Drug and alcohol use of the homeless within the Homeless

Health Outreach Team

Is there an association between drug of choice and mental health diagnosis?

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ABSTRACT

Alcohol and drug use is commonly reported in homeless populations. The research aimed to identify drug use patterns of the Homeless Health Outreach Team (HHOT) clients, to look at the period and type of homelessness as well as to investigate whether there were any correlations between diagnosis and drug of choice. A chart audit was conducted of the case managed clients of HHOT. Fifty four charts were reviewed. It was found that a high percentage of people used alcohol, cannabis, opioids, and amphetamines. However, there were no significant correlations found between drug of choice and diagnosis.

KEY WORDS: drug and alcohol use, mental health, homeless

TYPE: Special issue (drug and alcohol use)

INTRODUCTION

Comorbidity and dual diagnosis refers to having more than one physical or mental disorder at the same time (Teesson, Slade, Mills, 2009). Dual diagnosis refers to individuals with substance use disorders in addition to mental disorders. Individuals with dual diagnosis have been recognised as having a poorer prognosis than individuals who have either a mental health disorder or substance use alone (Lai & Huang, 2007).

Social problems associated with substance use include legal problems, housing instability, lower rates of employment, and poor money management (Petrakis et al., 2006). Individuals that use substances also have numerous physical and chronic health conditions, which are often untreated and poorly managed. More than half of the chronically homeless individuals are both substance misusing and struggling with serious mental illness (Rowe et al., 2007). These clients are unstable, diagnostically complex, difficult to recruit in studies, complicated to engage in treatment, and especially difficult to retain in treatment (McHugo et al., 2006).

People with a mental illness have a higher probability of developing substance use disorders compared to the general community. Similarly, people with substance use disorders are more likely to develop a mental illness in comparison to the general population (Greig, Baker, Lewin, Webster, & Carr, 2006). Several studies have also shown that mental illness and substance misuse disorders regularly occurs together (Greig et al., 2006, Lai & Huang., 2007).

This paper aims to discuss substance misuse and homelessness and elaborate upon a chart audit that was conducted with clients of the Homeless Health Outreach Team.

LITERATURE REVIEW

Regier and colleagues (1990) conducted research into comorbidity of mental disorders with alcohol and other drug abuse using a sample of 20 291 participants. The research found a 22.5% prevalence rate for individuals that were diagnosed substance misuse as well as mental disorder. The research found that 13.5% of the subjects reported alcohol misuse, and 6.1% of individuals reported drugs other than alcohol. Results suggested that the prevalence rate of alcohol disorders were almost twice that of other drug disorders (Regier et al., 1990).

Regier and colleagues (1990) also reported that among those individuals with alcohol misuse, results indicated that mental disorder appeared in 37% of cases. Results also suggested that there were more people in the sample with both alcohol misuse and mental disorders than other drug misuse and mental disorders. For alcohol disorders, the highest specific disorder comorbidity was for individuals diagnosed with affective mood disorders, anxiety disorders, and anti-social personality disorder. The research also indicated that 50% individuals with drug misuse (other than alcohol) diagnosis had at least one other mental disorder diagnosis, including 26% with affective mood disorders, 28% with anxiety disorders, 18% with anti-social personality disorder, and 7% with schizophrenia (Regier et al., 1990).

Lai and Huang (2007) conducted research in New South Wales Australia looking at 1 592 156 hospital admissions, both medical and psychiatric. Results found that 91 510 (6%) people were diagnosed with a mental disorder only, and that 18 283

(1.1%) were diagnosed with alcohol and drug use disorder only. The research found that 9 584 (9.6%) of patients were diagnosed with dual diagnosis disorders. The research established that comorbidity was five times more likely in people with alcohol and drug use disorders than people with only mental disorders.

Research conducted by Petrakis and colleagues (2006) found that substance use disorders were more prevalent in individuals with a mental illness within the spectrum of psychotic disorders, such as schizophrenia, schizoaffective disorder and bipolar disorder and were higher than the rate observed in the general population. The individual's substance misuse was also associated with increased psychotic symptoms, increased rate of medication and non-compliance, more frequent and longer hospitalisations, a higher rate of crisis-oriented service utilisation, and consequently a higher cost of care.

A number of studies have looked at the occurrences of substance misuse and mental illness within the general population. Teesson and colleagues (2009) conducted correlational research into mental illness and substance misuse on 8841 participants within Australia. They found that substance use in combination with anxiety disorders was the most common comorbidity followed by substance misuse and affective mood disorders in the general population.

Similar results were found within the United States. Grant and colleagues (2004) looked at 43 093 surveys that were completed as part of the National Institute of Alcohol Abuse and Alcoholism research. Their results also indicated mood and anxiety disorders, separate from intoxication and withdrawal were among the most prevalent disorders in America. Research has clearly indicated that substance misuse frequently co-occurs with mental disorders within the general population. Research conducted in 2007 in Australia found that substance misuse by people with a mental

illness exacerbated psychiatric symptoms and also contributed to more frequent relapses (Cleary, Hunt, Matheson, & Walter, 2007). These results suggest that dual diagnosis has a considerable impact on people.

HOMELESSNESS AND SUBSTANCE MISUSE

Risk factors for dual diagnosis populations include poverty, homelessness, lack of adequate housing, incarceration, and unemployment (Fichter & Quadflieg, 2001). More than half of chronically homeless individuals report both substance misuse and struggling with serious mental illness (Rowe et al., 2007).

Deinstitutionalisation, the complexities of health care systems and non-government organisations and a lack of affordable housing have created circumstances in which people with a serious mental illness are over-represented among those who are chronically homeless (McHugo et al., 2006; Rowe et al., 2007). Homeless people with substance use and mental health problems are at increased risk for chronic homelessness, frequent hospital presentations, multiple prison incarcerations, and premature death (Bradford et al., 2005).

Homeless people are socially isolated and often lack the skills required to navigate the healthcare system. Research clearly identifies that homeless people encounter multiple barriers to accessing healthcare. It has been found that homeless men and women died three to four times more frequently than the general population. Alcohol dependence probably contributed too many of the premature natural deaths from alcoholic liver disease, gastro-intestinal bleeding and seizures. Whilst overdoses of prescribed medication were the most common causes of suicide, accidental deaths resulting from heroin overdoses were also frequent due to heroin being the most commonly abused illicit drug (Greig et al., 2006).

Research conducted in Melbourne Australia investigated hospital admission and representations and found that homeless people were representing significantly more compared to other people (Moore, Gerdtz, Hepworth, & Manias, 2010). They reported 64 177 presentations by 40 942 individuals to the ED. The homeless population accounted for 10.4% of all the visits and accounted for 3.9% of all the patients. The re-presentation rate for the homeless was 47.8% for ED visits. The research also found that 70.5% of the homeless patients reported drug and alcohol misuse and 54% reported mental illness. The study however did not further investigate the relationship between homelessness, mental illness and drug and alcohol misuse and a better understanding of these issues is needed to effectively engage and treat this complex group.

Homeless men who misuse substances have been found to consume twice as much alcohol as women (Lai & Huang, 2009). Research also indicated that men tend to use substances for different reasons compared to women. Men tend to use more substances when their first experience of the substance was physically powerful and also following a confrontation and anger with a significant other. Kaplan (1996) found that women tended to use more substances following the breakdown of personal relationship. Research has also found that homeless individuals often have self-defeating and lethal behaviours, abusive or destructive personalities and under developed personal skills (Malcolm, 2004). Homeless individuals also tend to be distrusting of services and highly itinerant (Breakey, 1987). Jablensky et al. (2000) found that on several measures, the homeless or marginalised people with psychotic disorders appeared to be more seriously ill and had a high prevalence of alcohol and other substance misuse (45.8% with alcohol misuse and 21.7% with other substance misuse compared with 29.0% and 13.2%, respectively in the mainstream group). Due

to the complexities of homeless individuals' treatment providers face special challenges in engaging and effectively working with homeless individuals.

Research conducted in America on 10 340 people with a serious mental illness found that the prevalence of homelessness was 15% (Folsom, Hawthorne, & Lindamar, 2005). This cross sectional research study found that homelessness appeared to be more prevalent in people that were diagnosed with schizophrenia (20%), bipolar (17%) and depression (9%) compared to other mental illness. They found that homelessness was a serious problem among individuals with severe mental illness complicated further by substance use. Their research suggested that treatment of substance abuse led to improved outcomes in homeless individuals with dual diagnosis.

Insufficient research has been conducted on the impact of dual diagnosis within the homeless population. A better understanding of how dual diagnosis impacts on homeless people, their functioning and their health is needed to help these vulnerable individuals stand a better chance at recovery and reintegration within general society (Grant et al., 2004). There is great concern about the disintegration of mental health service delivery, especially for dual diagnosed homeless people. As a result such fragmentation adversely affects service access and outcomes for this population (Rosenheck, Resnick, & Morrissey, 2003).

This research aimed to investigate the prevalence of drug and alcohol use and mental illness diagnosis in the homeless population of the Gold Coast HHOT. The research also aimed to identify any relationships between the drug of choice and mental health diagnosis.

METHODS

Clinical context

In Queensland, the Queensland Health Homeless Initiative was a state wide endeavour to address the problem of homelessness. Teams were established with a primary focus on mental health and drug and alcohol and other drugs. These teams, HHOT, provide comprehensive case management, assessment and intervention for people experiencing homelessness. The HHOT on the Gold Coast has 20.5 clinicians who work shift work to enable them to carry out their work.

Materials

Fifty four charts were audited to collect relevant information needed to complete the research. Client charts were eligible when the Drug and Alcohol use section of the standard Queensland Health mental health assessment was completed. The information was recorded on a chart audit tool that was specifically developed to use in this research. The tool was developed to record only the information relevant to the research out of the mental health assessment. Client characteristics including age, sex, type of substances used, amount used, frequency, time frame last used, route of administration, age first used, history of homelessness and mental health diagnosis were obtained by conducting the chart audit.

Participants

Clients were eligible to receive case management services from HHOT if they were homeless or living in crisis accommodation, had a diagnosis of a severe mental illness or had a substance use problem and were not currently involved in ongoing community treatment.

There were 54 community mental health charts accessed, these were all clients that were being case managed by HHOT at that stage. There were 24 males and 30 females.

Procedures

A chart audit of all clients case managed by HHOT was completed to specifically look at the Queensland Health mental health assessment form. Information was taken from this assessment about the clients' substance use, diagnosis and homelessness history.

RESULTS

Homelessness

The HHOT case managed clients experience a variety of homelessness. Seven (13%) of the HHOT clients reported that they were experiencing primary homelessness at the time of their assessment; 25 (46.3%) were experiencing secondary homelessness; 1 (1.9%) had experienced tertiary homelessness; and 21 (38%) had experienced a combination of the various types of homelessness. The profile of these clients is outlined in Table 1.

[insert table 1 approximately here]

Substance use

HHOT case managed clients were also assessed for the type and amount of substances they abused. Of these 42 (77.8%) had used alcohol; 38 (70.4%) cannabis; 24 (44.4%) amphetamines; 12 (22.2%) opioids; 7 (13.0%) benzodiazepines; 15 (27.8%) designer drugs; 4 (7.4%) inhalants in their lifetime.

Of the clients that reported substance use, 95.2% of people had used alcohol within the previous month (daily and weekly); 39.5% had used cannabis within the last month (daily and weekly); 88.2% had used amphetamines within the last month (daily and weekly); 66.7% had used opioids within the last month (daily and weekly) and 50% had used benzodiazepines within the last month (daily and weekly).

Another significant factor was many of the clients reported using for the first time under the age of 18. This included 94.6% alcohol, 87.1% cannabis, 40%

amphetamines , 66.7% Opiates, and 53.8% Designer Drugs. This is outlined in Table 2.

[insert table 2 approximately here]

Mental health diagnosis

HHOT case managed clients' diagnoses were also investigated. Depressive illnesses were identified in 16 (29.7%) of clients; delusional disorders including schizophrenia 14 (26%); personality disorders 9 (16.8%); bipolar disorders 6 (11.2%) and anxiety disorders 3 (5.7%). Substance misuse disorders were diagnosed in 5 (9.4%) clients in the absence of any other mental illness. The most commonly seen diagnoses within the HHOT consumer group were schizophrenia and depression.

Relationship between mental health and substance use

A Pearson's chi-square test of independence was performed to examine the relationship between substances used and mental health diagnoses. The substance used was assigned as the independent variable and diagnoses were assigned as the dependent variable.

The relationship between alcohol use and diagnosis were non significant, $X^2(1) = 0.06, p = 0.81$ as were for cannabis use $X^2(1) = 2.65, p = 0.10$, amphetamine use $X^2(1) = 0.17, p = 0.68$, opiates $X^2(1) = 0.94, p = 0.33$.

Additional Pearson's chi-square test of independence was performed to examine the relationship between substances used and gender. The substance used was assigned as the independent variable and gender were assigned as the dependent variable. Again these were insignificant.

DISCUSSION

HHOT have been introduced in key regions with the aim to minimize the health problems of homeless people and contribute to the prevention and reduction of homelessness within Queensland. Homeless individuals frequently reported suffering from substance use as well as a mental illness (Greig et al., 2006, Lai & Huang, 2007). The aim of the current research project was to investigate the homeless population within the Gold Coast area by exploring pattern of substance use and mental health diagnosis within clients being case managed by HHOT community mental health. The research aimed to provide a further understanding of the complexities of working with clients with dual diagnosis issues with the aim of improving client outcomes for homeless individuals on the Gold Coast. The current study provided the most comprehensive analyses of HHOT clients to date.

Drug use patterns identified in the current study were consistent with other research done into the substance use pattern of homeless people (Teesson et al., 2009). Results indicated that 77.8 % of HHOT clients engaged in substance use. Of these, 55.8 % of clients reported weekly substance use, and 38.1% engaged in daily substance use. From this it can be seen that over three quarters of HHOT clients use substances and it would be reasonable to suppose that this could also affect the way clients engage with support services. The substance use of clients might also create several difficulties that need to be considered in the case management of these clients.

The most commonly seen diagnoses within the HHOT client group were schizophrenia and depression. The current research found that 29.7% of HHOT clients were diagnosed with a depressive illness. Delusional disorders including schizophrenia were identified in 26% of HHOT clients. Personality disorders were reported by 16.8% clients. Bipolar disorders were also reported by 11.2% clients. In

addition anxiety disorders were identified by 5.7% clients. Substance abuse disorders were diagnosed in only 9.4% clients in the absence of any other mental illness.

The results found that there was no positive relationship between substance use and diagnosis. These results are not congruent with other research conducted in Australia. Research conducted by Teesson and colleagues (2009) found that substance use in combination with anxiety was the most common comorbidity followed by substance abuse and affective disorders. However, they did not specifically look at homeless individuals.

Limitations

There are several limitations that need to be considered. This research relied on Queensland Health staff to fully and accurately complete the substance use measure that is within the standard Queensland health mental health assessment. Several problems occurred from using this measure. Not all substance use measure within the standard Queensland health mental health assessment were completed for every clients. This meant that the information used for this research were not always accurate or fully reflective of a clients substance use. These measurement limitations may have weakened our ability to detect relationships between substance use and diagnosis. Not all staff are proficient in completing substance use measures accurately. In addition it was also evident that staff used several different ways to report the results. This resulted in the assessment results not being consistent. Another limitation to the research is that historically people under report their substance use (Rockett, Lian, Stack, Ducatman, & Wang, 2010).

Future studies should attempt to use validated measure to assess substance use as well as diagnosis. It is also recommended that a psychiatrist confirms the diagnosis to eliminate any possible errors. In addition, to reduce measurement and researcher

error it is recommended that either one person completes the measurements or that staff use a script when questioning clients

CONCLUSION

In conclusion, dual diagnosis is a major health issues for homeless clients in Australia. Homelessness and dual diagnosis is associated with increased health problems and poorer recovery outcomes. A significant proportion of homeless clients have chronic physical health problems and poor mental health that again impacts on their substance use and as a result their mental health. Homeless clients that have a mental illness or substance use problem is one of the most vulnerable and disadvantaged segments of our society. The health, mental health and substance use problems of homeless clients should be of the top social concern. Although dual diagnosis problems in homeless clients are complex, it is clear that a sustained effort to deliver effective prevention and treatment responses for this cohort is needed.

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Table 1**Demographic profile of HHOT clients**

Age	21-64
Gender	M = 24 (44.4%) F = 30 (55.6%)
Drug dependence	2 (3.7)
Schizophrenia	15 (27.8%)
Depression	16 (29.6%)
Bipolar Affective Disorder	7 (13.0%)
Personality Disorder	7 (13.8%)
Alcohol Dependence	3 (5.6%)
Situational crisis	1 (1.9%)
PTSD	2 (3.7%)
Panic Disorder	1 (1.9%)
Time spent homeless (months)	1 (20.4%) -180 (3.7%)
Primary homeless	7 (13%)
Secondary homeless	25 (46.3%)
Tertiary homeless	1 (1.9%)
Combination	21 (38.9%)

Table 2**Alcohol and drug use of the client population**

	Age first use, 18 years	Age first use, after 18 yrs	Daily use	Weekly use	Monthly use
Alcohol	91.9%	8.1%	29.6%	24.1%	20.4%
Cannabis - exp. hash, bongs, ganga, marijuana	87.1%	12.9%	35.2%	9.3%	5.6%
Amphetamines - exp. speed, goey, ice	40%	60%	13%	11.1%	3.7%
Opioids - exp. methadone, heroin, morphine	66.7%	33.3%	9.3%	1.9%	0%
Designer Drugs - exp. MDA, ecstasy, MDMA	53.8%	46.2%	3.7%	7.4%	3.7%
Inhalants - exp. glue, petrol, paint	100%	0%	1.9%	0%	1.9%