ADDICTS CAN CHANGE

Will people prepared to inject illegal drugs with secondhand needles be able to change now to reduce the risk of spreading AIDS to each other, and to the general population? Research in London suggests there's at least a 50-50 chance they will, while in America, it's already happening.

Richard Hartnoll, Emmanuelle Daviaud and Robert Power

FEW CONFIRMED cases of drug-related AIDS have been reported in the UK. However, if analyses from countries such as the USA apply here, then drug injection will become increasingly important in the spread of the disease. First, as the HIV virus that causes AIDS spreads among drug injectors, so they will constitute a growing number and proportion of AIDS cases. In the United States, the number of new cases related to drug injection is rising more rapidly than in other risk groups: in parts of New York and New Jersey, and also in Italy, most AIDS cases are now related to injection.[1, 2] In these and other centres such as Edinburgh, over 50 per cent of samples of drug injectors have been found to be infected with the virus.[3]

Secondly, a high level of infection among drug injectors provides a bridge across which the virus can spread to the wider, largely heterosexual population. At particular risk are the sexual partners and future children of injecting drug users, and through them, their sexual or needle-sharing contacts.[4] Following the increase of injection-related AIDS in New York, the incidence of both heterosexual and child AIDS cases is also starting to increase, though at a slower rate than among drug injectors.[5] Most reported heterosexual cases are non-injecting female partners of male drug injectors.

Prostitutes who inject are a particular risk group in terms of communicating AIDS to numerous partners, though the mechanisms and relative risks of female-male versus male-female and male-male transmission are not clearly established.

The likely spread of AIDS among drug injectors and the risk this presents to the wider population, make it imperative that special prevention efforts are aimed at drug injectors and their partners, designed to change both sexual habits and injecting behaviours, especially the sharing of injection equipment. However, intervention needs to be based on a good understanding of the patterns of risk behaviours and on a realistic assessment of how drug injectors themselves, and others close to them, are likely to respond.

Different levels of risk are associated with different patterns of drug use by injection (see table). The main variables affecting level of risk are:
— frequency of sharing equipment;
— number of people shared with;
— whether shared equipment is cleaned *effectively*;
— number of sexual partners and their risk behaviours;
— extent of 'safe sexual practices';
— conception of children where one parent is at risk of being infected.

On all these counts, it is necessary to consider both the risk of *catching* AIDS and the risk of *passing* it on.

PREVENTION EFFORTS in this area must start with the question: What do drug injectors know and think about AIDS and the relevant risk behaviours, and what are the possibilities of those behaviours changing?

The extent of knowledge about AIDS among British drug users and among drug injectors in particular is not known. Impressionistic evidence suggests they are less well informed than the gay population, but that most are aware AIDS can be transmitted by sharing syringes and needles — a fact known to 90 per cent or more of two samples of New York intravenous drug users in treatment.[6, 7]

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Of more interest was the finding from both studies that about 60 per cent of these samples reported changing their behaviour to reduce the risk of AIDS. The most common changes were increased use of sterile needles and reduced sharing. Supporting evidence of these behaviour changes comes from the greatly increased (illicit) market in sterile needles in New York.[8, 9] Similarly, a study in San Francisco reports that "the vast majority of [intravenous] drug users expressed deep concern about health and AIDS".[10]

In the course of our own work in London, we have started to ask problem drug takers about their risk-behaviour and attitudes to AIDS. It is too early to report firm findings, but already it is becoming clear that there are a range of responses. On the one hand are probably a small minority who, although they inject, are almost obsessional about using 'clean works' and assert they have never shared and never will.

At the other extreme are people who appear unconcerned and who are likely to continue to share despite the risks: "I've always shared and always will . . . have had lots of dirty hits, but you've forgotten about it by the next day".

A somewhat larger proportion take some precautions to limit the extent of sharing (eg, "only with people I know well"). In some cases, this was connected to pre-existing concerns about the risk of catching hepatitis and other infections.

The responses of what are probably the majority reflect concern and a varying degree of desire to reduce risks. For some, this is a considerable change: "I only use my own needle. I always used to share with my mates, but I don't share at all now". For others, the change was only to protect themselves: "If someone wants to share after me, that's their business. But I'll never use a 'works' after someone else".

Concern for protecting oneself from AIDS will also protect others who may use the syringe afterwards, but *only* if the first user is definitely free from the virus. Unfortunately, in present circumstances, this cannot usually be assumed.

Other drug injectors are more resigned. Thus a prostitute, who asked her clients to use sheaths because of VD, would "only share works with X [her partner], but he shares with other people — I'd like not to share with anyone, but often I can't be

Richard Hartnoll and co-workers at the Drug Indicators Project have been researching the extent and pattern of problem drug use in north London since 1980. The project is at Birkbeck College, 16 Gower Street, London WC1, phone 01-580 6622.

1. Cohn J.A. Treating and coping with AIDS: the experience at Bellevue Hospital. In *Community Epidemiology Work Group proceedings, vol. II.* Rockville, Md: US National Institute of Drug Abuse, 1986. p.I/1-5.
2. Avico U. Drug use in Italy. In *Community Epidemiology Work Group proceedings, vol. II.* Rockville, Md: US National Institute of Drug Abuse, 1986. p.IV/34-62.
3. Des Jarlais D.C. and Friedman S.R. AIDS among intravenous drug users: current research in epidemiology, natural history and prevention. In *Community Epidemiology Work Group proceedings, Vol. II.* Rockville, Md: US National Institute of Drug Abuse, 1986. p.I/25-36.
4. Des Jarlais D.C., Friedman S.R. and Hopkins W. Risk reduction for the acquired immunodeficiency syndrome among intravenous drug users. *Annals of Internal Medicine*: 1985, *103*, (5), p.755-759.
5. Thomas P., Des Jarlais D.C., Deren S., *et al.* Relative risk for AIDS among intravenous drug users and their children in New York City. *In preparation.*
6. Friedman S.R., Des Jarlais D.C., Sotheran J.L., *et al.* AIDS and self-organisation among intravenous drug users. *Arch. Int. Med.*: 1986, *145*, p837-840.
7. Selwyn P.A., Cox C.P., Feiner C., *et al.* Knowledge about AIDS and high-risk behaviour among intravenous drug abusers in New York City. Presented at the annual meeting of the American Public Health Association, Washington DC, November 18, 1985.
8. Des Jarlais D.C., *et al*, 1985, *op cit.*
9. Des Jarlais D.C. and Hopkins W. Free needles for intravenous drug users at risk for AIDS: current developments in New York City. *New England J. Med.*: 1985, *313*, p1476.
10. Watter J.K., Newmayer J.A., Feldman H.W., *et al.* Street-based AIDS prevention for intravenous drug users in San Francisco: prospects, options and obstacles. In *Community epidemiology work group proceedings, Vol. II.* Rockville, Md: US National Institute of Drug Abuse, 1986, pI/37-43.
11. A 30-45 second wash-out with household bleach, followed by rinsing with boiled or sterile water, is effective.
12. Des Jarlais D.C., *et al*, 1986, *op cit.*

HOW DRUG USERS NEED TO CHANGE TO REDUCE THE AIDS RISK

High risk behaviours

Frequent sharing of equipment with others.
Sharing with groups of friends, some of whom share with injectors outside that group.
Indiscriminate sharing with many people
Many sexual partners (especially prostitutes).
Never use 'safe' sexual practices.

Medium risk behaviours

Sharing limited to small group of friends.
Sharing limited in frequency.
No use of other peoples' equipment, but will let others use equipment afterwards (low risk for person and others if the original user is not HIV positive, high risk for others if they are).
Usually clean equipment effectively.
One sexual partner now, but some sexual partners, especially drug injectors, over recent years (both partners).
Several sexual partners, but usually use condoms.

Low risk behaviours

Drug use by means other than injection.
Inject, but never shared equipment, or not shared for some years.
Sharing limited to one partner, both partners not shared with anyone else for some years.
Share, but *always* clean equipment effectively.
One sexual partner (both partners no sexual contact with drug injector in recent years).
Always use safe sexual practices (condoms, etc).

bothered to go to the chemist for new 'works'". Another injector, who had found out four months previously that he was HIV positive, said: "before then I didn't take any notice of it [publicity about AIDS]. Now I always try to get new 'works'. But it's hard because the police stop people coming out of [the] chemist. I've been stopped and searched six times". Several others worried about AIDS shared nonetheless if they were desperate or if clean syringes and needles were not available at the time.

A few people reported cleaning equipment in various ways between injections, though the techniques used (eg, washing out with boiling water) were not necessarily sufficient to kill the virus.[11]

It has been suggested that, in contrast to the gay community, it is unrealistic to expect significant changes in risk behaviour among injecting drug users. Reasons given include the observation that drug injectors are not a coherent or organised community through which it is possible to disseminate and reinforce 'safe practices', and that they are so self-destructive or of such low self-esteem that they would not change their behaviour anyway — a variation on the theme of the 'hopeless junkie'.

However, our main impression, consistent with the American studies, is that a substantial number of injectors, perhaps the majority, are worried about AIDS and/or report they have changed their behaviour to reduce the risks. As researchers in New York's public health service have commented: "AIDS is a new type of death associated with [intravenous] drug use. The process is usually protracted and painful, and includes social stigmatisation beyond that associated with [intravenous] drug use. This type of death does not have any of the psychological escapism that might be associated with an overdose death. Concern about dying from AIDS is great enough to change the behaviour of many drug users".[12]

While it is unrealistic to expect all injectors to reduce the extent and frequency of risk behaviours, it might be realistic to aim to encourage significant changes on the part of at least half the injecting population who currently share 'works' or take part in other risky activities. Added to the minority who already use 'safe practices', this could help slow the spread of AIDS, both within the drug using population, and into the wider community.

A MAJOR DIFFICULTY is that very little is known about the needle sharing and sexual behaviours of drug injectors. A few studies in this country have suggested that between 50 and 80 per cent of various samples of injectors in treatment have shared syringes at some time. However, this level of information is inadequate for assessing the current and future levels of risk of spread of the virus. As a basis for effective and accurate targeting of preventive measures, it is important to clarify not only the dimensions and characteristics of different sub-groups at risk, but also the mechanisms involved in the spread of the virus, the extent of various risk behaviours, and the situational factors that encourage or discourage those behaviours. □

US STRESSES NEED TO BRING USERS INTO TREATMENT

QUESTIONS have been raised about the extent to which injecting drug users show an ability to increase their risk-avoidance behaviours in the face of the AIDS epidemic. Much has been made of the fact that the gay community has responded to the threat of HIV infection with changes in behaviour that have modified their health risk. Whether drug injectors will exercise similar restraint in risk-promoting behaviours, particularly in the sharing of needles with other drug injectors, is cause for concern.

It is, or should be, apparent that ultimately the spread of AIDS among injectors can only be contained through increased success in bringing them into treatment and the success of that treatment in changing drug-using behaviours.

While the first line of defence with injecting drug users involves gaining their involvement in drug abuse treatment, to some extent publicity and information about the relationship of AIDS to injecting are affecting the behaviour of individuals who do not commit themselves to treatment. The following evidence is noteworthy: anecdotal accounts of increased sales of (purportedly) new needles in New York City indicate efforts by injectors to contain the threat of AIDS. New York is one of 11 States in which hypodermic syringes can be legally purchased only with a doctor's prescription. A study conducted in Dallas, Texas, suggests that even drug users who do not enter treatment may be modifying their needle-sharing behaviours. It was found that a large percentage report sharing their needles only with other relatives and persons who are viewed as close friends (77%) as opposed to acquaintances and strangers (23%). It must be emphasised that this study is not longitudinal, and one cannot assume these findings reflect changes in behaviour.

Again, the major strategy for containing the spread of HIV infection in the drug-injecting population is to encourage individuals to enter treatment. Strategies exist for making use of (typically) former drug users as outreach workers. Their role is to enter the drug-using community and engage drug injectors in street settings, to encourage their participation in treatment. It has been established that this strategy can be used effectively. Indeed, a variation of that strategy is now in use in several States, eg, New York, New Jersey, and California, to bring into treatment persons at risk of HIV infection through injecting. New Jersey reports this strategy appears to be successful in bringing injectors into treatment.

OBVIOUSLY, once such individuals are engaged in treatment, there is the task of retaining them long enough to allow them to benefit from the services available. There is also the challenge of offering aftercare services that will provide the supports the clients need to allow them to remain drug free even after they have severed formal ties to the programme. Again, with the threat of HIV infection, the importance of aftercare in preventing relapse to injecting becomes particularly significant.

US National Institute on Drug Abuse

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