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*Setting up new medical services*

# The development of healthcare services for drug misusers and prostitutes

Clive L Morrison, Sue M Ruben

**Summary**
**With the advent of human immunodeficiency virus (HIV) and the increase of drug misuse in the UK, the Government wishes primary care to play a greater part in treating drug problems in the hope of preventing the spread of HIV. Drug misusers do not avail themselves of traditional services and many are not registered with general practitioners. In response to this Liverpool Health Authority and Family Health Service Authority commenced a new salaried post to provide primary care services to special groups such as injecting drug misusers and prostitutes. Judgemental attitudes towards drug misusers, their high mobility and being a transient population play a part in the reasons why drug misusers find it difficult to access primary healthcare. Drug misusers have high morbidity related to their drug misuse. Many of these conditions, if treated early, can prevent the need for more intensive intervention. Although drug misusers may present with a condition requiring immediate treatment, the opportunity is used to provide other healthcare such as hepatitis B vaccinations, sexually transmitted infection screening, contraception and HIV/hepatitis B testing. The sero prevalence of anti-HBc in injecting drug misusers is 45.5%. Due to their high morbidity and associated costs, the requirements of these groups may conflict with the objectives of budget-holding practices. If general practitioners are unable to respond to their problems, then health care providers and purchasers will have to consider similar schemes in areas which have a higher prevalence of drug misuse in order to provide appropriate healthcare for these vulnerable groups.**

**Keywords:** drug misuse, prostitution, primary healthcare

**The Maryland Centre, 8 Maryland Street, Liverpool, L1 9DE, UK**
CL Morrison

**The Liverpool Drug Dependency Clinic, 26 Rodney Street, Liverpool, L1 2TQ, UK**
SM Ruben

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In recent years there has been an increase in the prevalence of drug misuse and infection by human immunodeficiency virus (HIV) in drug injectors in the UK. To address these two problems, the Government's Advisory Council on the Misuse of Drugs, placed an emphasis on primary care interventions, and on general practitioners to take a more active role, which includes the prescribing of methadone to opiate misusers.[1]

In the Liverpool Drug Dependency Clinic, we noted that many drug users were either not registered with general practitioners or did not use them. This placed a potential burden of care on the secondary care facilities and resources were being diverted from drug dependency treatment into primary healthcare issues. In their 1988 report, the Advisory Council advised that drug dependency units should have access to medical officers for clients that required or requested health checks and examinations for evidence of HIV disease.

In recognition of these factors, the Liverpool Health Authority, with the support of the local Medical Committee and Liverpool Family Health Services Authority, began an innovative scheme in delivering health care. A Senior Clinical Medical Officer who was a vocationally trained general practitioner was employed to work four sessions a week, providing primary care in the district's HIV Prevention Unit at The Maryland Centre, a service managed and provided by the Drugs and HIV Prevention Directorate of the North Mersey Community (NHS) Trust. The centre includes the needle and syringe exchange and is the base for drug and sexual health outreach workers. This report describes the progress and development of a complementary primary care service for injecting drug misusers and prostitutes.

Routine primary health care services are offered by the Senior Clinical Medical Officer; clients can self refer, and no appointments are required. Referrals are accepted from any statutory and non-statutory agency, such as voluntary counselling agencies and support groups for positive people. The service is confidential if clients wish this. The service has a self-imposed prescribing formulary and does not issue prescriptions for opiate-based or benzodiazepine medications, or other drugs that have potential for misuse.

Initial research in primary care and drug misuse was in Scotland where general practitioners have worked closely with community drug teams, in response to the high levels of HIV and, until recently, in the absence of established secondary care drug treatment services.[2–5] The provision of a range of services with a low threshold access for drug misusers has led to Merseyside having the highest number of notifications of addicts[6] and one of the lowest rates of HIV sero-prevalence.[7]

## The Liverpool strategy for drug misuse

The drug services in Liverpool have been committed to implementing the recommendations of the various reports from the Advisory Council on the Misuse of Drugs[1,8] in relation to drug policy and health care provision for drug misusers. The services provide a broad base of healthcare.[9] Outreach works with hidden communities to encourage drug users to contact services. Needle and syringe exchange schemes provide sterile injecting equipment from either the Maryland Centre or the pharmacy needle and syringe exchange schemes which is co-ordinated by the Drugs and HIV Prevention Directorate. The methadone programme provides maintenance and reduction regimes to out-patients, whilst in-patient facilities offer drug misusers stabilisation and detoxification from drugs and also rehabilitate physical health problems.

Over 900 patients attend the Liverpool Drug Dependency Clinic each year on the methadone programme while 1000 clients attend the Maryland Centre needle and syringe exchange schemes with over 150 000 syringes dispensed and a further 200 000 syringes dispensed from the pharmacy needle and syringe exchange schemes. The services work within a harm-reduction philosophy,

**Harm reduction – hierarchy of aims**

- to prevent sharing of injection equipment
- to reduce injecting drug misuse
- to replace illicit drugs by methadone
- to commmence detoxification programme
- abstinence

**Box 1**

**Controlled drugs which require notification**

diamorphine (heroin)
methadone
morphine
opium
pethidine
dextromoramide (Palfium)
dipipanone (Dicanol)
hydrocodone (Dimotane DC)
hydromorphone
oxycodone
levorphanol (Dromoran)
phenazocine (Narphen)
piritramide (Dipidolor)
cocaine

Any doctor who attends a patient who he considers to be, or has reasonable grounds to suspect is, addicted to any of the above controlled drugs must notify the Chief Medical Officer at the Home Office in writing within seven days under the Misuse of Drugs (Notification of and Supply to Addicts) Regulations, 1973. Forms are available from the Regional Drug Misuse Database Team

**Box 2**

**Table 1** Reasons for consultation ($n = 5308$)

| *Activity* | % |
|---|---|
| general medical services | 52.4 |
| problems related to drugs misuse | 17.9 |
| viral hepatitis consultation | 28 |
| investigation performed | 17.4 |
| genito-urinary problem or female health service | 13 |
| advocacy and welfare advice | 8.5 |

Percentages add to more than 100% as more than one activity can take place in a consultation.

which considers that the way drugs are taken and the associated lifestyles in funding drug misuse, are just as problematic as the complications and consequences of addiction to the drug itself.

Drug misusers are encouraged to progress through a hierarchy of goals to limit the health consequences of their actions. The targets in each goal are tailored to be achievable and realistic to individual drug misusers. Abstinence is the ultimate aim but a non-judgemental approach can encourage interim steps towards this end, through activities that involve less risk or harm.

## The need for complimentary primary care for special groups

Up to the end of December 1994, 510 intravenous drug misusers, 83 non-intravenous drug misusers and 152 prostitutes were seen in the Maryland Centre by the Senior Clinical Medical Officer. There was a total number of 5308 consultations. The mean age of intravenous drug misusers was 29.1 years, with prostitutes having a mean age of 26.1 years. The ratio of male:female drug misusers was 1.4:1. Usually in drug services there is an over-representation of male attenders, but this ratio was more balanced due to the targeting of female prostitutes of whom 119 (78.3%) were also intravenous drug misusers.

Other reports have identified that as few as 38% of drug users may be registered with a general practitioner.[10] In Liverpool, 74% of drug misusers and 62% of prostitutes were already registered with a general practitioner. This higher rate was due to the requirement that drug users must be registered with a doctor before they can commence on the methadone programme. However, being on the list of a general practitioner does not mean that drug misusers can access this service and many are told that they will be refused an appointment or 'struck off' if they attempt to attend surgery.[11,12] Drug misusers are stereotyped as being aggressive and violent people, only interested in receiving a supply of prescription medicines that can be misused. Many drug misusers, who normally attended their general practitioner, presented to the Senior Clinical Medical Officer regarding health problems they considered may have been drug-related. Although they were normally very happy with the service their doctors had provided to them, their family and children, they feared the consequences of informing them that they were drug users.[13] Historically, in Liverpool, there is a large number of single-handed general practitioners in the inner city with small catchment areas. Over a two-year period, 45% of prostitutes and 16% of intravenous drug misusers attending the Maryland Clinic had changed their permanent address at least once. Many do not bother re-registering with a new general practitioner.

When a general practitioner removes a drug misuser from a list, usually the whole family are struck-off. Forty-nine children of drug users who had no other access to primary care services were seen in the Maryland Centre, where they were then able to be linked back into the mainstream child health care arrangements such as vaccinations, health visitors and paediatric health surveillance schemes.

Drug misusers without a general practitioner often use Accident & Emergency Departments as their point of access into health care. It is inappropriate to present with non-acute medical problems to these departments where they may not be offered follow-up appointments to review conditions and their role does not encompass preventative medicine.[14]

Intravenous drug misusers take considerable risks with their health, despite warnings from those people involved in their care. Even though drugs are illegal, society still has not been able to eradicate their misuse. Although drug misusers may not wish to stop misusing drugs, they can be encouraged to reduce the harm they inflict upon themselves by minimising the inherent risks through beneficial behavioural changes.[15] The availability of this service attracts groups who do not have access to the usual primary care services for a variety of reasons, either due to their drug misuse or sexuality. This contact allows for the opportunity to discuss harm reduction advice and HIV prevention.

## Service provision

### GENERAL MEDICAL SERVICES

Over half of the consultations involved the provision of general medical services that would be provided in normal general practice (table 1). There are frequent consultations involving dermatology and dental problems. Many drug misusers have low self-esteem and this can be exacerbated by conditions that effect personal appearance such as facial and scalp-skin disease and poor dentition.[16] Constipation and related problems are frequently seen as a result of the reduction in gut motility and suppression of appetite from opioid dependence. Drug

**Initial assessment of a drug misuser**

- examine injection sites for infection
- confirm injection techniques
- assess understanding of routes of HIV/hepatitis B transmission
- dental examination
- offer HIV/hepatitis B testing or referral
- commence hepatitis B vaccination
- offer referral to drug treatment programme
- complete notification of addict
- for women: cervical cytology, determine rubella immunity status, assess contraceptive needs, organise antenatal care

**Box 3**

**Medical complications of drug misuse**

*Related to the drug*
- drug overdose
- benzodiazepine withdrawal seizures
- hallucinogenic drug psychosis

*Related to injecting*
- allergic reactions
- skin abscesses
- thrombophlebitis
- septicaemia
- endocarditis
- osteomyelitis
- pneumonia
- pulmonary abscesses

*Related to using contaminated injecting equipment*
- HIV
- viral hepatitis (B & C)

From: *Drug misuse and dependence: Guidelines on clinical management.* Department of Health. HMSO: London, 1991

**Box 4**

**Table 2** Diagnosis of emergency referrals

| *Condition* | *n* |
|---|---|
| *Complications of drug misuse* | |
| deep venous thrombosis | 33 |
| skin abscesses | 27 |
| deep abscesses (± septicaemia) | 9 |
| pulmonary embolism | 3 |
| accidental illicit drug overdose | 1 |
| anaphylactic reaction | 1 |
| acute hepatitis B | 1 |
| *Genito-urinary problems* | |
| pelvic inflammatory disease | 2 |
| urinary tract infection | 2 |
| vaginal blood loss | 2 |
| *Other* | |
| trauma | 4 |
| chest infection | 3 |
| cholecystitis | 1 |
| concussion | 1 |
| constipation | 1 |
| diabetes | 1 |
| paracetamol overdose | 1 |

misusers are pre-disposed to bacterial infections as a direct consequence of their drug misuse or indirectly through poor nutritional state or detrimental social conditions. This is reflected by the large number of presentations of respiratory tract infections[17,18] although most drug misusers are also heavy tobacco smokers. Opiates and stimulant drugs suppress appetite and drug misusers lose weight. Advice is often sought and appropriate healthy diets and vitamin supplements are prescribed. Drug misusers are often seeking assurance that there is no serious undiagnosed illness causing the weight loss. Cervical dysplasia[19] and sexually transmitted diseases have been associated with drug misusers and it is important to have access to screening tests for sexually transmitted disease and referral to genito-urinary medicine departments. Female drug misusers may not use the routine family planning services and so contraceptive prescriptions and access to NHS abortion services are essential. Depot injections of contraception appears to be the most popular method for female drug misusers as it fits most easily into their lifestyle.

Maintaining contact with drug misusers is achieved by providing services which satisfy their needs. Writing letters or reports regarding health problems to Social Services, Housing Departments, the Benefits Agency, Police or Courts is an important and essential role for the Senior Clinical Medical Officer. At times, even crisis intervention is required. The provision of welfare advice in consultations may take precedence as the main priority to the drug user, however this then leads onto the offer of health care as an adjunct.[20] A drug user who has an illness or long-term disability and is not registered with a general practitioner would be excluded from the benefits and services available from the Benefits Agency or local authority. Some drug misusers do not have the necessary education or social skills to apply to these statutory agencies and so advocacy on behalf of the client is required. There is a high presentation rate of skin problems related to intravenous drug misuse such as abscesses, cellulitis and allergic reactions.[21] The Senior Clinical Medical Officer has developed a particular expertise in the management of these conditions and has prevented the need for specialist surgical care in a majority of cases. Even though the facility does not provide formal treatment programmes with methadone, drug users still availed themselves of the opportunity to receive drug counselling, thus identifying a need for some to discuss their problems confidentially with a physician with no 'hidden agenda' in obtaining a prescription medicine that could be misused.

## HEPATITIS B IN INTRAVENOUS DRUG MISUSERS

An important part of the workload is the diagnosis and treatment of hepatitis B virus and the administration of hepatitis B vaccinations which involve over a quarter of consultations. It was not until the Senior Clinical Medical Officer post commenced that there began a mass campaign in Liverpool to vaccinate drug misusers and especially to target prostitutes. There is evidence of past infection in 45.5% of those that have ever injected drugs. Current infection affects 6.3%. Although lower than reports of 64% in a London clinic,[22] and 84% in Edinburgh,[23] the high rate at times hampered the efficiency of the vaccination campaign in attempting to identify those from the total population that remain non-immune.

In Liverpool, mortality associated with hepatitis B still exceeds that associated with HIV in drug misusers, and it is surprising that some drug services still do not offer hepatitis B vaccination, despite it being an important part of the initial rehabilitative process.

## ACUTE MEDICAL PROBLEMS

This post could not be successful if it did not have the support of specialist secondary services. Many of the medical complications of drug misuse require hospitalisation. The Regional Infectious Disease Unit at Fazakerley Hospital has developed a reputation for providing the necessary hospital care for drug misusers. Extensive skin infections and associated septicaemia and mycotic

**Table 3** Hepatitis serology of injecting drug misusers

| | *Male* | | *Female* | | *Total* | |
|---|---|---|---|---|---|---|
| | *n* | *(%)* | *n* | *(%)* | *n* | *(%)* |
| Number tested for HBsAg and anti-HBc | 278 | | 214 | | 492 | |
| Number with positive HBsAg | 20 | (7.2) | 11 | (5.1) | 31 | (6.3) |
| Number with positive anti-HBc | 124 | (44.6) | 100 | (46.7) | 224 | (45.5) |

**National contacts for drug misusers**

- National Drugs Helpline
  Tel: 0800 776600
- Narcotics Anonymous
  Tel: 0171 498 4680
- National AIDs Helpline
  Tel: 0800 567123
- Release (24 h Counselling and Legal Advice) 388 Old Street, London EC1V 9LT
  Tel: 0171 603 8654
- DOH Health Information Line (for local information on drug services and syringe exchange schemes)
  Tel: 0800 665544

**Box 5**

**Further information for health professionals in the UK**

Institute for the Study of Drug Dependence
Waterbridge House
32–36 Loman Street
London SE1 0EE
Tel: 0171 928 1211

National HIV Prevention Information Service
Hamilton House
Mabledon Place
London WC1H 9TY
Tel: 0171 388 9855

Health Information and Training
The Liverpool Palace
9 Slater Street
Livepool L1 4BW
Tel: 0151 709 3511

Standing Conference on Drug Abuse
Waterbridge House
32–36 Loman Street
London SE1 0EE
Tel: 0171 928 9500

**Box 6**

abscesses are some of the most common dangers encountered. Deep venous thrombosis is a complication of a peculiar type of injecting. Drug misusers who have lost peripheral venous access on their limbs begin injecting in their femoral vein at the site of the groin. The misuse of temazepam and the trauma of repeated injecting contributes to this complication.[24]

The Regional Genito-Urinary Medicine and Gynaecological Services also provide immediate opinions and treatment for those with associated conditions. In Liverpool, the specialist services form part of an integrated package of care and there is extensive liaison between the drug and hospital services. Individuals within the hospital services have expressed a particular interest in providing care for drug misusers, so contributing to an overall response in preventing the spread of HIV infection.

### HIV IN INTRAVENOUS DRUG MISUSERS IN LIVERPOOL

Ten intravenous drug misusers who are known to be HIV positive, two of whom are prostitutes, have presented to the service. This rate of 1.6% is one of the lowest in the UK. This low rate has been verified by the National Collaborative Survey of the prevalance of salivary antibodies to HIV and anti-HBc in intravenous drug misusers.[25] Liverpool is a major collaborator having tested 2792 samples with a HIV prevalence rate of 0.4%. The majority of intravenous drug misusers have shared injecting equipment at some time but for recent sharing the rate is 14.5%. The Health of the Nation target for 1997 is 10%. Part of the continued success in keeping prevalence so low is due to the large number of drug users on the methadone programme, the Maryland Centre providing needle and syring exchange schemes, outreach workers servicing prostitutes, and the input of the specialist services in treating medical illnesses and HIV or hepatitis B in those users already infected.

### MORTALITY IN INTRAVENOUS DRUG MISUSERS

Injecting drug misuse and its associated lifestyle carries with it a considerable risk of mortality. Injecting a mixture of street drugs including amphetamines, cocaine and heroin with illictly acquired prescription medicines such as temazepam, antidepressants and cyclizine can, in combination, cause respiratory depression or cardiac arrhythmias, a trend recently experienced in Glasgow.[26] Although the deaths are far fewer than those reported in Glasgow, 15 intravenous drug misusers of the cohort seen in the Maryland Centre have died over the past two years, nine of a drugs overdose, one of broncho–pneumonia, one of alcoholic/hepatitis C liver cirrhosis, two have been murdered and two have committed suicide. None of this group of drug misusers have died of autoimmune deficiency syndrome (AIDS) or an HIV-related illness.

Reasons for a substantially lower rate of mortality in Liverpool's drug misusers is that a large number have access to a regular supply of oral methadone, thus decreasing the chances of drug misusers injecting a cocktail of drugs if their primary drug is scarce or unavailable. It is alarming that of this group, six of the deceased intravenous drug misusers were from the cohort of 119 injecting drug using prostitutes. The lifestyle of a prostitute is hazardous. Research conducted in Liverpool[27] found that 61% of prostitutes reported that they had had violence inflicted upon them by a sex trade client at some time, 44% in the previous year, while 58% had been raped, 26% in the preceding year.

This level of mortality will continue in these groups if society is unprepared to deliver their health and social needs. Services have to deliver care in imaginative and innovative ways which are not judgemental and encourage contact without reinforcing traditional stereotypes of women prostitutes and are able to provide escape routes into alternative and less dangerous lifestyles.

## Discussion

This service has shown that marginalised groups can access health care if it is designed with their needs in mind.[28] It is generally assumed that drug users stay away from medical services through their own choice, but in fact they can be deterred by the attitudes and approach of the staff that provide these services.[29] Our facility attracts new clients and refers into the other services available within the Maryland Centre and is an integral part of the HIV prevention services. The availability of this centrally located primary care service provides a safety net for vulnerable groups who have not been picked up by traditional services. Medical care can still be provided with continuity of care for the most chaotic of drug misusers. Once their lifestyles have become more stable and their behaviour more socially acceptable they can then springboard back into mainstream services and transfer back to the care of general practitioners when appropriate for the individual. The spread of HIV in Liverpool appears to have been

contained in drug misusers in part by the provision of needles and syringe exchange schemes but hepatitis B is still efficiently spread both sexually and by contaminated injection paraphernalia. Hepatitis B vaccinations are an important part of the delivery of care. As part of a public health campaign targeted at drug misusers the beneficial outcome of such a scheme can be evaluated by monitoring a reduction in the prevalence of anti-HBc antibodies in this population.

General practice is moving towards budget holding and containment of costs. Drug misusers are a demanding and high cost population. Their needs may conflict with the agenda of the new primary care.[30,31] More drug misusers may find themselves without general practitioners and so health purchasers for inner city areas which have high rates of drug misuse may have to consider alternatives like this scheme to reduce mortality, morbidity and the spread of HIV and hepatitis B virus in the drug-using population.


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