

*Résumé*

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**La toxicomanie chez les clients  
d'un programme de suivi intensif  
dans le milieu au Canada :  
implications pour la planification  
et la prestation des services**

**Shirley Eastabrook, Terry Krupa, Salinda Horgan,  
Gary Gerber, Robert Grant, Joanne Mayo,  
Marie Leeder, et Nalini Stiernerling**

Ce bref article fait état d'une recherche au cours de laquelle on a étudié les diagnostics, les auto-évaluations et les estimations des cliniciens pour évaluer la prévalence de la consommation abusive de drogues, d'alcool et de tabac chez un échantillon aléatoire de 174 clients, traités par quatre équipes de suivi intensif dans le milieu dans le sud-est de l'Ontario, au Canada. On a constaté que les taux de consommation abusive de drogues et d'alcool étaient inférieurs à ceux que rapportent la documentation, alors que la consommation de tabac correspondait aux taux élevés relevés dans cette dernière. Le programme de suivi intensif dans le milieu est guidé par des normes formelles qui présupposent de hauts taux de consommation abusive. Les auteurs avancent qu'il faudrait étudier le profil des populations locales et en tenir compte dans les programmes de suivi intensif dans le milieu.

Mots clés : suivi intensif dans le milieu, toxicomanie

## **Substance Abuse in a Canadian Population of Assertive Community Treatment (ACT) Clients: Implications for Service Planning and Delivery**

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This brief paper reports on a study that used diagnosis, client self-reports, and clinician ratings to estimate the prevalence of drug, alcohol, and tobacco abuse among a random sample of 174 clients of 4 Assertive Community Treatment (ACT) teams in southeastern Ontario, Canada. Drug and alcohol abuse rates were lower than those reported in the literature, while high rates for tobacco use were consistent with published reports. ACT service delivery is guided by formal standards that assume high rates of substance abuse. It is argued that local population profiles should be monitored and considered in the development of ACT intervention practices.

Keywords: assertive community treatment, substance abuse

Assertive Community Treatment (ACT) is a model of continuous, community-based service delivery that promotes the community adjustment of persons with severe mental illness who are high service users (Stein & Test, 1980). Nursing is considered a critical element of the multi-disciplinary service and typically an ACT team includes at least two full-time-equivalent registered nurses (National Alliance for the Mentally Ill [NAMI], 1996). The model has proven effective in reducing hospitalization (Bond, Drake, Mueser, & Latimer, 2001) and has been replicated internationally.

ACT services have developed to address coexisting problems that compromise community adjustment. In response to US reports that substance-abuse rates are over 40% among those with severe mental illness (Regier et al., 1990), ACT standards include a full-time substance-abuse specialist and the active identification and treatment of abuse, including group therapy (NAMI, 1996).

Substance abuse among persons with severe mental illness is a complex phenomenon that appears to be sensitive to social and environmental context. For example, Graham and colleagues (2001) report lower rates of substance abuse (24%) among persons with severe mental illness

in the inner cities of the United Kingdom than in the United States. Such variation suggests the need to develop ACT services based on an understanding of locally determined population profiles.

There is a lack of information on the prevalence of substance abuse among Canadian ACT clients. The few existing Canadian prevalence studies suggest that the co-morbidity of psychiatric disorder and substance abuse ranges from 33 to 65% (Cochrane et al., 2000), although no studies focusing on Canadian ACT clients were found. The present study contributes to our knowledge of ACT in Canada by reporting on the rates of alcohol, drug, and tobacco use among clients of four ACT teams in southeastern Ontario.

### **Method**

Data related to substance use were collected as part of a larger study investigating processes and outcomes associated with ACT (Eastabrook, Krupa, & Gerber, 1998). Approval was obtained from the research ethics committees of both Queen's University and the University of Ottawa. A random sample of clients with severe mental illness across four teams was recruited and informed consent was obtained. Sixty percent of all the clients were approached to participate. When a client declined, another was randomly chosen until the numbers approached 50% of the total population (approximately 370), for a refusal rate of approximately 22%. Although the clients came from across the region, they primarily lived in two small cities where secondary- and tertiary-care centres offer services for the entire area.

The data were collected in late 1998 and early 1999. The research assistants received training in the administration of each instrument and a structured protocol for data collection was followed. Consistent with recommendations that several sources be used to develop a reliable descriptive profile of substance use (Drake, Alterman, & Rosenberg, 1993), the following measures were taken: (1) clinical diagnosis as it appeared in the ACT clinical records; (2) case managers' ratings of client abuse of substances in the previous 6 months on the Clinician Rating Scales for Alcohol (AUS) and Drugs (DUS) (Drake, Mueser, & McHugo, 1996) — these are five-point scales that rate abstinence, use without impairment, abuse, dependence, or dependence with institutionalization; substance abuse was defined as a rating of abuse or dependence; and (3) client self-reports of alcohol, drug, or tobacco use, in response to 12 questions from the Ontario Drug Monitor (Adlaf, Ivis, & Ialomiteanu, 1997); the participants identified the frequency of substance use over the previous year, the types of substances used, and occasions of heavy use. Substance abuse for alcohol, drug, or tobacco was defined on the basis of

frequency using the following ratings: drinking alcohol at least two or three times per week, using drugs at least once per week, or smoking at least 25 cigarettes per day.

### Results

Table 1 presents the characteristics of the sample ( $n = 174$ ). Table 2 presents the results of the substance-use measures. Fifteen percent of the sample had a secondary diagnosis of substance-related disorder, and this was the most prevalent secondary diagnosis across all four teams.

Clinicians rated 9% ( $n = 16$ ) of the sample as alcohol abusing. On self-report, 10% of the sample indicated that they drank two or three times over the previous week. Ten percent of the 100 participants rated as abstinent by case managers indicated that they did drink. Beer and wine were reported as the most frequently used alcoholic beverage.

Clinicians rated 11% ( $n = 18$ ) of the sample as drug abusing or dependent. On self-report, 24% of the sample ( $n = 41$ ) admitted using drugs in the previous year, with 11% ( $n = 18$ ) using drugs at least once per week. Eighteen percent of the 152 participants rated as abstinent by case managers reported some level of drug use. Cannabis was the drug of choice, followed by over-the-counter drugs, dimenhydrinate, anxiolytics and sedatives, and, finally, cocaine.

Tobacco was the substance of choice among the participants. The overall frequency of smoking was 62% ( $n = 108$ ), with 48% ( $n = 84$ ) smoking 25 or more cigarettes per day.

Across the four teams, self-report rates for frequent alcohol use varied from 0 to 22%, for drug use from 0 to 13%, and for smoking from 40 to 80%.

<b>Variables</b>	<b>Mean</b>	<b>(SD)</b>
Age	44 years	(10.18)
	<b>Number</b>	<b>(%)</b>
Gender	96	(55) male
Diagnosis	127	(73) schizophrenia
Marital status	144	(83) not married
Education	80	(46) high school incomplete
Housing	130	(75) private housing/apartment
Work	134	(77) no work previous 9 months

**Table 2** *Rates of Substance Abuse Based on Clinical Diagnosis, Clinician Ratings, and Self-Report*

	<b>Sample N = 174</b>	<b>Males n = 96</b>	<b>Females n = 78</b>
Secondary diagnosis of substance-related disorder	26 (15%) (10%, 20%)*	19 (20%) (12%, 28%)*	7 (9%) (8.9%, 9.1%)*
Clinical rating of alcohol abuse or dependence	16 (9%) (8.6%, 9.4%)*	13 (13%) (12%, 28%)*	3 (4%) (0.0%, 8%)*
Self-report of alcohol use at least 2 or 3 times per week	18 (10%) (6%, 14%)*	14 (15%) (3%, 17%)*	4 (5%) (0.0%, 10%)*
Clinical rating of substance abuse or dependence	14 (8%) (4%, 12%)*	8 (8%) (3%, 13%)*	6 (8%) (14%, 2%)*
Self-report of drug use at least once per week	18 (10%) (7%, 17%)*	8 (8%) (3%, 13%)*	10 (13%) (6%, 20%)*
Self-report of smoking at least 25 cigarettes per day	84 (48%) (41%, 55%)*	55 (58%) (48%, 68%)*	29 (37%) (27%, 48%)*

\* 95% confidence intervals.

## Discussion

Given the problems associated with the reliability of substance-use data, the prevalence rates from this study are likely underestimates. While multiple methods of data collection were used, Drake and colleagues (1993) recommend laboratory tests and information from collateral sources to enhance detection. These methods were beyond the resources of the present research and, given their invasive nature, might be more applicable in the context of a substance treatment program. It is also important to note that the participants were not new to ACT, and it may be that the low rates of alcohol and drug use were at least partially the result of effective treatment.

The rates of substance abuse were remarkably similar for clinical and self-report ratings. This finding runs counter to the assumption that people are likely to conceal or deny substance use. Wright, Gournay, Glorney, and Thornicroft (2000) suggest that agreement rates are sensitive to the differences in measurement scales between clinical and self-report ratings. In the present study, clinicians were asked to rate abuse while participants were asked to comment on their actual frequency of use without making judgements about abuse or its implications, which may have facilitated the participants' willingness to share information about their use of drugs and alcohol.

The alcohol- and drug-abuse rates for the sample were lower than those reported in the literature for persons with mental illness and no higher than those reported for the general adult population in Ontario (Adlaf & Ialomiteanu, 2001). The sample was drawn from a semi-rural region and a large number of participants had a history of long-term institutionalization. Both of these factors have been associated with lower rates of substance abuse (Farrell et al., 1998; Mueser, Essock, Drake, Wolfe, & Frisman, 2001). If these factors do confer some immunity from pressure to use substances, it will be important to monitor prevalence rates and patterns over time as the socio-demographics of the ACT population and the community undergo change.

The actual rates of substance use have implications for ACT service delivery, given that the model's standards are based on assumptions of high substance use. When rates are lower than expected, intervention practices will need to be modified accordingly. For example, group therapy may be less feasible than individual strategies. Substance-use profiles can also provide information about the nature of substance use to be considered in service planning.

Consistent with the findings of previous studies, the smoking rates for the sample were found to be much higher than those for the general adult population (Lasser et al., 2000). To date, ACT standards have not focused on tobacco use. While not typically associated with relapse and behavioural disturbances, smoking does compromise physical health and the economic sustainability of individuals in the community. There are heavy health-care costs associated with the sequelae of smoking. Furthermore, the current marginalization of smokers in public settings can restrict active community participation. With its role in public health, mental health, and smoking cessation, nursing may be the ideal discipline to develop and deliver programming in this area.

Substance abuse amongst persons with mental illness is a serious problem that requires direct consideration and systematic, evidence-based treatment approaches. The findings of this study do support the need to consider local context in the planning and delivery of substance-related services. While well-defined models such as ACT provide clear standards for practice, local profiles would provide important information for determining specific organizational and clinical features of substance-abuse treatment.

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