16)
Personal health: psychiatric							
Psychiatric composite score	.20 (.24)	.42 (.24)	.41 (.24)	.50 (.22)	.44 (.26)	.42 (.24)	.40 (.23)
% Reporting depression	31%	55.3%	52.8%	67%	54.7%	54.9%	56.5%
% Reporting anxiety	35%	69.6%	67.3%	80.5%	66.3%	71.3%	71.1%
Mean days of psychiatric problems	8 (12)	12.89 (12.71)	12.29 (12.67)	15.65 (12.56)	12.42 (12.65)	13.35 (12.59)	12.36 (13.01)
Social functioning: employment							
Employment composite score	.65 (.32)	.77 (.20)	.75 (.20)	.82 (.19)	.76 (.20)	.76 (.20)	.78 (.20)
Mean days paid for working	8 (10)	2.16 (6.27)	2.20 (6.29)	1.98 (6.20)	2.24 (6.10)	1.91 (5.90)	2.61 (7.25)
Mean days of employment problems	8 (12)	10.03 (13.70)	10.99 (13.96)	5.48 (11.37)	9.26 (13.40)	10.56 (13.82)	10.11 (13.90)
Social functioning: family/social							
Family composite score	.15 (.21)	.30 (.24)	.29 (.23)	.36 (.23)	.30 (.23)	.32 (.24)	.26 (.23)
Mean days family conflicts	3 (8)	3.10 (7.39)	2.82 (7.04)	4.44 (8.77)	3.31 (7.24)	3.33 (7.73)	2.29 (6.88)
Mean days social conflicts	2 (6)	1.61 (4.50)	1.62 (4.62)	1.55 (3.91)	2.16 (5.24)	1.63 (4.56)	.74 (2.79)
% Currently living with person with alcohol problem	13%	18.6%	19.2%	15.1%	18.5%	20.4%	14.6%
% Currently living with person using or abusing drugs	7%	15%	15.9%	10.8%	17.4%	16.6%	8.4%
Social functioning: legal							
Legal composite score	.20 (.22)	.22 (.24)	.23 (.24)	.15 (.22)	.29 (.24)	.19 (.23)	.14 (.22)
Percent in controlled environment	68%	23%	18.2%	11.3%	30.9%	23.1%	11.7%
Mean days illegal activity	1 (5)	1.39 (4.06)	1.43 (5.15)	1.15 (4.59)	5.82 (10.55)	4.22 (9.27)	1.60 (5.55)
Mean days incarcerated	2 (6)	4.22 (9.24)	4.74 (9.69)	1.57 (5.78)	2.37 (6.52)	1.29 (4.87)	.04 (.38)

Note. All values are based upon the thirty days prior to the administration of the ASI. All values are means, with standard deviations in parentheses. * *N* varies from 614 (drug use composite) – 1105 (mean days paid for working) ** *N* varies from 485 (drug use composite) – 918 (mean days paid for working) *** *N* varies from 125 (mean days heroin use) – 185 (mean days paid for working) § *N* varies from 259 (lifetime heroin use) – 362 (gender) §§ *N* varies from 330 (cocaine) – 499 (gender) §§§ *N* varies from 138 (cocaine) – 239 (gender) † our data combines alcohol and drugs ‡ past 30 day data only

† The ASI defines heavy drinking as consumption of five or more alcoholic drinks in one day.

compared to the sample in the USA. Figure 1 provides composite score comparisons between the current sample and the McLellan *et al.* (5) sample, and illustrates the current sample as experiencing worse outcomes on all measures.

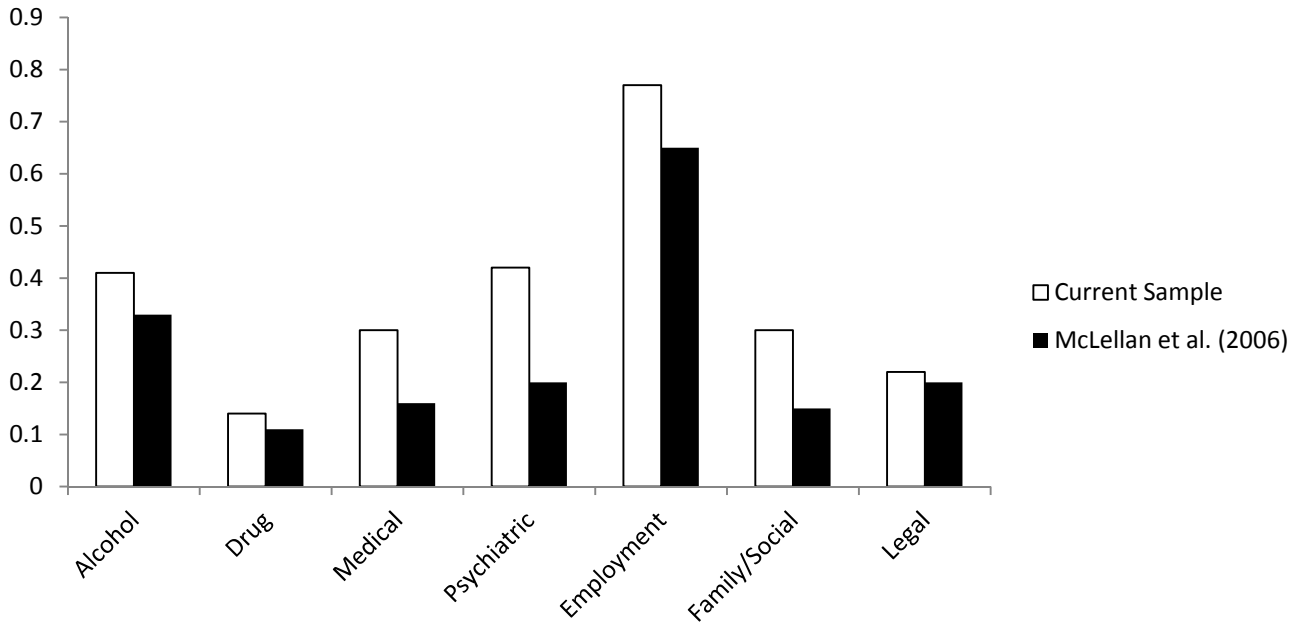

Figure 1. Comparison of ASI composite scores for current sample (white) and normative sample (black).

Discussion

This article reports descriptive data collected through administration of the ASI from a large sample of Australian residential substance abuse treatment clients. Comparisons of psychiatric co-morbidity with normative ASI samples using an Australian cohort have not previously been collected. When compared to other studies the results show a pattern of substance abuse that has remained generally consistent across nearly three decades of data collection at Australian residential rehabilitation centres. A predominantly white unemployed male population aged in their early to mid thirties utilises these services. In the only sample that provided data on ethnicity (4), the present sample was consistent with approximately 10% of the sample identifying as Aboriginal or Torres Strait Islander.

Older clients (aged 45 +) showed significantly higher alcohol composite scores than did those in the 30-44 year age group. This age group also provided significantly higher alcohol composite scores than the youngest age group (18-29 years). Drug use generally followed the reverse pattern, with composite scores for drug use highest among those in the youngest age group and lowest in the oldest age group. Differences between groups were again significant.

Psychiatric illness differed by gender. Women scored significantly higher on the psychiatric composite than men. Additionally, women were significantly more likely to be experiencing symptoms of severe depression and anxiety than were men, both in the past 30 days, and based on lifetime scores. Age was unrelated to psychiatric morbidity. Using a diagnostic interview, Ross *et al.* (10) investigated psychiatric co-morbidity among Australian heroin addicts and obtained similar gender differences to the present sample. Women experienced psychiatric illness at an approximately 10% higher rate than did men. In the present research, however, depression and anxiety were found at proportionately higher average rates in the previous 30 days (Depression: 55.3% vs 28%).

An international, normative sample was provided by McLellan *et al.* (5). The present sample was higher on all ASI composite scores (see Figure 1). Alcohol and other drug use composites were somewhat similar. Relative to those clients described by McLellan *et al.*, Australian residential treatment clients presented with higher psychiatric composite scores, and were admitted to rehabilitation agencies with very high levels of self-reported depression and anxiety symptoms. The current sample also presented with higher composite scores on medical, psychiatric, family/social, and legal domains, indicating greater levels of distress and dysfunction in all seven areas assessed by the ASI when compared with a large overseas sample.

Limitations

Only one service provider/agency was involved in the data collection procedure although data were collected from eight sites across two states and a territory. It is unclear whether the high levels of multiple and complex problems identified in this sample are a function of the relatively 'open door' policy of The Salvation Army Recovery Services, or whether similar severity profiles would be found in other organisations.

A second limitation is that case managers were required to administer the ASI with clients. This is tempered by the level of appropriate induction and training that was provided to case managers by the clinical psychologists running the study. There was also limited supervision for case managers in relation to data collection. No information is provided about how the McLellan *et al.* (5) ASI data was obtained, while Weisner *et al.* (13) used trained interviewers not associated with treatment agencies in their data collection.

Strengths

This research offers three important contributions to substance abuse literature. First, by utilising the ASI as an assessment tool, it provides data from a comprehensive addiction measure with established validity and reliability. This is the first time that the ASI has been used in an Australian residential inpatient setting. Second, the ASI is useful because of the standardised nature of the composite scores which allow comparison between local and overseas datasets that utilise this instrument. Lastly, while the ASI is a complex assessment tool, this research demonstrates that it can be utilised in routine practice by caseworkers. Such practice, if widely applied, could provide substantial benefit to present understandings of substance addiction.

Implications

One of the biggest issues confronting service providers relates to the very high rates at which substance abuse and psychiatric illness co-occur in the substance abuse treatment

settings (6-9). Indeed, the present research attests to the highly complex and challenging difficulties substance abusers face. Their drug addictions appear to co-occur with employment problems, psychiatric difficulties, social and family issues, legal troubles, and poor physical health. This research highlights the degree to which these individuals are at risk, and the importance of ensuring that the treatment agencies are adequately and appropriately resourced to provide treatment.

Residential treatment is arguably the most intensive treatment available and those with the greatest need should be the ones who access this treatment. One indicator of this need was the high proportion of respondents (77%) that indicated they had previous substance abuse treatment.

Summary

The present study provides an overview of the characteristics of a large Australian residential sample of treatment-seeking substance abusers, utilising the ASI as an assessment measure. It shows high rates of psychiatric co-morbidity and other problem constellations that are as high or higher than those seeking residential substance abuse treatment in the USA. It reinforces the need for multi-component services to successfully address these difficulties. Further research is needed to determine the capacity of organisations to deliver these services and investigate the effectiveness of the treatment that is currently provided.

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