Dual diagnosis of severe mental illness and substance misuse: a case for specialist services?

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Investigation of the prevalence, consequences and management of comorbid psychotic illness and substance misuse ('dual diagnosis') has been one of the central projects in US clinical research and service development during the past decade (Osher & Drake, 1996). In contrast, the silence on this topic in Europe has only recently begun to be broken, and specific services addressing this combination of problems have not generally been established on this side of the Atlantic. In this paper, I will draw on a comprehensive literature search and visits to specialist services in New Hampshire and Washington, DC to discuss whether the absence of specialist services for people with dual diagnosis in Europe constitutes a significant gap, and whether US experiences have produced models of dual diagnosis treatment which could usefully be adopted here.

IS DUAL DIAGNOSIS A CLINICALLY SIGNIFICANT PROBLEM?

Prevalence of dual diagnosis: US studies

Until the 1980s, research on the relationship between psychosis and substance misuse mainly focused on the difficulties of identifying which disorder is primary in people presenting with symptoms of both (Soyka, 1994). Recently, concern with this question has largely given way to a pragmatic acceptance that, whatever the reasons for the co-occurrence of the two disorders, many individuals meet criteria for both a primary diagnosis of a psychotic illness and for a primary substance misuse diagnosis, and may need treatment for both problems. US studies give rates of between 20 and 65% for the prevalence of substance-related disorders among people with psychotic illnesses, with most recent estimates for community or out-patient samples falling between 30 and 50% (Mueser *et al*, 1990; Osher & Drake, 1996). Rates may have been rising since the 1960s (Cuffel, 1992). Alcohol, cannabis and stimulants are the most frequently misused substances among the study samples. The Epidemiological Catchment Area study provided strong evidence of high rates of substance misuse among the severely mentally ill; it gave an odds ratio of 4.0 for the occurrence of substance misuse among people with schizophrenia compared with the general population, with a corresponding figure for bipolar affective disorder of 7.9 (Regier *et al*, 1990).

Possible motivations for substance misuse among people with psychoses include self-medication for positive or negative symptoms, gaining access to a social group, relief from boredom, inactivity and poverty, and difficulty coping with stressful relationships or situations (Test *et al*, 1989). It has also been suggested that rates of dual diagnosis may be increasing as deinstitutionalisation makes drugs and alcohol more readily available to the mentally ill, and creates new problems for them in finding social roles and becoming integrated into the community (Bachrach, 1986).

Does substance misuse cause significant problems among the severely mentally ill?

Research comparing the dually diagnosed with people with psychosis only suggests that they are younger, more often male, and at higher risk of homelessness (Drake & Wallach, 1989). In-patient service use is greater than for people with psychosis only, compliance with community care and medication is poorer, and overall treatment costs are higher (Bartels *et al*, 1993). Violence is more closely associated with this comorbidity than with severe mental illness alone (Swanson *et al*, 1990). Evidence on symptom severity is inconsistent, but some studies find more thought disorder, hallucinations, depression and suicidal behaviour among the dually diagnosed (Drake & Wallach, 1989). A solitary finding favouring people with dual diagnosis is that the combination of schizophrenia and substance misuse has been found to be associated with fewer negative symptoms and better premorbid functioning than schizophrenia alone (Arndt *et al*, 1992). Possible explanations for this are that substance misuse has triggered psychosis in individuals who might not otherwise have become ill, or that severe negative symptoms are incompatible with the level of initiative and social skills required to become involved in drug misuse.

While some studies find no difference between dual diagnosis and psychosis-only groups in some aspects of functioning, there seems to be a substantial overall tendency for more social and clinical problems to be reported in the dually diagnosed. However, most studies describe cross-sectional associations only, so that they do not clearly demonstrate that substance misuse causes the poorer outcomes. An important possibility is that substance misuse is only one among a cluster of problems experienced by a group of young mentally ill people who live in poor social conditions, are hostile to or uninterested in the mental health services, feel they have little prospect of working or being accepted in conventional society, have unstable relationships and housing, and may become involved in various illegal activities. Substance misuse disorders among the dually diagnosed are generally less severe, and volumes of substances consumed are lower, than among people presenting to services with substance misuse disorders only (Lehman *et al*, 1994), a finding which also indicates the need to be wary of assuming that the poorer outcomes observed among people receiving a dual diagnosis are entirely attributable to the direct effects of substance misuse.

Is dual diagnosis mainly a North American problem?

Soyka's (1994) review showed that a link between schizophrenia and drinking was reported early in this century in Germany, and that this observation has been repeated at intervals in various countries, although some contrary findings have also been reported. A handful of European studies with substantial samples has appeared in the 1990s. Duke *et al* (1994) detected problem drinking in 22% of people with schizophrenia in a London catchment area. Menezes *et al* (1996) found evidence of substance

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misuse in 36% of people with psychosis on the case-loads of two London community mental health teams, with higher in-patient bed use among the dually diagnosed. In Munich, Soyka *et al* (1993) found a lifetime prevalence of substance disorders of 22% among in-patients with schizophrenia at a university clinic, and 43% at a state hospital, with elevated rates of suicidal behaviour, hospital admission and homelessness among the dually diagnosed. In Mannheim, Hambrecht & Häfner (1996) found that 24% of people with a first episode of schizophrenia also had alcohol misuse disorders, and 14% drug misuse. Substance misuse tended to begin during the prodromal phase of the schizophrenic illness, and was associated with high rates of positive symptoms and antisocial behaviour. Thus there is some evidence that substantial rates of dual diagnosis and associated exacerbations of social and clinical problems may not be an exclusively North American phenomenon, although more epidemiological evidence is needed to allow satisfactory assessment of needs for dual diagnosis treatment in Europe.

CAN CONVENTIONAL SERVICES MANAGE DUAL DIAGNOSIS SUCCESSFULLY?

Several impediments have been identified to successful management of dual diagnosis by conventional services (Drake *et al*, 1993*a*, 1996). First, staff in generic mental health services often lack training, experience and confidence in managing people with addictions. Particularly if patients attend when intoxicated, staff may feel irritated and threatened (often understandably), and responses may be punitive rather than therapeutic. Many services do not admit this group, and residential placement is especially problematic. Second, staff in addiction services may lack confidence in working with people with psychoses and may decide that such patients are beyond their remit. Addiction treatments may be inappropriate for the severely mentally ill, especially where a relatively confrontational approach is used, where there are strict limits on tolerance of relapse, or where the emotional temperature in treatment sessions tends to run high. Third, if addiction and general adult services do attempt to care for someone jointly, the fragmentation resulting from the involvement of two distinct services may exacerbate the difficulties of maintaining engagement and providing continuity of care for this already poorly compliant group.

SERVICE MODELS IN THE USA

A central principle in the innovative services developed in the USA in the past decade has been the maintenance of continuity of care by integration of treatment for severe mental illness and for addictions, with both delivered by the same team (Drake *et al*, 1993*a*). Services often combine intensive case management with addiction techniques such as relapse prevention, education on substance misuse and motivational interviewing. Training and supervision are provided so that each team member can use all these techniques. Addiction treatments are modified so that confrontation is gentle, and frequent relapses do not result in ejection from care. Attention is paid to finding activities and networks which do not involve substance misuse, and to ensuring that basic needs for housing, food and money are met.

Prominent examples of such services are the 'continuous treatment teams' established throughout New Hampshire by Drake *et al* (1993*a*,*b*, 1996). Teams are dedicated specifically to people with dual diagnosis, for whom they have 24-hour responsibility. Case managers have case-loads of around 12 patients, and use individual and group interventions. The main initial emphasis is on intensive attempts at engagement. A 'persuasion' phase begins once a relationship is established, with the aim of gradually increasing awareness of problems caused by substance misuse. An 'active treatment' phase follows once some motivation is present.

ARE SPECIALIST SERVICES EFFECTIVE?

Descriptive accounts have appeared of a variety of specialist dual diagnosis services which seem to have succeeded in engaging at least some patients and in improving their short-term outcomes. Examples include descriptions by Hellerstein & Meehan (1987) and by Kofoed *et al* (1986) of out-patient group therapy programmes, an account by Franco *et al* (1995) of an intensive dual diagnosis treatment programme based on an acute psychiatric ward, and a paper by Kline *et al* (1991) describing a community programme for homeless mentally ill substance misusers which is based on case management, provision of supported accommodation and assertive outreach. However, as yet few published studies include control groups, involve substantial numbers of subjects and follow-up periods of more than a few months, or use standardised measures to evaluate outcomes. A large randomised controlled trial of 'continuous treatment teams' has been carried out in New Hampshire; the results have not yet appeared in full, but preliminary reports are promising, with reductions in hospitalisation, improvements in functioning and almost half achieving a degree of abstinence after three years (Drake *et al*, 1996). The same research team previously followed up for four years 19 people with schizophrenia who were under the care of a pilot 'continuous treatment team', finding that all eventually engaged actively in treatment, with improvements in levels of alcohol misuse (Drake *et al*, 1993*b*). Jerrell & Ridgeley (1995) followed up 146 subjects over two years, comparing three different approaches to dual diagnosis, one based on behavioural skills training, one on intensive case management and one on an Alcoholics Anonymous-style model. Over two years, improvements in drug- and alcohol-related symptoms, reductions in service use and costs, and a trend towards better social adjustment were observed in the sample as a whole, with better outcomes for behavioural and case management interventions than for the Alcoholics Anonymous-style programme.

Accounts of unsuccessful services should also be noted. In the community-based programme described by Lehman *et al* (1993), very few people cooperated with an attempt to initiate intensive substance misuse treatment for the dually diagnosed without allowing for a substantial initial phase of gradual engagement and working to increase patients' motivation. Similarly, Bartels & Drake (1996) found no evidence of any benefit from an intensive residential programme for frequently relapsing individuals with dual diagnosis, and concluded that successful treatment requires great attention to engagement and long-term work in the setting in which patients will continue to live.

SHOULD MODELS FROM THE USA BE ADOPTED IN EUROPE?

In the USA, addiction and mental health services have distinct funding and training systems. In countries such as the UK where addiction treatment forms part of the mental

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health system, the obstacles to integrated care may be fewer. Despite this, there are few reports of simultaneous delivery of care for both disorders, so that there is probably a need to develop ways of diminishing fragmentation of care for this group. This might be met by adopting the apparently successful New Hampshire specialist team model. However, such teams would not fit readily with the sectorised model now widely adopted in European countries. As centralised services with large catchment areas, they would probably be less able than sector teams to achieve close integration with local primary care and social services and a high level of accessibility. As a separate specialist service without an obligation to accept all patients from a catchment area, they may risk becoming very selective and developing barriers to taking on the most chaotic patients. Concentration of expertise in such a service may perpetuate the feeling of other professionals that they are unable and unwilling to cope with this large group of patients. Moving patients to these teams may itself disrupt continuity of care. Engagement may be more problematic in the absence of some of the coercive methods available in the USA, such as discharges from hospital conditional on accepting treatment, and the federal payeeships and protective guardianships which allow mental health professionals to take close control of the finances of patients known to be spending state benefits on drugs and alcohol (Drake *et al*, 1993*a*). An obstacle to assessing the applicability of this model outside the USA is that published evaluations of specialist services rarely make clear how far these coercive methods have been used to engage patients.

In countries such as the UK, where sector community mental health teams are becoming well-established, it may thus be preferable to develop ways of delivering integrated care within these teams, rather than to establish distinct specialist teams. One strategy would be to develop closer links between addiction and general adult services, for example by attaching an addictions professional to each sector team, facilitating referrals and joint discussions of patients. However, this will not allow delivery of both types of care by the same keyworker, which seems desirable at least for the most difficult patients. A second possibility is to provide additional training and supervision in addiction techniques for all community mental health team staff, so that they all become confident in managing the dually diagnosed. However, in hard-pressed services, resources and time may not be available for the intensive training and supervision required. A third alternative is for a specialist dual diagnosis keyworker to be attached to each community team. This individual could receive intensive training and supervision, take on a case-load mainly of people with dual diagnosis, and also provide advice and support for the rest of the team. Potential problems are 'burnout' resulting from the high concentration of 'difficult' patients on such a case-load, and isolation as the only dual diagnosis specialist within a team. These problems could be addressed by ensuring that case-loads are low, that dual diagnosis keyworkers are well paid and made to feel valued as specialists, and that training and supervision are plentiful and involve opportunities to meet with other specialist dual diagnosis workers. An intermediate option would be to train and supervise two or three members of each team as dual diagnosis keyworkers, and divide the team's dual diagnosis case-load between them. Thus there are various potential strategies for attempting to meet the needs of the dually diagnosed more effectively. The costs and benefits of each have yet to be evaluated in the UK or elsewhere in Europe.

CONCLUSIONS

Rates of dual diagnosis are high in the USA, with homelessness, violence and heavy service costs among the associated problems. Relatively few methodologically robust evaluations of specialist dual diagnosis intervention have so far been completed, but recently there have been some reports of promising outcomes from model services. In the UK and other European countries, there is some evidence that dual diagnosis may be a clinically significant problem currently not addressed in service planning. More comprehensive assessment of needs for care for dual diagnosis is needed, together with evaluation of the costs and outcomes of various strategies which could be applied to provide integrated care for this group.

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