



PRASHANT PHILLIPS AND SONIA JOHNSON

Drug and alcohol misuse among in-patients with psychotic illnesses in three inner-London psychiatric units

AIMS AND METHOD

Ward staff were asked to rate whether in-patients with a diagnosis of functional psychotic illness also met criteria for a diagnosis of alcohol or drug misuse or dependence during the preceding 6 months. Those who demonstrated such evidence were then asked to report the nature and extent of their substance use and whether they continued to use as in-patients.

RESULTS

264 in-patients with psychotic illness were screened for evidence of recent or current alcohol or drug misuse. According to staff reports, 127 (48.9%) met the criteria for substance misuse or dependence. The mean age of those with 'dual diagnosis' was 34.7 years and 72% were male. Eighty-three (83%) of those with a history of current or recent alcohol or drug misuse reported that

they had continued to use alcohol and/or illicit drugs in the in-patient wards during their current admission.

CLINICAL IMPLICATIONS

It appears difficult to prevent in-patients with drug or alcohol misuse problems from continuing to use substances in hospital. Further consideration and investigation of how best to manage this group is therefore required.

Dual diagnosis of alcohol and/or drug misuse and psychotic illness has been identified in the past decade as an important clinical problem in service provision for those with severe mental illnesses, and is associated with substantial social difficulties for this group (Dixon, 1999; Gearon *et al*, 2001; Phillips & Johnson, 2001; Murray *et al*, 2002).

The present study investigated the prevalence of dual diagnosis among adults of working age with psychotic illness in in-patient wards and the extent of their continued substance use as in-patients. The approval of a relevant local research ethics committee was obtained.

Epidemiology

Recent US studies indicate that around 50% of service users with mental illness also have substance misuse problems (Regier *et al*, 1990), and that prevalence rates are higher in in-patient populations and emergency service settings (Ridgely & Johnson, 2001). The few European studies reporting prevalence in community settings of this comorbidity generally report lower (but still substantial) prevalence rates. Weaver *et al* (1999) report a particular paucity of research evidence in the UK regarding the prevalence of dual diagnosis in in-patient settings.

Clinicians and service managers have reported that alcohol and drug misuse are prevalent on in-patient wards and associated with substantial management difficulties (McKeown & Liebling, 1995). Sandford (1995) reported, from a survey of mental health nursing members of the Royal College of Nursing, that 68% of respondents were aware of illicit drug use and drinking in their workplaces, mostly in-patient psychiatric wards. Among the associated difficulties reported were adverse effects on patients' mental states, increased violent incidents, drug-related overdoses, interactions between prescribed and non-prescribed substances, drug dealing on the wards and non-compliance with prescribed medication (Sandford, 1995). Staff and patients are likely to find patients who are intoxicated with drugs or alcohol on the ward intimidating, and nurses surveyed by Sandford (1995) found the impact of drug dealing on the wards especially difficult to manage.

Method

The study consisted of two phases: an initial screening phase in which clinicians used a structured rating scale to identify in-patients showing evidence of a dual diagnosis, and a second phase in which the participants thus identified were interviewed about their substance use.

The study was undertaken by three psychiatric in-patient units in inner London between 1999–2000. Clinical staff and managers in the units had made strenuous efforts to prevent substance misuse on the wards, which was perceived as very undesirable, and comprehensive policies had been developed and implemented for the detection of, and response to substance use. Sanctions were used when evidence of substance use became apparent, including discharge (if appropriate) and the cessation of leave should discharge be inappropriate (in the case of patients detained under the Mental Health Act 1983).

Initial screening

Sample

The sample for the initial screening phase of the study consisted of all in-patients, aged between 18–65, with a clinical diagnosis of functional psychotic illness (schizophrenia, schizoaffective disorder, bipolar affective disorder, severe depression with psychotic symptoms or delusional disorder) and resident in the nine catchment area general acute wards and two intensive care wards of the three psychiatric units. Each ward was visited on two census dates, set at least 3 months apart. The time

original
papers

interval between ward census dates was not standardised, but there were no significant differences between census dates in the proportion of patients identified as having a dual diagnosis.

Instruments and procedures

For the initial screening phase, primary nurses and junior psychiatrists who were responsible for the patients' care completed the Drug and Alcohol Use Scales (AUS and DUS) (Drake *et al*, 1990). The ratings from the first ward census date used primary nurses as raters, while the second used junior psychiatrists. There were no significant differences between these sets of ratings concerning the proportion of patients identified as having a history of substance misuse. The scales are designed as a means of eliciting ratings of substance use from clinical staff, and have established psychometric properties when used by staff with relevant training (Drake *et al*, 1990). Ward staff completing the scales in this study received training in the use of the scales directly from the researcher. Written information was also given to support the staff in completing these ratings. The Drug and Alcohol Use Scales elicit ratings for 11 drugs and alcohol, including illicit and commonly-misused prescribed drugs. Staff are asked to rate alcohol and/or drug use using five categories that broadly follow those in the DSM-IV (American Psychiatric Association, 1994) (abstinence, use without impairment, abuse, dependence and severe dependence). Where individual patients had urine drug screen results, these were taken into account in informing the rating, although not all patients had these results available. Those rated as having abuse, dependence or severe dependence for at least one substance were identified as showing evidence of having a dual diagnosis and comprised the sample for the second interview phase of the study. Basic demographic data were also recorded for all those screened in the sample.

Interview stage

Those rated in the initial screening phase as showing evidence of a dual diagnosis with substance use disorders were then asked by clinical staff if they were willing for the lead researcher (P.P.) to discuss the study with them. If they agreed, their informed consent was sought for participation in an interview, which was administered. This included structured questions about their recent alcohol and drug use, including continued use on the ward.

Analysis

Data handling and analysis were carried out using the Statistical Package for the Social Sciences, version 10.0.1 (for Windows) (2001).

Results

Screening phase

Staff completed the Drug and Alcohol Use Scales for all 264 in-patients (100%) with a clinical diagnosis of functional psychotic illness who were screened for evidence of substance misuse within the 6 months prior to their admission. Staff rated 129 (49%) as showing evidence of drug and/or alcohol misuse or dependence, so that they met criteria for inclusion in the interview phase of the study. Thirty-nine (15%) were rated as using drugs and/or alcohol without impairment, and 96 (36%) as abstinent from drug and/or alcohol use.

As Table 1 shows, those with dual diagnosis were younger on average and more likely to be male than those with psychosis alone. Although there was a lower proportion of Black Caribbean, Black African and Black British patients with dual diagnosis when compared with other ethnic groups, this trend did not reach statistical significance.

Interview phase

One hundred and twenty-nine individuals met the study criteria, of whom 102 agreed to interview (response rate 79%). There were no statistically-significant differences between the demographic characteristics and diagnoses of respondents and non-respondents in the study. The nature of the drug and/or alcohol use reported below (Table 2) comes from the subject's own reports at the interview stage.

Alcohol and substance use on in-patient wards

Eighty-nine participants (89%) reported that they had used alcohol and/or drugs at least once on the ward during an in-patient admission, while 83 participants (83%) reported using on the ward during the current admission. Forty-seven (47%) of the participants reported having obtained the substance they used from another in-patient, while 19 (19%) reported that friends had brought alcohol or drugs onto the ward for them. Only five participants (5%) had bought drugs from their regular dealers outside the ward. Eight participants (8%) used intravenous injection as their main means of administration on the ward. For the remainder, use was exclusively by oral means of administration. Thirty participants (30%) reported feeling pressurised to buy substances from other in-patients while on the ward and 32 (32%) felt pressurised to use drugs with other in-patients. Four participants (4%) reported that their first ever experience of drug use occurred on an in-patient ward, in the company of other in-patients.

Discussion

The results of this study may not represent the true prevalence of dual diagnosis among in-patients in inner

**Table 1. Socio-demographic and clinical characteristics**

Socio-demographic and clinical variables	Participants with dual diagnosis (n=129) (% of participants with dual diagnosis)	Participants with psychosis only (n=135) (% of participants with psychosis only)	Significance test ¹
Male gender	93 (72%)	75 (55%)	$\chi^2=7.80, P=0.005$
Mean age	34 (SD: 9.6)	41 (SD 11.6)	$t=7.06, P=0.000$
Ethnic origin			
White European	81 (63%)	72 (53%)	$\chi^2=4.42, P=0.109$
Black Caribbean, African or British	36 (28%)	54 (40%)	
Asian	12 (9%)	9 (7%)	
Diagnosis			
Schizophrenia	98 (76%)	101 (75%)	Fisher's exact test: $P=0.000$
Bipolar affective disorder	31 (24%)	16 (12%)	
Schizoaffective disorder	0 (0%)	12 (4%)	
Depression with psychotic symptoms	0 (0%)	3 (2%)	
Delusional disorder	0 (0%)	3 (2%)	
Compulsorily detained under Mental Health Act 1983	129 (73%)	135 (68%)	$\chi^2=0.706, P=0.401$

1. The last column reports the result of testing whether there is a significant difference at the $P=0.05$ level between participants with dual diagnosis and those with psychosis only. Student's t test is used for continuous and χ^2 for categorical data, except for *diagnosis* where Fisher's exact test (STATA) was used because of multiple empty cells.

London, as their identification depended on staff awareness of substance use in in-patients. It is likely that some patients with current or recent alcohol or substance misuse may have never disclosed such problems to mental health staff, perhaps because they had not been asked or because they feared the consequences of disclosing use. Thus, our prevalence estimate is, if anything, likely to be an under-report.

The rate of problematic alcohol or drug use detected among this group of in-patients in inner London is high (49%), and substantially exceeds that reported in UK community studies (Menezes *et al*, 1996; Wright *et al*, 2000; McCreadie, 2002). This fits in with reports of increased bed use among individuals with dual diagnosis, although it is unclear from the current data whether it is admission rate, length of stay or both variables that are

increased. One factor may be that people with dual diagnosis tend to get 'stuck' on the wards because they are difficult to place in the community.

The findings of the current study suggest that although it is very uncommon for service users' first experience of drug use to occur while on hospital premises, those who regularly use alcohol and/or drugs in the community continue to use these substances on the wards as in-patients. In this study, the substance use reported by participants ranged from drinking alcohol and smoking cannabis to crack use on the wards. It is striking that the majority of participants who reported any cannabis use during the previous 6 months reported use of the drug on the wards at least once, in contrast to other substances. This suggests that the drug is readily

Table 2. Substances and frequencies of use, including use on in-patient wards

Substance used	A. Used at least once in past 6 months	B. Used at least once a week for at least 2 of past 6 months	C. Used at least once daily for at least 2 of past 6 months	Used on the in-patient ward at least once in past 6 months
Alcohol	83 (81%)	55 (54%)	45 (44%)	32 (31%)
Cannabis	71 (70%)	52 (51%)	52 (51%)	53 (52%)
Crack cocaine	32 (31%)	11 (11%)	10 (10%)	7 (7%)
Opiates/opioids	33 (32%)	15 (15%)	9 (9%)	7 (7%)
Cocaine	33 (32%)	6 (6%)	4 (4%)	5 (5%)
Khat	4 (4%)	3 (3%)	3 (3%)	2 (2%)
Amphetamine	25 (24%)	4 (4%)	1 (2%)	None
Ecstasy	21 (20%)	2 (2%)	None	1 (1%)
Hallucinogenics ¹	19 (18.6%)	None	None	None
Benzodiazepines	20 (19%)	3 (3%)	1 (1%)	1 (1%)

1. Hallucinogenic substances=Lysergic acid diethylamide (LSD) and psilocybin (magic mushrooms).

original
papers

available and widely used on the in-patient wards sampled.

Attitudes of staff and managers towards substance misuse on these wards certainly did not seem permissive, yet local policies did not appear to have achieved the goal of preventing use. Increasing the use of invasive interventions (such as insisting on frequent searches of patients and visitors) create problems with civil liberties and therapeutic relationships with patients. The fact that the majority are detained under the Mental Health Act 1983 indicates that in the assessment of professionals, there is little scope for managing their acute mental health problems effectively in the community. Current policies, both in the study area and many other NHS sites, often advocate the discharge of patients found to be using alcohol and/or other substances. This creates a considerable dilemma where the discharge of a detained patient appears unsafe and inappropriate.

In the management of substance misuse in community settings, it would not necessarily be expected that substance users have a good chance of achieving abstinence at a time when their mental health is at its poorest and stress levels are at their highest, at the time of an acute admission. Achieving abstinence is a long-term goal, which is often not realistic to expect in people who are at the precontemplation stage (i.e. people who have not yet acknowledged that they have a substance misuse problem, or considered the possibility of changing their substance use behaviours) (Miller & Rollnick, 1991). Yet the great difficulties associated with coping with active substance misuse in hospital do mean that achieving abstinence, at least on a short-term basis at this point, necessarily does become the goal.

Substance misuse is clearly a substantial problem for front-line clinical staff managing in-patient mental health services, to which innovative solutions need to be sought with urgency.

Declaration of interest

This study was funded through a research fellowship awarded to the principal author by the Camden &

Islington Mental Health & Social Care NHS Trust. There are no competing interests.

References

- AMERICAN PSYCHIATRIC ASSOCIATION (1994) *Diagnostic and Statistical Manual of Mental Disorders*. (4th edn)(DSM-IV). Washington, DC: APA.
- DIXON, L. (1999) Dual diagnosis of substance abuse in schizophrenia: prevalence and impact on outcomes. *Schizophrenia Research*, **25**, S93–S100.
- DRAKE, R. E., OSHER, F. C., NOORDSY, D. L., et al (1990) Diagnosis of alcohol use disorders in schizophrenia. *Schizophrenia Bulletin*, **16**, 57–67.
- GEARON, J. S., BELLACK, A. S., DIXON, L., et al (2001) Substance use behaviours and correlations in schizophrenia. *Addictive Behaviours*, **26**, 51–61.
- McCREADIE, R. G. (2002) Use of drugs, alcohol and tobacco by people with schizophrenia – a case-control study. *British Journal of Psychiatry*, **181**, 321–325.
- McKEOWN, M. & LIEBLING, H. (1995) Staff perception of illicit drug use within a special hospital. *Journal of Psychiatric and Mental Health Nursing*, **2**, 343–350.
- MENEZES, P. R., JOHNSON, S., THORNICROFT, G., et al (1996) Drug and alcohol problems among people with severe mental illness in South London. *British Journal of Psychiatry*, **168**, 612–619.
- MILLER, W. R. & ROLLNICK, S. (1991) *Motivational Interviewing: Preparing People to Change Addictive Behaviours*. New York: The Guilford Press.
- MURRAY, R. M., GRECH, A., PHILLIPS, P., et al (2002) What Is The Relationship Between Substance Abuse And Schizophrenia? In *The Epidemiology of Schizophrenia* (eds R. M. Murray, M. Cannon, P. Jones, et al), pp. 317–342. Cambridge: Cambridge University Press.
- PHILLIPS, P. & JOHNSON, S. (2001) How does drug and alcohol misuse develop among people with psychotic illness? A literature review. *Social Psychiatry and Psychiatric Epidemiology*, **36**, 269–276.
- REGIER, D. A., FARMER, M. E., RAE, D. S., et al (1990) Co-morbidity of mental disorders with alcohol and other drugs of abuse: results from the epidemiological catchment area (ECA) study. *Journal of the American Medical Association*, **264**, 2511–2518.
- RIDGELY, M. S. & JOHNSON, S. (2001) Drug and alcohol services. In *Textbook of Community Psychiatry* (eds G. Szmulker & G. Thornicroft), pp. 347–367. Oxford: Oxford University Press.
- SANDFORD, T. (1995) Drug use is increasing. *Nursing Standard*, **9**, 16.
- WEAVER, T., RENTON, A., STIMSON, G., et al (1999) Severe mental illness and substance misuse. *British Medical Journal*, **318**, 137–138.
- WRIGHT, S., GOURNAY, K., GLORNEY, E., et al (2000) Dual diagnosis in the suburbs: prevalence, need and in-patient service use. *Social Psychiatry and Psychiatric Epidemiology*, **35**, 297–304.

Sonia Johnson MSc MRCPsych, Senior Lecturer in Social & Community Psychiatry, ***Prashant Phillips** MSc RMN, Research Fellow in Substance Misuse Nursing, Royal Free and University College London Medical School, Department of Psychiatry & Behavioural Sciences, Wolfson Building, 48 Riding House Street, London W1N 8AA. p.phillips@ucl.ac.uk