Identifying depression and anxiety disorders in people presenting for substance use treatment

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ABSTRACT

Objective: To identify the type and proportion of depressive and related mental health disorders in a group of individuals seeking outpatient treatment at an alcohol and other drug (AOD) service.

Design, setting and participants: A cross-sectional study using diagnostic interviews with 95 participants (56 men, 39 women) seeking treatment from an AOD service.

Main outcome measures: Mental health and substance disorders were measured using the Composite International Diagnostic Interview, Posttraumatic Stress Disorder Checklist, Beck Depression Inventory, and State–Trait Anxiety Inventory (Trait Version).

Results: This was a complex group with addiction, mental health and physical health conditions; 76% had a depressive disorder and 71% had an anxiety disorder. Most were diagnosed with at least two mental health disorders and 25% were diagnosed with four or more different disorders. Alcohol and cannabis use were the most commonly diagnosed AOD disorders. Further, those diagnosed with a drug use disorder reported significantly higher levels of depression compared with those with an alcohol-only disorder. Finally, 60% of the sample reported chronic health conditions, with over one-third taking medication for a physical condition on a regular basis.

Conclusions: Primary care providers such as general practitioners are likely to be increasingly called on to assess, treat and/or coordinate care of patients with AOD disorders. We show that this group will likely present to their GP with more than one mental health disorder in addition to acute and chronic physical health conditions.

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Recent health service initiatives within Australia require alcohol and other drug (AOD) services to identify and case-manage or treat high-prevalence mental health disorders such as depression or anxiety alongside the AOD problems.[1,2] Specialist dual-diagnosis workers have therefore been funded in Australia to provide primary, secondary and tertiary support to AOD services.

The high prevalence of co-occurring mental health disorders among clients of AOD services means it is impossible for specialist dual-diagnosis workers to directly treat all clients identified with comorbid mental health disorders. Therefore, they focus their scarce resources on building capacity in AOD workers to provide integrated treatment and providing appropriate external referrals for mental health treatments.

General practitioners will increasingly be required to assist in the treatment of individuals identified by AOD services as having comorbid substance and mental health disorders, in particular those with depression and related disorders such as anxiety. This is particularly likely in the short term, as AOD workers continue to acquire the appropriate skills to manage treatment of dual-diagnosis clients. GPs are able to draw on a range of treatment approaches for depressive disorders, including prescription of psychotropic drugs, focused psychological strategies and referral to specialists (eg, psychologists) using the Better Outcomes in Mental Health Care and Better Access to Mental Health Care initiatives.[3-5]

GPs may be more familiar and comfortable treating patients with a single substance use disorder, eg, an alcohol use problem, but less familiar with the complexity of issues involving polydrug users (users of multiple drugs). Yet, as AOD services increasingly identify high-prevalence mental health problems such as anxiety or depression within their client groups, there are likely to be more single-issue and polydrug-using clients seeking adjunctive mental health treatment from GPs. Most individuals seeking treatment for drug use disorders are at the more severe end of the AOD spectrum.[6-8] As yet, there are few Australian data to assist GPs in understanding the type and severity of AOD and high-prevalence mental health problems in patients referred to their practice from public AOD health services.

We aimed to identify the type and severity of substance use and high-prevalence mental health disorders present in a group of people seeking treatment at AOD services. We examined the type and prevalence of different substances and mental health disorders within the sample, and compared patients with an alcohol-only disorder to patients with a drug or polydrug use disorder, using type and severity of anxiety and depressive disorders. These findings will help GPs treat depressive and anxiety symptoms in substance-dependent clients referred to their practice.

METHOD

Participants

Ninety-five individuals (56 men [mean age = 38.18 years; SD, 8.27 years] and 39 women [mean age = 36.64 years; SD, 9.83 years]) attending outpatient AOD services participated in the study. Most participants (81%) were not married. The inclusion criteria for participants were that they were aged 18 years and older; they could speak English; and they had been in treatment no longer than 4 weeks. People with a psychotic disorder (as determined by a psychosis screener) were excluded.[9] Participants were either referred by case managers or were self-referred in response to advertising at the AOD service. Case managers identified people considered to have both mental health and AOD disorders, and asked permission to forward their patient details to project recruiters. Project recruiters then contacted the individuals to provide information and invite participation. This two-step process separated case managers from active recruitment, so individuals did not feel coerced into taking part. The resulting sample was therefore nonrandom.

Measures

- *Composite International Diagnostic Interview (CIDI), version 2.1*:[10] we used this diagnostic measure (for mood and substance use disorders) to assess mental disorders and provide diagnoses according to definitions and criteria of the *Diagnostic and statistical*

1 Participants diagnosed with substance use disorder, by substance ($n = 95$)*

	Dependence	Abuse	Total
Alcohol	60	4	60 (63.2%)
Cannabis	51	10	54 (56.8%)
Sedatives	20	13	32 (33.7%)
Opiates	29	2	31 (33.7%)
Amphetamines	12	0	12 (12.6%)
Hallucinogens	1	2	3 (3.2%)
Cocaine	2	0	2 (2.1%)
Other substances	20	7	27 (28.4%)

* Some participants were in more than one category. ◆

manual of mental disorders (DSM-IV).[11] We used sections A, D, E, F, J and L of the 12-month version of the CIDI to measure demographics and assess participants for mood and anxiety, and for alcohol and substance use disorders.

- *Posttraumatic Stress Disorder Checklist, civilian version (PCL-C)*:[12] we used this self-reporting scale which assesses symptoms of post-traumatic stress disorder (PTSD) based on DSM-IV diagnostic criteria.[11] A cut-off score of 50 is indicative of a PTSD.
- *Beck Depression Inventory (BDI-II)*:[13] this well validated 21-item self-reporting questionnaire was used for assessing the severity of depression.
- *State–Trait Anxiety Inventory (STAI), Trait version, form Y*:[14] this was used to measure stable individual differences in proneness to anxiety.
- *Addiction Severity Index, 5th edition*:[15] we measured participants' health problems (current and chronic medical problems and medications prescribed).
- *Demographic data* were collected including age, sex, and age at first drug use.

Percentages, χ^2 difference tests and multivariate analysis of variance were used to analyse the data using SPSS (SPSS Inc, Chicago, Ill, USA).

The study was conducted in Melbourne, Australia, and ethics approval for this study was obtained from Deakin University Human Research Ethics Committee and Southern Health Human Research Ethics Committee.

2 Participants diagnosed with depressive and anxiety disorders*

	Drug† use disorder group ($n = 72$)	Alcohol use disorder group ($n = 23$)	Total ($n = 95$)
Depressive disorders			
Major depressive disorder			
Single episode, mild	10 (13.9%)	4 (17.4%)	14 (14.7%)
Single episode, moderate	4 (5.6%)	6 (26.1%)	10 (10.5%)
Single episode, severe‡	31 (43.1%)	4 (17.4%)	35 (36.8%)
Recurrent, mild	2 (2.8%)	0	2 (2.1%)
Recurrent, moderate	4 (5.6%)	0	4 (4.2%)
Recurrent, severe‡	6 (8.3%)	0	6 (6.3%)
Dysthymic disorder	6 (8.3%)	1 (4.3%)	7 (7.4%)
Any depressive disorder	57 (79.2%)	15 (65.2%)	72 (75.8%)
Anxiety disorders			
Post-traumatic stress disorder	30§ (42.9%)	5¶ (23.8%)	35 (36.8%)
Social phobia	24 (33.3%)	7 (30.4%)	31 (32.6%)
Generalised anxiety disorder	23 (31.9%)	8 (34.8%)	31 (32.6%)
Obsessive–compulsive disorder	21 (29.2%)	2 (8.7%)	23 (24.2%)
Specific phobia**	8 (11.1%)	4 (17.4%)	12 (13.2%)
Panic disorder††	7 (9.7%)	2 (8.7%)	9 (9.5%)
Agoraphobia‡‡	2 (2.8%)	1 (4.3%)	3 (3.2%)
Any anxiety-related disorder	52 (72.2%)	15 (65.2%)	67 (70.5%)

* Abuse and dependence disorder statistics were combined to give a single "disorder" indication for each substance. † With or without comorbid alcohol use disorder. ‡ Without psychotic features. § $n = 70$. ¶ $n = 21$. ** Animal, natural environment, blood injury or situational phobia. †† With or without agoraphobia. ‡‡ Without history of panic disorder. ◆

RESULTS

Substance use problems

Respondents were asked the age at which they first used any drug. Results showed that over 50% of the sample had used a drug of some sort by the age of 14 years. Box 1 shows proportions of participants diagnosed with substance use disorders. Alcohol use disorder was the most common, reported by over 60% of respondents.

Further examination showed that only 34 people (36%) seeking assistance for AOD problems were diagnosed with only one substance use problem, alcohol being the most commonly diagnosed single problem ($n = 23$) (24%). Of the 72 respondents diagnosed with drug use disorders other than alcohol misuse, the vast majority (85%) were found to have multiple drug use disorders. Twenty-one per cent were diagnosed with four or more different substance use disorders.

Health problems

This group experienced significant health problems. Fifty-five respondents (58%) reported that they had a chronic medical condition which interfered with their life, while 36 (38%) said they were taking medication on a regular basis for a physical problem. Further, 32 (34%) reported experiencing medical problems for 15 or more days over the past month.

Type and severity of high prevalence mental health problems

Examination of the prevalence of mental health disorders in this sample of people seeking assistance for AOD disorders showed that only nine respondents (10%) were not diagnosed with any depressive or anxiety-related disorders, although they experienced subclinical symptoms. Nineteen (20%) were diagnosed with a single disorder, and 23 (24%) were diagnosed with four or more different high-prevalence mental health disorders. Box 2 shows the proportion of people diagnosed with each depressive and anxiety-related disorder. The sample was also split across AOD diagnoses to produce two groups: (i) alcohol use disorder only; and (ii) drug use disorder (people in this group may also have been diagnosed with a concurrent alcohol use disorder).

As Box 2 shows, 76% of the participants were diagnosed with a depressive disorder. Those with a drug use disorder (79%) appeared more likely to be diagnosed with a

depressive disorder compared with the alcohol-only group (65%). However, a χ^2 test showed that this difference was not statistically significant ($\chi^2_1 = 1.85$; $P > 0.05$). In terms of anxiety disorders, PTSD, generalised anxiety disorder, social phobia and obsessive–compulsive disorder were the most commonly diagnosed disorders overall. Those with a drug use disorder were more likely to be diagnosed with PTSD or obsessive–compulsive disorder but less likely to be diagnosed with a specific type of phobia, compared with those with an alcohol-only disorder. Follow-up statistical tests showed that the drug use disorder group (72%) and the alcohol use disorder group (65%) were equally likely to be diagnosed with an anxiety disorder ($\chi^2_1 = 4.11$; $P > 0.05$). Sample sizes were too small in some groups to enable statistical analysis of group differences for the individual depression and anxiety disorders.

The data in Box 2 also suggest that those with a drug use disorder suffered from more severe depressive issues than the alcohol-only group. Multivariate analyses of variance were conducted to compare severity of depression (measured by the BDI) and anxiety (measured by the STAI) for the alcohol-only group and those with a drug use problem. The analysis showed that there was a significant difference between the two groups in overall negative affect (Wilks' lambda = 0.882; $F_{2,90} = 6.01$; $P < 0.01$; partial $\eta^2 = 0.11$). Univariate comparisons showed that those with a drug use disorder were significantly higher in severity of depression scores (mean = 26.82; SD, 12.14) on the BDI compared with the alcohol-only group (mean = 18.50; SD, 11.74) ($F_{2,91} = 8.01$; $P < 0.01$; partial $\eta^2 = 0.08$). There was no significant difference between the drug disorder group (mean = 55.23; SD, 10.32) and alcohol-only group (mean = 51.00; SD, 11.63) on severity of anxiety scores.

We examined whether there were any differences between the drug use disorder group and the alcohol use disorder group in terms of chronic and acute health problems. A cross-tabulation with χ^2 difference tests showed that the alcohol-only group were slightly more likely to report chronic medical conditions (61%) than the drug use disorder group (57%) but this difference was not significant.

Finally, an analysis-of-variance test showed no difference in the average number of days that medical problems were experienced over the preceding 30 days for the alcohol-only group (mean = 12.70; SD, 13.83) compared with the drug use disorder group (mean = 10.17; SD, 11.93).

DISCUSSION

Three-quarters of the patients in this group had a depressive disorder, and most had at least two different mental health diagnoses (ie, a depressive and an anxiety disorder) and two or more different substance use diagnoses. Furthermore, around one-quarter of the sample had four or more diagnoses in each domain.

These findings emphasise the complexity of issues experienced by many people with AOD disorders, showing that individuals with AOD disorders are not only likely to present with a depressive disorder,[16] but they are also very likely to suffer from at least one anxiety disorder.

Therefore, primary care practitioners such as GPs working with patients with AOD disorders need to consider assessment for both depressive and anxiety disorders in this patient group. PTSD, social phobia and generalised anxiety disorder, for example, were each identified in more than 30% of cases. The Better Outcomes and Better Access initiatives are well placed to assist GPs to coordinate a comprehensive care plan for individuals with multiple mental health diagnoses.

Treatment may involve a combination of psychotropic medication and psychological or psychiatric treatment, in line with best-practice recommendations,[17] thus potentially improving long-term outcomes for these clients. As these patients were all within 4 weeks of treatment for AOD disorders, it is likely that anxiety and depression disorders are at least partially due to AOD use and/or withdrawal. However, it is better to have an understanding of potential mental health problems as soon as possible. This allows clinicians to target all disorders in treatment and observe whether anxiety and depression reduce with treatment of AOD disorders. Targeted treatment can then continue when mental health remains a concern.

Interestingly, our findings highlighted that those with a drug use disorder tend to report more severe levels of depression than those with an alcohol use problem alone, and possibly a greater likelihood of anxiety disorders such as PTSD or obsessive–compulsive disorder. It is possible that the lifestyle associated with, and consequences of, illicit drug use at least partially explains the higher severity of depression in this group. The sample size prohibited statistical comparisons across groups on individual anxiety disorders, so these findings must be considered with caution until it is confirmed with a larger sample.

The overall physical health of the clients was poor, with over half reporting chronic health conditions. Over one-third were currently taking medication on a regular basis, and a similar proportion reported experiencing medical problems for 15 days or more over the previous month. The high level of chronic physical conditions among people who have either a mood or substance use disorder has been demonstrated in previous studies,[6,18] indicating the importance of addressing the primary health care needs of these clients.

It is important to note that these findings cannot be generalised to the wider population of people with AOD disorders, as the study specifically targeted people identified as potentially having depressive and related disorders and excluded those with psychotic disorders. The sample was therefore nonrandom. Patients initially presenting to GPs or primary care with AOD problems, for example, may differ from the patients we studied. This approach was adopted because the focus of our study was on AOD treatment-seekers with high-prevalence mental health disorders, as these individuals are likely to be excluded from public specialised mental health services (ie, where treatment is focused on low-prevalence mental health disorders).

Recent policy initiatives have led to increased identification of high-prevalence mental health disorders within AOD services. This suggests that GPs will increasingly be called on to assess, treat and/or coordinate care of this patient group. Our findings emphasise that this group will generally present to their GP with more than one mental health disorder, along with acute and chronic physical health conditions. In the medium-to-long term, AOD services will need to ensure their workers obtain the necessary skills to manage and treat high-prevalence mental health problems in-house, which may require improved resourcing of such services.

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COMPETING INTERESTS

None relevant to this article declared (ICMJE disclosure forms completed).

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