

An Examination of the Relationship of Homelessness to Mental Disorder, Criminal Behaviour, and Health Care in a Pretrial Jail Population

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Objective: To examine the prevalence of homelessness and its relationship to mental disorder, criminal behaviour, and health care.

Method: Interview and file data were collected for 790 male admissions to a large, pretrial jail facility over a 12-month period.

Results: A significant relationship was found between homelessness and severe mental disorder as well as between homelessness and prior psychiatric history. There were no significant differences found between the homeless and the nonhomeless on the types of crimes for which they were incarcerated or on contact with health care services within the past year.

Conclusion: The findings indicate the need for a link between the jail and community services for homeless individuals.

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Key Words: forensic assessment, jail mental health, mentally disordered offenders, homelessness

Although prevalence rates vary considerably across studies, there is general agreement among researchers that the number of mentally ill individuals in jail is substantial (1–6), and that many of these individuals are arrested for minor crimes, particularly disorderly conduct (7,8). Teplin (9) reviewed a large number of studies of the prevalence of mental disorder among jail detainees and found rates ranging from 5% to 12% for severe mental disorder and from 16% to 67% for any mental illness. There is also evidence that a large percentage of these individuals may also have been homeless at the time of arrest. Martell (10) conducted a study of New York City's primary forensic evaluation and treatment centre. Most of the 137 individuals in the study sample were found either not guilty by reason of insanity or unfit to stand trial.

The most striking finding was that nearly 50% were classified as homeless when they were arrested. After controlling for demographic and diagnostic variables, Martell concluded that homelessness significantly increases the risk of indictment for violent criminal offences among mentally disordered offenders (MDOs).

Michaels and others (11) collected data from several samples of inmates at a pretrial detention facility in New York City. A total of 40.1% reported being homeless at some point in the 3 years preceding arrest, and over 21% were homeless the night prior to arrest. Information on mental illness was based on responses to a few questions about prior mental health treatment, suicidal ideation, use of medications, and hallucinations. One-half of the homeless sample answered affirmatively to at least one of these questions compared with 24% of inmates who had never been homeless.

Problems associated with being homeless may be compounded when homeless individuals also have a history of hospitalization for a mental disorder. Gelberg and colleagues (12) found that homeless persons with a history of prior hospitalization in a mental health facility also had greater involvement in criminal activities than homeless individuals with no such history: 75% of the hospitalization group had

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Table I
Comparisons of Living Arrangement and BPRS Factors

Factor	Items	Mean (SD)		t Value
		Homeless (n = 53)	Nonhomeless (n = 619)	
Positive psychotic symptoms	Conceptual disorganization	4.21 (2.25)	3.68 (1.87)	-1.66
	Hallucinatory behaviour			
	Unusual thoughts			
Negative psychotic symptoms	Emotional withdrawal	5.40 (2.79)	4.05 (1.95)	-3.44 ^a
	Motor retardation			
	Blunted affect			
Distress	Anxiety	5.28 (2.50)	4.82 (2.40)	-1.35
	Guilt feelings			
	Depressive mood			
Hostility	Hostility	4.19 (1.58)	4.21 (2.10)	0.09
	Suspiciousness			
	Uncooperativeness			
Agitation	Tension	3.19 (1.86)	3.05 (1.69)	-0.57
	Excitement			
Hypomania	Grandiosity	2.51 (1.05)	2.58 (1.25)	0.43
	Elevated mood			

^a $P < 0.001$.

been arrested compared with 45% of the rest of the sample. These authors have also suggested that the homeless are not a homogeneous group, and for that reason, diverse programs and services are necessary to meet the needs of different groups of homeless individuals.

Vitelli (13) examined a sample of inmates released from a Canadian correctional institution and found that 39% were homeless upon release. These homeless individuals had more symptoms of mental illness, had a greater likelihood of prior convictions, had greater involvement with mental health services, and had a higher incidence of violent and parasuicidal behaviours than did the domiciled subjects. Vitelli also argued that the correctional system may be acting as a gateway to medical, dental, and psychological services that are unavailable to the homeless, resulting in their developing a dependence on the criminal justice system to receive these services.

The present study examines the prevalence of homelessness as well as its relationship to mental disorder, criminal behaviour, and health care in a pretrial population.

Method

Subjects

Participants were adult males randomly selected from English-speaking admissions to the Vancouver Pretrial Service Centre—a facility for pretrial defendants whose catchment area includes a large, metropolitan area—for the 12-month period between August 1, 1989, and July 31, 1990. We selected consecutive admissions for the first 5 months and

every third admission for the last 7 months. Sampling was done without replacement, so that readmissions were ineligible for inclusion. The sample represented approximately 50% of men admitted to the jail during the study period. After being selected, potential participants were approached by the researchers (typically within 8 hours of admission), advised of the nature and purpose of the research, and asked to consent to a brief interview. Participation was voluntary and unpaid. All procedures were approved by the appropriate university and institutional ethics review boards and were in accordance with prevailing ethical principles.

A total of 881 men were selected to participate in the study; 20 were excluded because they were completely unable to speak English. Of the remaining 861 men, 78 (9.1%) refused to participate; 54 (6.3%) were released on bail or recognizance before they could be interviewed; 28 (3.3%) were unable to be interviewed due to medical problems (most frequently severe opiate withdrawal); and 17 (2.0%) were excluded because researchers were denied access to them due to their extreme security risk. For those men unwilling or unable to complete assessment interviews, researchers attempted to complete standardized rating scales (described later) on the basis of their health care files (which may contain nursing and/or psychological assessments) and institutional progress logs (which contain security staff's observations of the behaviour of participants in the living unit). Sufficient information was available to complete rating scales for 106 of 177 men (59.9%) who were not interviewed: 59 of 78 who refused to participate (75.6%); 6 of 54 who were released on bail or recognizance (11.1%); 26 of 28 who had medical

Type of Offence	Living Status	
	Homeless (n = 53) ^a	Non-homeless (n = 612) ^a
Violent	26.4% (14)	25.7% (157)
Property	52.8% (28)	45.3% (277)
Drug	32.1% (17)	22.4% (137)
Miscellaneous	41.5% (22)	37.6% (230)

^aThe columns will not add up to the total number of individuals in each group as an individual may have committed more than one type of offence.

problems (92.9%); and 15 of 17 who posed security risks (88.2%).

In summary, we collected interview-based assessment data on 684 men (86.6%) and file-based data on a further 106 men, yielding a final sample size of 790. Information was unavailable for the remaining 71 men initially selected for inclusion in the sample.

Procedure

As noted, most participants completed a semistructured interview designed to elicit information concerning current and lifetime psychosocial functioning. The first section of the interview gathered basic demographic data, including employment status and living conditions; the second section covered past mental health contacts, substance use history, and recent utilization of physical health care resources; and the third section consisted of a mental status examination and questions concerning the participant's self-perceived need and desire for mental health treatment. The interviews took, on average, 20 to 30 minutes to complete. Files were reviewed for those individuals who were not interviewed. On the basis of interviews and/or file reviews, all subjects were then rated on 2 standardized rating scales of psychiatric symptomatology, the Brief Psychiatric Rating Scale (BPRS) (14) and the Diagnostic Profile (DP) (15). Cutoff scores on the BPRS and DP were used to classify participants as "cases" (that is, probable MDOs) or "noncases" (that is, not MDOs). The assessments were conducted by 4 PhD-level graduate students in clinical psychology, all of whom had undergone formal training in the use of the rating scales; interrater reliability was assessed in a subsample of 50 participants using the interviewer-observer method. (All possible pairs of raters were represented in the reliability subsample.) Details of the BPRS and DP assessments follow.

BPRS. This rating scale is designed to assess the severity of specific psychopathological symptoms. We used a 19-item version of the scale, with each item rated on a 7-point scale according to its severity at the time of assessment and over

the preceding month (1 = not present, 7 = extremely severe). BPRS total scores (the sum of the individual items) are a highly reliable index of global symptomatology (14,16). The 19-item version of the BPRS has 6 orthogonal factors (Roesch R, Corrado RR, Cox DN, Hart SD. Factor structure of the 19-item Brief Psychiatric Rating Scale. Unpublished observations; 1993). Five of these factors are identical to those identified in research using previous versions of the BPRS (17). One additional factor, comprised of items added in later versions, is also included. The factors are as follows: 1) positive psychotic symptoms (conceptual disorganization, hallucinatory behaviour, unusual thought content), 2) negative psychotic symptoms (emotional withdrawal, motor retardation, blunted affect), 3) distress (anxiety, guilt feelings, depressive mood), 4) hostility (hostility, suspiciousness, uncooperativeness), 5) agitation (tension, excitement), and 6) hypomania (grandiosity, elevated mood).

The BPRS has been validated extensively in clinical populations (16) and has also been used in studies of mentally disordered offenders (15,18). Following the recommendations of Hart and Hemphill (15), we considered participants with a BPRS total score of 34 or greater to be cases.

DP. The DP is a rating scale designed to assess the severity of major psychopathological syndromes (that is, symptom clusters) in jail settings. It has good test-retest and interrater reliabilities, as well as good concurrent validity with respect to the BPRS and predictive validity with respect to institutional behaviour (15). We used a 7-item version of the DP, with each item rated on a 4-point scale (0 = absent, 3 = severe). As recommended by the authors, we collapsed the DP items to yield scores for 3 syndromes: *psychosis*, defined as the presence of delusions, hallucinations, illogical speech, and bizarre behaviour; *acting-out*, defined as hostility, violence, manipulativeness, and noncompliance; and *distressed*, defined as acute anxiety, depression, suicidality, and social withdrawal. Participants meeting the criteria for one or more DP syndromes were considered cases.

Homelessness

Information about living arrangements for the 6 months prior to arrest was obtained for 679 of the participants in this study. Individuals who indicated that they had no fixed address were considered to be homeless, whereas those who indicated that they resided in a room or hotel, house or apartment, boarding or foster home, prison or jail, mental hospital, or other were considered to be domiciled. Fifty-three individuals (7.8%) indicated that they had been homeless for most or all of the 6 months prior to arrest.

Results

Homelessness and Mental Disorder

A significantly larger proportion of homeless individuals (35.8%) were severely mentally disordered as measured by the BPRS than were the domiciled individuals (17%) ($\chi^2 [1, n = 677] = 11.54, P < 0.001$). As well, there was a significant correlation between homelessness and severe mental disorder ($r = 0.13, P < 0.001$).

The comparisons between homelessness and the 6 factors of the BPRS are reported in Table I. There was a significant relationship found between homelessness and negative psychotic symptoms ($r = 0.18, P < 0.001$). There were no significant differences between homelessness and any other factors of the BPRS.

The results indicated that homelessness was associated with prior psychiatric history ($r = 0.09, P < 0.05$) and that significantly more of the homeless individuals (22.6%) had a history of inpatient admissions than did the nonhomeless individuals (12%) ($\chi^2 [1, n = 679] = 4.97, P < 0.05$).

There were no significant differences between the homeless and the domiciled on measures of ethnicity, marital status, education, or past outpatient history. A significantly larger proportion of the homeless (76.9%) were unemployed than were the nonhomeless (53.2%) ($\chi^2 [1, n = 655] = 10.86, P < 0.001$).

Homelessness and Type of Offence

There were no significant differences between the homeless and the nonhomeless in their commission of various types of crimes including violent, property, drug, and miscellaneous offences (Table II). Homeless individuals were significantly more likely to have had a juvenile criminal history (64.2%) than domiciled individuals (49.5%) ($\chi^2 [1, n = 673] = 4.18, P < 0.05$). As well, homeless individuals were more likely to have an adult criminal record (92.5%) than were the nonhomeless individuals (81.9%) ($\chi^2 [1, n = 678] = 3.80, P < 0.05$). There were no significant differences between the homeless and the domiciled in terms of previous incarcerations.

Homelessness and Health Care

The homeless individuals were equally as likely as the nonhomeless individuals to have had contact with health care within the past year, to be in need of dental care, to say that they had current dental problems which affected their lifestyle, and to indicate that they would like to see a dentist while in the pretrial centre. There was a significantly smaller proportion of homeless individuals (59.6%) than nonhomeless (77.1%) who stated that they wanted to see a psychiatrist while in the pretrial facility ($\chi^2 [1, n = 667] = 7.95, P < 0.01$).

The treatment recommendations of the interviewers were recorded and their relationship to homelessness was analyzed. The possible recommendations included no treatment, follow-up monitoring, crisis management, ongoing counselling, segregation, medication, or other treatment. Some form of psychiatric treatment was recommended by the interviewers for a significantly larger proportion of the homeless (56.6%) than the domiciled (36.5%) ($\chi^2 [1, n = 677] = 8.34, P < 0.05$). Follow-up checks were recommended for significantly more homeless (37.7%) than nonhomeless (22.6%) individuals ($\chi^2 [1, n = 677] = 6.18, P < 0.05$). There were no differences between the homeless and nonhomeless in interviewer recommendations of counselling, segregation, or medication.

Discussion

This study examined the relationship of homelessness to 3 different areas: mental disorder, criminal behaviour, and health care. It is important to note that the majority of homeless individuals do not have a mental disorder. However, we found a significant relationship between homelessness and mental disorder; that is, a higher percentage of homeless individuals compared with domiciled individuals appeared to be severely disordered as evidenced by higher BPRS scores, more negative symptomatology, and a history of admissions to psychiatric facilities. There is an established relationship between the presence of negative symptoms and chronicity of mental disorder; that is, those individuals who display negative symptoms tend to have more chronic mental disorders and have a poorer prognosis for recovery (19). These individuals tend to be more severely disordered and so, theoretically, are more likely to be homeless than others who may have less severe disorders and, as a result, be better able to care for themselves.

We found no differences between homeless and nonhomeless individuals on the types of crimes for which they were arrested. Both homeless and domiciled individuals committed violent, property, drug, and miscellaneous offences at the same rate. This does not support the contention of other researchers who have suggested that homeless individuals are often arrested for less serious types of crimes (7,8).

Finally, we found no differences between homeless and nonhomeless individuals on amount of contact with health care services. We did not ask these individuals where they had come in contact with health care professionals, so it is possible that they may have had contact with these professionals through the criminal justice system. As previously suggested (13), therefore, it is possible that the criminal justice system is acting as a gateway to health care services.

Due to the large number of inmates with mental health problems, jail mental health services, including screening and

treatment programs, have become essential for most jails, especially those in urban centres. As Michaels and others (11) point out and as we have shown in our own research in pretrial facilities (4,20,21), however, such services must be extended postrelease because most homeless people will return to the streets unless alternatives are arranged. Jail services must be seen as a starting point, providing an opportunity to identify the needs of inmates both within the institution and after release. For example, in one pretrial jail project, a full-time social worker, employed by a community mental health centre, meets with inmates while they are still in jail and then coordinates services for them after their release (4). Individuals who fulfill this position and cross the boundaries of separate systems have been called "boundary spanners" by Steadman (22). In order for a program to be effective, Steadman and his colleagues have argued for the use of these "boundary spanners," who would be responsible for managing the interactions of mental health, jail, and judicial personnel. In the case of homeless individuals, their responsibility would include ensuring that adequate housing and any needed mental health services are made available.

Leukfeld (23) believes that there should be a stronger link between the mental health system and the legal system to get mentally ill offenders the help that they need rather than simply warehousing them in the prison system. Belcher (24) argues convincingly that the mental health system should be responsible for the mentally ill individuals in jail who have prior histories of mental health treatment. He followed a group of patients after their release from a mental hospital and found that 47 individuals from a sample of 132 became homeless subsequent to release. Thirty-three individuals had histories of chronic mental illness, had become homeless shortly after discharge, and remained homeless during the 6-month follow-up, while the remaining 14 had some period of homelessness during the follow-up. A high percentage of those homeless during the entire follow-up (23 of 33) were arrested and jailed during the study period, and the majority of these (21 of 23) had histories of chronic mental illness and homelessness. He suggests that this is the "result of a lack of specific responsibility by a mental health staff person to ensure that the client is not experiencing significant mental decompensation" (p 194). We agree that the mental health system should assume direct responsibility but feel that this may best be accomplished by creating a working partnership with correctional institutions. Too often, the jail has not been seen as part of a community and is isolated from other community services. The model we have developed in our pretrial jail project allows corrections and mental health personnel to work together in an effort to reduce the revolving door cycle of admissions to both jail and mental health facilities. Indeed, the list of agencies that need to work together will likely extend beyond these 2 systems. As Gelberg and others (12) point out, given the fact that "many homeless

adults have an overwhelming set of social, mental health, criminal, alcohol, and drug problems" (p 195), an effective solution will need to combine the efforts of social service, housing, mental health, and drug and alcohol addiction service providers.

Clinical Implications

- The majority of homeless individuals in jails do not have a mental disorder.
- The rate of mental disorder among homeless jail inmates is significantly higher than domiciled inmates.
- Jails should provide mental health screening of all incoming inmates.
- Homelessness should be considered when providing jail services.
- Jail mental health services provide an opportunity to identify the needs of inmates inside the institution as well as after release.

Limitations

- The percentage of homeless individuals in the sample was small.
- There was only limited information available on the health care of homeless and jail populations.

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Résumé

Objectif : Déterminer la prévalence du problème des sans-abri et ses liens avec les troubles mentaux, un comportement criminel et les soins de santé.

Méthode : On a interviewé 790 sujets de sexe masculin gardés avant procès dans une importante installation carcérale et examiné leur dossier sur une période de 12 mois.

Résultats : On a constaté qu'il existe un lien significatif entre le statut de sans-abri et de graves troubles mentaux ainsi que des antécédents psychiatriques. On n'a pas observé de différences significatives entre le type de délit à l'origine de l'incarcération pour les sans-abri et le reste de la population, ni dans le recours aux services de santé durant l'année antérieure.

Conclusion : Les constatations révèlent qu'il faut créer un pont entre les services pénitenciers et communautaires pour les sans-abri.