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GLOBAL
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REPORT OF THE MEETING ON
HIV INFECTION AND
DRUG INJECTING
INTERVENTION STRATEGIES

GENEVA
18 - 20 JANUARY 1988



WORLD
HEALTH
ORGANIZATION



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1. INTRODUCTION

The global magnitude of the AIDS epidemic and its increasing association with drug injecting behaviour has intensified the need to reassess policies and programmes for the prevention and control of drug injecting, especially with regard to reducing the risk of human immunodeficiency virus (HIV) transmission. To review the problem and the most appropriate ways of dealing with it, a meeting was organized by the WHO Global Programme on AIDS (GPA), in collaboration with the WHO Division of Mental Health (MNH), from 18 to 20 January 1988. Twenty-four participants attended from 14 countries. The meeting was chaired by Dr Dorothy Black (United Kingdom). A list of participants is given in Annex 1.

The objectives of the meeting were:

- (a) to review the experience with policies and intervention programmes for control and prevention of HIV transmission in the context of IV drug use;
- (b) to identify how intervention programmes can be monitored and evaluated;
- (c) to identify research needs on the effectiveness of strategies to control and prevent HIV infection related to IV drug use.

2. NATURE AND MAGNITUDE OF THE PROBLEM

The past decade has seen a marked increase in the number of people injecting drugs for non-medicinal purposes (Tables 1 and 2). In the United States of America, 1.2 million persons are estimated to inject drugs on either a regular or an intermittent basis. In Europe the number of people injecting drugs is estimated at between 750 000 and one million. In Hong Kong, Malaysia and Thailand, injecting has become the primary method of consuming non-medicinal drugs. Over 40 000 drug injectors came under treatment programmes within a one year period in Thailand; local authorities believe this may represent as little as 10% of the total number of drug injectors in the country.

The significance of this problem for HIV infection and AIDS is highlighted by the fact that, of the over 50 000 AIDS cases reported in the USA by the end of 1987, approximately 25% were directly associated with drug injecting (homosexuality was a related risk factor in 8% of the cases). In the European region drug injecting currently accounts for up to 21% of the approximately 8 500 AIDS cases thus far reported to WHO (homosexuality was a related risk factor in 3% of the cases).

In both regions there has been a marked increase among drug injectors in the incidence of bacterial pneumonia, endocarditis and tuberculosis. These diseases have traditionally been associated with drug injecting and currently may not always be recognized as HIV-related. As a result, current surveillance definitions of AIDS may therefore be underestimating the true prevalence of HIV infection associated with drug-injecting behaviour.

TABLE 1. ESTIMATED NUMBERS OF INJECTING DRUG USERS (IDUs) BY COUNTRY

| <u>Country</u> | <u>Estimated no. of IDUs</u> | <u>Date and source of estimate</u> |
|--------------------------------|----------------------------------|---|
| Australia* | 300 000 | 1987, Market Research |
| Canada* | 25 000 - 50 000 | 1987 |
| France | 60 000 - 100 000 | 1986, Hôpital Claude Bernard, Paris (WHO Collaborating Centre) |
| Federal Republic of Germany | 50 000 - 100 000 | 1986, Hôpital Claude Bernard, Paris (WHO Collaborating Centre) |
| Greece | 25 000 | 1986, Hôpital Claude Bernard, Paris (WHO Collaborating Centre) |
| Italy | 130 000 - 170 000 | National Research Council, Pisa |
| Netherlands | 8 000 | 1986, Hôpital Claude Bernard, Paris (WHO Collaborating Centre) |
| Norway | 3 000 - 4 000 | 1987, National Narcotics Advisory Board |
| Singapore* | 5-6 new cases p.a. | |
| Spain | 100 000 | 1986, Hôpital Claude Bernard, Paris (WHO Collaborating Centre) |
| Thailand | 60 000 - 80 000 | 1986, National Registry of Drug Abuse Patients |
| Yugoslavia | 15 000 | 1986, treatment centres and police and customs offices |
| United Kingdom* | 36 000 - 72 000 | 1986 |
| USA | 1.5m | 1986, United States Public Health Service |

* Data reported by participant.

Because of the covert and often illegal nature of drug injecting, these figures, which are mainly based on treatment programme reports, may be an underestimate of the true magnitude of the problem.

TABLE 2. CUMULATIVE TOTAL AIDS CASES AMONG INJECTING DRUG USERS BY COUNTRY, 1987

| Country | AIDS cases with history of drug injecting | % of total AIDS cases associated with drug-injecting |
|-------------------------|--|--|
| Australia * | 25 ¹ | 3.7 |
| Bermuda * | 44 ¹ | 63 |
| Canada * | 9 (+ 42 cases associated with homosexual behaviour) | 0.6 (+35% cases associated with homosexual behaviour) |
| France ** | 267 (+ 74 cases associated with homosexual behaviour) | 11 (+3% cases associated with homosexual behaviour) |
| Federal Rep. of Germany | 111 (+ 18 cases associated with homosexual behaviour) | 8 (+1% cases associated with homosexual behaviour) |
| Greece ** | 1 (+ 1 cases associated with homosexual behaviour) | 1 (+1% cases associated with homosexual behaviour) |
| Italy * | 871 (+51 cases associated with homosexual behaviour) | 64 (+ 4% cases associated with homosexual behaviour) |
| Japan * | None reported | |
| Liberia * | None reported | |
| Mexico * | 7 ¹ | 0.5 |
| Netherlands * | 16 (+ 5 cases associated with homosexual behaviour) | 3.8 (+1.2% cases associated with homosexual behaviour) |
| Norway * | 4 ¹ | 2.8 |
| Singapore * | None reported | |
| Spain * | 453 | 57.4 |
| Sweden * | None reported | |
| Yugoslavia * | 7 ¹ | 33 |
| United Kingdom* | 19 (+ 19 cases associated with homosexual behaviour) | 2 (+2% cases associated with homosexual behaviour) |
| USA *** | 4760 (+ 2188 cases associated with homosexual behaviour) | 17 (+8% cases associated with homosexual behaviour) |

* Data reported by national representatives at the meeting.

** Hôpital Claude Bernard, Paris (WHO Collaborating Centre).

*** Des Jarlais, D. & Friedman, S. HIV infection among intravenous drug injectors: epidemiology and risk reduction. AIDS 1987 1:67-76 (1987).

¹ Not specified whether injecting drug use is sole risk factor.

HIV infection in drug injectors also poses a serious risk to sexual partners whether they are drug injectors or not. In some cities of North America with a high prevalence of HIV infection among drug injecting populations, a large proportion of the cases in which HIV has been acquired heterosexually can be traced to sexual contact with an HIV-infected drug injector. Perinatal transmission of HIV by an HIV-infected mother is becoming increasingly linked to drug injecting too, whether by the mother herself or her sexual partner.

2.1 Alternative strategies for reducing risks of HIV infection among drug injectors

Given the magnitude of the new and evolving HIV/AIDS problem, traditional policies and approaches to the prevention and control of drug injecting urgently need to be reassessed in terms of their effectiveness and appropriateness. Although primary prevention of drug injecting clearly continues to be the first priority together with appropriate treatment of drug injectors, including their reintegration into social and economic life, emphasis has to be given to interventions designed to reduce the risk of exposure to HIV infection among those drug injectors who are unwilling or unable to stop drug injecting (see below). These interventions will increasingly need to involve approaches in which the health, social welfare, education, employment, and law enforcement sectors provide support and services through comprehensive programmes and policies. Drug injectors themselves may need to participate in designing and implementing intervention programmes in order to enhance the potential success of these programmes.

Experience to date in different parts of the world indicates that a number of approaches may be effective in HIV risk reduction among drug injectors. These include:

(a) Educational outreach programmes designed to provide information and social support

Risk reduction interventions appear to be enhanced when they include activities that provide social support to drug injectors and/or their partners who are attempting to change their behaviour. Self-help organizations have been shown to be well received, particularly when operated by or involving ex-drug injectors in the provision of services. Examples of such organizations include the Dutch Drug Users Union, Association for Drug Abuse Prevention and Treatment (ADAPT) in New York City, and the Australian Drug Information Collective in Sydney. Provision of shelter, food, and non-medical care all form an integral part of these outreach activities and will increasingly need to be a part of other treatment programmes if they are to succeed in attracting high-risk drug injectors.

In the Federal Republic of Germany, Norway, and Sweden, considerable numbers of drug injectors have also been reached through what have been termed "low-threshold measures" that include self-help organizations that offer food, shelter and counselling, and which reach out to drug injectors through a variety of informal settings such as cafes and clubs.

(b) Facilitating access to sterile needles and syringes

Facilitating access to sterile injection equipment has given rise to a number of different initiatives. These have been influenced at times by legal factors, health care traditions, the coverage achieved by outreach programmes,

or official and public attitudes to drug injecting and related risk-reduction programmes. In some countries facilitating access to sterile injecting equipment has been achieved by improved over-the-counter sale of needles and syringes. At present injecting equipment can be purchased without prescription in parts of the USA, Europe, Latin America, South-East Asia, and Africa. In Denmark and the Federal Republic of Germany, the distribution of needles and syringes by vending machines has also been introduced on a trial basis in certain cities.

In addition, needle and syringe exchange programmes have been set up in some cities of Australia, England and Scotland, and the Netherlands. Through these programmes drug injectors are able to get new, sterile needles and syringes in return for used injection equipment; the objective is to ensure that the level of needle sharing is reduced and sterile injection equipment used whenever possible. Drug injectors participating in these programmes are provided with strict guidelines and education on the use of equipment. Counselling is provided whenever requested.

To date, however, there has been little systematic evaluation of any of these activities and it is still difficult to assess what their long-term impact on HIV infection and drug injecting behaviour will be. Nevertheless, initial reports on the programmes introduced in England, Scotland, and the Netherlands suggest that needle and syringe exchange programmes have been successful in attracting drug injectors who had not previously come into any contact with treatment programmes. Needle and syringe exchange schemes also appear to constitute an important channel for providing information, education, and counselling services that in turn are of value in helping prevent other diseases related to drug injecting. They also provide an opportunity for the promotion and provision of family planning methods.

The experience thus far in England, Scotland, and the Netherlands suggests that the potential of needle and syringe exchange programmes for ensuring the long-term involvement of drug injectors is high. Compliance with programme guidelines has been good; the number of used needles and syringes returned, for example, has been almost equal to the number distributed and there has been little evidence of injection equipment distributed free being passed on or sold to other users. There has been no indication that needle and syringe distribution programmes have increased the frequency of drug injecting or reduced the demand for treatment. Drug injecting and needle sharing appears to have decreased; in England and Scotland the level of sharing has dropped significantly in the last two years, since needle and syringe exchange initiatives were introduced. It is not, however, possible at present to determine whether this is a direct result of the needle exchange programmes or of other factors.

(c) Providing information on the decontamination of needles, syringes and other drug injection equipment

In some countries, especially the USA, HIV risk reduction schemes have focused on needle and syringe cleaning. In these initiatives, outreach workers provide drug injectors with bleach solutions and educational demonstrations about how injecting equipment can be cleaned using simple, cheap and easily accessible methods.

These initiatives have generally been well received, but the coverage achieved by them has been initially low. Street outreach activities tend to be limited by the ability of "workers" to identify drug injectors on the street or to have access to them in the places where they go to inject. The task, moreover, is time-intensive and requires specialized personnel who both know the communities and the behaviour of the individuals concerned. Opportunities for providing information also appear to be limited because of the irregular contact and the brevity of the meetings.

(d) Methadone and other medical and non-medical approaches towards stopping drug injecting

Methadone and other medical and non-medical interventions, including detoxification programmes, have been shown to contribute to a decrease in drug injecting in some countries. In the Netherlands an estimated 50%-60% of known injectors have been contacted yearly through methadone programmes. This contact appears to have contributed to the reduction of needle sharing by providing drug injectors with the time they need to consider other ways of reducing health risks associated with injecting. Many of these programmes, however, were set up before the AIDS epidemic; if they are now to be effective in helping to reduce the risk of HIV they will increasingly need to take new initiatives in introducing information, education, and counselling activities relevant to HIV/AIDS.

It should also be borne in mind that methadone is appropriate only in cases of opiate dependency; it is not suitable for treating people who use other drugs or even those who only use opiates intermittently. Methadone maintenance programmes may therefore have only a limited contribution to make to HIV/AIDS risk reduction, particularly in countries where the range of drugs being injected is increasing and where opiates are used rarely or decreasingly.

3. HIV ANTIBODY TESTING

Voluntary testing services for HIV antibodies are being introduced into many health and social services and are increasingly being made available to drug injectors. Testing for HIV antibodies is a part of any epidemiological surveillance programme and voluntary testing of drug injectors can contribute considerably to epidemiological studies and to the ongoing assessment of the prevalence and incidence of HIV infection.

Mandatory testing of drug injectors or their partners, however, is not warranted. At best, such testing can provide point prevalence data, but it can also adversely influence the reliability of information provided by respondents about their life-styles, and the willingness of individuals or groups with high-risk behaviour to cooperate in longer-term surveillance activities. Voluntary testing accompanied by careful and sensitive counselling on the other hand can provide some of the incidence and prevalence data required for monitoring trends, while at the same time providing an opportunity for changes in behaviour to be discussed, explored and encouraged.

Testing for antibodies to HIV among drug injectors and their sexual partners should always be considered in the same way as HIV testing in general and criteria for HIV that have been established by WHO¹ should always be adhered to, especially with regard to

¹ Report of Meeting on Criteria for HIV Screening Programmes, Geneva, 20-21 May 1987 (WHO/SPA/GLO/87.2).

informed consent and confidentiality. In many parts of the world intravenous drug use is illegal and carries severe penalties; any breach of confidentiality that compromises the drug injector is likely to deter others from coming forward to voluntarily participate in antibody testing and other services.

4. EDUCATION AND TRAINING

To reach those at risk, many education and training programmes build increasingly on a variety of community-based resources. In some countries outreach activities are being developed that involve contacting drug injectors on the street and outside the formal services. They often bring in ex-drug injectors who are familiar with the life-styles, attitudes, and needs of drug injectors and can provide motivation and advice on how to use the services available. Education and training activities have also been shown to gain considerably from the contribution of ex-drug injectors to the planning and design of outreach services, paying special attention to the overall social, cultural, and legal contexts in which injectors live.

All these activities and innovations have implications for the training of programme staff. Since the goal of all outreach programmes is to reduce high-risk behaviour and encourage and facilitate the integration of drug injectors into economic and social life, programme staff need to be trained both in risk reduction methods and in ways of enrolling drug injectors in job training programmes. To do this they also need to know how to mobilize and use the social, legal, and other welfare services that are available but often remain unused by marginalized social groups.

The risk of sexual transmission of HIV among and from infected drug injectors also needs always to be taken into consideration in designing intervention programmes. The promotion of safer sex and the provision of condoms, as well as the skills required for their effective use, must clearly assume a high priority in outreach programmes. Women at risk of HIV infection or already known to be infected, need to be provided routinely with contraceptive and family planning counselling and have access to the necessary methods and services. Special counselling for pregnant women who are known or thought to have a history of drug injecting or sexual contact with drug injectors should also be established within health care services, especially antenatal clinics.

Because of the difficulties traditionally encountered in contacting and recruiting drug injectors in treatment programmes, intervention need to be made as attractive and accessible as possible. In most situations they need to form part of programmes that should include a mix of social and medical services and not be independent initiatives.

Research on the effectiveness of outreach and intervention programmes is at an early stage. So is the coordination of programmes within and between countries. Coordination is essential if the activities of different local authorities and countries are to contribute to an understanding of which factors and approaches lead to successful reduction of the risk of HIV infection.

In the context of drug injecting behaviour, HIV infection and AIDS have introduced new requirements for the role of health care personnel, especially those working in relation to treatment and care. As a result, new training programmes may be called for to provide health care staff with the necessary insights into HIV risk reduction and the ways in which it can be achieved.

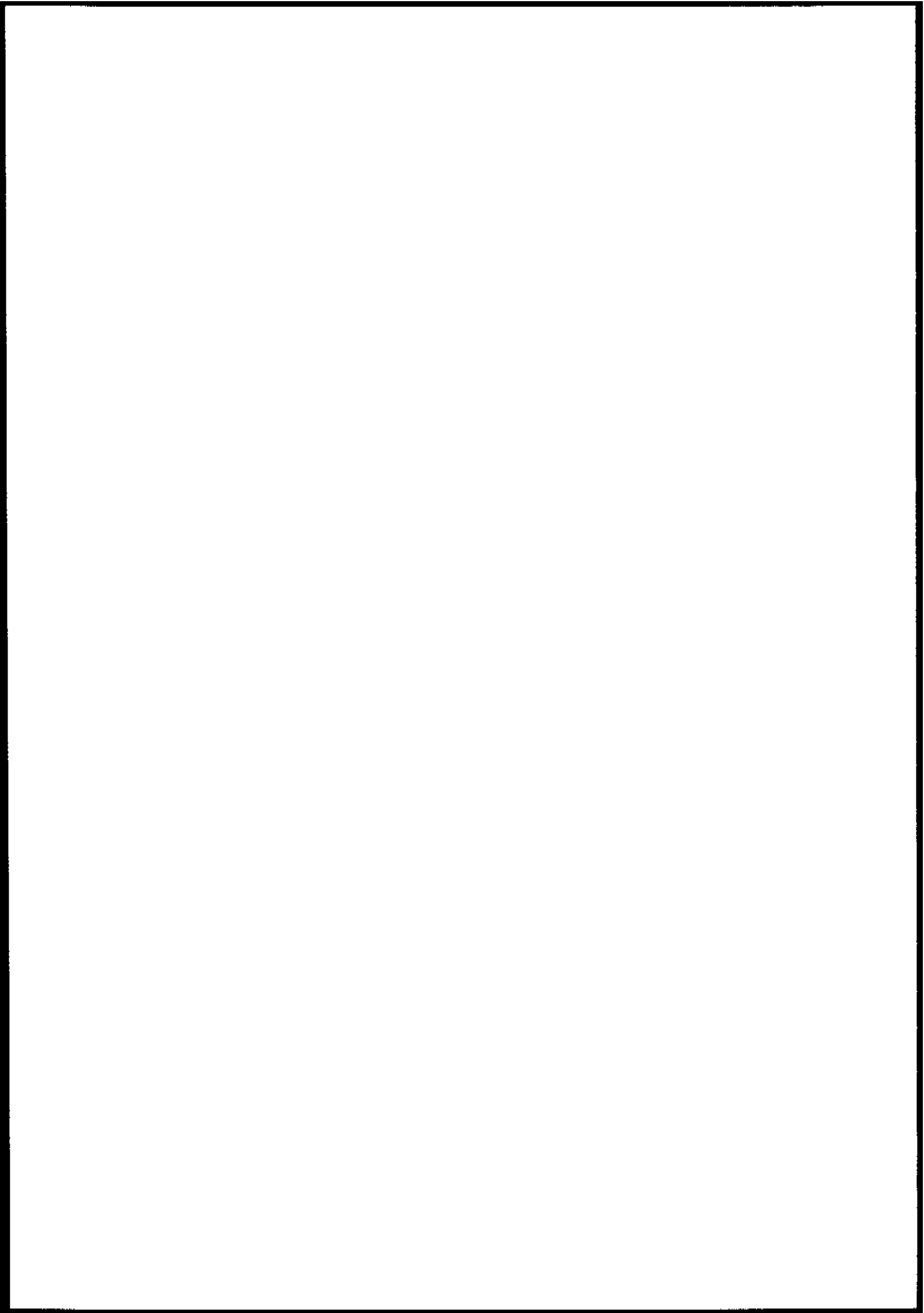
Because activities to reduce risk of HIV infection among drug injectors is a relatively new area of concern it is also important that the experiences gained with programmes in the same country as well as in different countries be exchanged as much as possible so as to provide the possibility of ongoing monitoring and review of progress, alternative approaches, changing needs and opportunities for action.

5. RECOMMENDATIONS

1. Given the increasing global magnitude of drug injecting behaviour and its implications for HIV infection and AIDS, new and innovative approaches are called for in preventing drug injecting-related HIV infection. Because of the urgent need to prevent HIV infection among drug injectors, these new approaches should consider the following types of intervention either singly or in combination:
 - (a) educational outreach programmes on HIV/AIDS risk reduction using innovative approaches including the involvement of ex-drug injectors;
 - (b) programmes to facilitate access to sterile needles and syringes, including needle and syringe exchange programmes;
 - (c) education programmes that provide information on HIV and AIDS and means for the decontamination (washing/cleaning) of needles, syringes, and other injection equipment;
 - (d) the provision of information, education and counselling on safer sex, contraception, and family planning, including the provision of condoms and appropriate virucidal agents.
2. The availability of drug treatment services should be extended to ensure that all those who wish to enter treatment programmes can be accommodated and have easy and rapid access to the appropriate services that guarantee confidentiality if so desired and freedom from legal complications.
3. When treatment services are available, they should be assessed for their scope and relevance to HIV prevention, and if necessary ways should be found of:
 - (a) expanding the range of treatment modalities they provide in order to include combinations of medical and non-medical treatment; and
 - (b) of providing these services through innovative outreach initiatives that enhance their accessibility and acceptability.
4. Treatment modalities designed to encourage abstinence from drug use and so achieve HIV risk reduction must form a part of any overall strategy. In this regard, methadone maintenance programmes for opiate dependent persons should be considered.
5. Training programmes for drug treatment staff, including the improvement of counselling skills in the promotion of safer sex, condom and virucide promotion, and family planning techniques, should be a priority in all drug-related programmes. Such training programmes may be specially needed where programme personnel have not yet encountered problems related to HIV.
6. Information, education, and counselling on the prevention of HIV transmission and on risk reduction should be an integral part of all drug-related intervention programmes, even in countries where HIV infection and AIDS are not yet a major public health problem. Programme staff in those countries should be sensitized to the epidemiology of drug injecting and HIV infection as well as to the needs of drug injectors.

7. Information, education, and counselling for HIV risk reduction associated with drug injecting should build on existing health, welfare, and educational services in addition to services specifically established for drug interventions. These other services may in some circumstances furnish equally good access to drug injectors and be a good basis for preventive approaches.
8. Wherever appropriate and possible, drug injectors, ex-drug injectors and their sexual partners should be involved in planning and providing outreach programmes and in providing information and education. They should also be involved in briefing outreach workers so as to enhance their understanding of the needs of drug injectors.
9. All HIV antibody testing initiatives should follow the WHO criteria for testing and screening¹ and take into account the special social, legal and economic characteristics and needs of drug injectors. Mandatory testing is not warranted. It would make communication with drug injectors more difficult and reduce the numbers of drug injectors voluntarily seeking treatment and/or access to information about risk reduction.
10. For strategies to reduce the risk of HIV infection among drug injectors to be successful, the resources necessary for comprehensive programmes should be provided on a routine long-term basis. Institutions that provide care for HIV-infected drug injectors should be allotted the resources required to cope with the existing or an anticipated increased workload, especially when the HIV prevalence is high.
11. More research is required on:
 - (a) the social and behavioural factors influencing drug injecting, needle sharing, and the extent to which drug injectors are willing to participate in risk reduction programmes;
 - (b) the factors that facilitate or impede risk reduction programmes; and
 - (c) the impact of HIV testing on the risk perception and behaviour of drug injectors.
12. Monitoring and evaluation of current interventions to reduce HIV transmission from drug injection should be established in as many places as possible as a routine part of programme management. Global monitoring and evaluation systems should, as far as possible, follow common protocols and focus on the factors that influence the effectiveness of different interventions on drug injecting behaviour.

¹ Screening and testing in AIDS prevention and control programmes. WHO document WHO/SPA/INF/88.1.



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