

ASSESSING AIDS PREVENTION

EC-CONCERTED ACTION ON ASSESSMENT OF AIDS/HIV PREVENTION STRATEGIES

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HIV PREVENTION STRATEGIES IN INJECTION DRUG USERS

Final report

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ASSESSMENT OF THE AIDS/HIV PREVENTIVE STRATEGIES

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This study is part of a Concerted Action (CA) conducted within the framework of the 4th Medical and Health Research Programme. This CA concerns the development of strategies and methods for assessment activities of HIV/AIDS prevention in European countries.

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PREAMBLE AND ACKNOWLEDGEMENTS

In Europe, evaluation of prevention programmes aimed at intravenous/injecting drug users (IDUs) is not routinely carried out. It should be performed, however, in order to produce reliable data and provide guidelines to health authorities at European level.

The European Community Working Party on AIDS Research allocated funds for an EC concerted action on the assessment of HIV/AIDS preventive strategies. IDUs were targeted as one of the areas of work. An attempt has been made to carry out such assessment, based on a review of data from European Community and COST Countries.

Dr. Giovanni Rezza was appointed as the group leader of this particular part of the EC concerted action. A working group was established with the following participants: Giovanni Rezza (Roma, Italy), Maria Cristina Rota (Roma, Italy), Ernst Buning (Amsterdam, The Netherlands), Raphael De Andres Medina (Madrid, Spain), Dominique Hausser (Lausanne, Switzerland), Pat O'Hare (Liverpool, England), Robert Power (London, England). During the period October 1989 to November 1990, data and information were collected from EC/COST countries, resulting in this report. This work has been made possible by the valuable contributions of many people who have worked hard to prepare baseline information.

We thank for their kind collaboration G.V. Stimson (UK), F.R. Ingold and P. Prat (France), D. Zulaica (Spain), W. Heckman and M. Fharner (Germany), I Erlacher (Austria), K. Kall and A. Setreus (Sweden), J.J. O'Connor (Ireland), A. Worm (Denmark), S. Todts (Belgium), T. Nunes Vicente (Portugal), G. Papaevangelou (Greece), D. Hansen-Koenig (Luxembourg).

1. SUMMARY

By December 31st 1990, over 14564 cases of AIDS among injecting drug users have been reported in Europe. HIV seroprevalence rates among drug injectors vary from less than 5% in some cities, to over 50% in others. Since the estimated number of drug injectors in Europe is between 750,000 and 1,000,000, HIV is a considerable threat to drug injectors, their sex partners and their off-spring, affecting large numbers of citizens in the European region.

This report gives a detailed overview of the magnitude of the drugs/AIDS problem in the European region and characteristics of drug injectors (Chapter 3).

The threat of HIV among drug users has urged policy makers at both national and European levels to design new strategies to cope with this problem. Chapter 4 reviews current drug policies and describes new initiatives in this area.

Preventing the further spread of AIDS is still the prevailing option, taking into account that effective vaccines or therapies are not available. "Prevention", however, is a widely used term. To clarify this concept, chapter 5 gives some theoretical considerations about the use of different terms (strategies, programmes, interventions, campaigns).

Throughout the European region, many concrete measures have been taken to prevent HIV infection among drug users. These measures include information campaigns, HIV testing, counselling, outreach programmes, promoting safer sex, methadone substitution programmes, providing clean needles and syringes and special projects for drug users in prison. All these measures are highlighted in chapter 6.

Although one might be impressed with the range of measures and their innovative character, the baseline is still "do they work?". Trying to assess the impact of prevention measures is not an easy task. Many methodological problems arise and sometimes funding is short to carry out proper evaluation. Before describing available data on the outcome of prevention measures, chapter 7 deals with the theory behind evaluation and provides a model of evaluation, developed by an EC working party and implemented in London.

Chapter 8 summarizes data from a long list of research projects. It concerns data from knowledge, attitude, behaviour studies, serological studies (both HIV and Hepatitis B), evaluation of methadone programmes and needle and syringe exchange schemes and finally data on sexual behaviour of drug users. The overall conclusion of chapter 8 is that safer needle use occurs. Safer sex is practised among drug users in similar proportion to the general population. Because of the higher prevalence of HIV amongst drug users, it is necessary that this proportion increases.

Based on all the material reviewed, the working group draws its conclusions and makes recommendations in chapter 9. One of the main conclusions is that AIDS is a greater threat to public health than problem drug use and that a combination of AIDS prevention measures should be used. Recommendations about this wide range of AIDS prevention measures are made, emphasizing the necessity of involving the target group (i.e. injecting drug users).

Finally, three recommendations are made concerning international cooperation:

- 1) an information exchange between EC/COST countries,
- 2) a network of training agencies for practitioners in the AIDS and drugs field, and
- 3) the setting up of a central training course for AIDS/drug researchers.

2. METHODOLOGY OF THE PROJECT

The purposes of the project are:

- 1) To set up a network of research in the AIDS/drugs field.
- 2) To gather existing data from EC/COST countries regarding patterns of drug use, number of drug users, number of drug users with AIDS, HIV seroprevalence and incidence, AIDS prevention programmes, behavioural studies related to HIV and drugs, and information from pilot schemes.
- 3) To assess to what extent the preventive strategies implemented at a national level have been effective in determining behavioural changes and/or modification in HIV trends in IDUs.
- 4) To analyze the different experiences in the European Community in order to identify problems met and lessons learned during the implementation of the interventions.
- 5) To recommend future action to be taken in order to improve prevention efforts, promote evaluative research which could lead to comparable data in EC/COST countries, and to stimulate further exchange of information.

These lessons are expected to be taken into account by the European Community countries in re-examining the strategic approach chosen and in intensifying the activities that have shown a bigger impact in curbing the spread of HIV.

The method used for the evaluation included the following steps:

- a) A first meeting was organized in Rome in October 1989 in order to plan activities.
- b) It was decided to collect informations from different sources: the Paris centre; the national reports to the WHO Copenhagen meeting held in Stockholm in 1989; information sent by a series of contact persons in different European countries; official publications such as journals, yearly reports, presentations at conferences or meetings etc.
- c) A check list was prepared in order to standardize data collection from all countries.
- d) This checklist, along with a letter of introduction, was sent to contact persons in the different countries of the European Community requiring information on specific topics related to HIV trends, prevention and evaluation in IDU.
- e) A review of the available national programme documentation was carried out.

f) The working group met five times, analyzing the progress, and discussing the various draft versions of this report.

The limitations of this project are fourfold:

1) Although over 100 articles, books, reports, presentations, etc., were reviewed, the data collection is limited to informations provided by the country contacts, gathered by the Rome Istituto Superiore di Sanita and supplied by the members of the working group.

2) Methodological problems concerning research in the AIDS/drugs field are notorious. Data provided about the effects of various AIDS prevention programmes are never 100% conclusive. As for evaluation per se, behavioural research, used to evaluate the effectiveness of preventive measures providing "soft" data, present several reasons for concern. The surveys themselves, for example, may play a role in changing the behaviour, or orienting in a particular direction the answers of the interviewees. Individuals enrolled in prevention projects may feel forced to hide behaviours that are not consistent with the project objectives.

Validity and reliability of data are often doubtful because they have to rely on small samples and interviewed self-reports. Sexual and drug use behaviour can vary over time, relapses may occur and risky behaviours can be repeated in particular situations. In addition, behaviour is influenced by a number of factors and it is difficult to determine the extent to which the changes observed are only due to the prevention interventions under study.

On the other hand, "hard" data, such as incidence and prevalence rates of HIV infection, are also difficult to interpret. In fact, changes in the trends and data from Hepatitis B may be attributed not only to a specific prevention effort, but they might be influenced by a serie of different variables (e.g. baseline HIV seroprevalence, information campaigns, saturation effect, selection of group, local policy towards HIV testing, etc.).

3) Existing information on the effects of AIDS prevention programmes always refers to a specific intervention in a specific local setting. Generalisation to other areas/countries is often difficult.

4) Another problem faced in the study has been the difficulty in assessing the real magnitude of drug consumption. In general, countries give "gestimates", rather than real estimates. In some countries, however, more sophisticated methods of estimating the number of drug users are applied, such as "snow-balling", "randomized chain referral" and the "capture - recapture" method. Most of the studies take into account mainly IDUs entering any kind of treatment programmes, because this sub-group is

easily accessible; this choice can lead to an underestimation in the real number of drug users and can introduce biases in the results, these samples are not being representative of the total IDU population.

In spite of these limitations, during the evaluation an attempt to compare data and to draw lessons has been made and it is hoped that the dissemination of the results will be helpful for those countries which are facing drug problems.

3. THE DRUG AND AIDS PROBLEM IN THE EUROPEAN REGION

3.1 Magnitude of the drug problem

From the data available it is only possible to estimate the number of injecting drug users (IDUs) in the European Community. However, WHO Geneva estimates a number of IDUs ranging from 750,000 to 1 million in the whole of Europe. (1,2).

Annex 1 gives an overview of the estimated number of drug users in various European countries.

Injecting drug use is widespread in Western Europe (particularly in Mediterranean countries), but is also becoming a relevant problem in some East-European countries (e.g. Poland).

The standardized mortality ratio (SMR) of IDUs is higher than that of the general population because of deaths due to infectious diseases (e.g. AIDS, viral Hepatitis, endocarditis, etc.), overdose and other drug-related deaths, murder, accidents, etc.

3.2 Drug use patterns

In almost all European Countries, heroin is by far the most common drug of addiction (89% of all notifications in the U.K., 80-90% of IDUs in France, 75% in Ireland, 70-80% in Federal Republic of Germany) (see Annex 1). In addition to heroin, other opiate type drugs (e.g. Dipipanone, Dextromoramide, Methadone) or barbiturates are usually used.

In Sweden, however, the majority of IDUs have amphetamine as their main drug of injection, and only a small percentage injects mainly heroin.

Some countries report an increasing use of cocaine.

3.3 Demographic data

Most IDUs in Europe are in the age-group 20-35 (see Annex 1). However, in some European countries, the mean age of IDUs is increasing. This phenomenon is particularly evident in the Netherlands (3).

Today, heroin use in Germany is a problem involving 20 to 35 year olds, while in the late 1970s there was a teenage use of opiates. Today, alcohol and prescription drugs are more popular below the age of 20.

A study carried out in West Berlin in 1989, analyzed drug-related deaths and found that:

- 1) They increased in 1988 in comparison to 1987.

2) The average age of those dying from drug related causes has risen from 21 years in the early seventies to 28 years in 1988.

3) Since 1985, there have been no drug-related deaths involving persons under 18 years of age.

In Amsterdam, available data show that the estimated number of drug users has been quite stable since 1983 and in the same period, the average age has risen from 26.8 in 1983 to 31.6 in 1989, whilst the percentage of young drug users (less than 22 years) reduced from 14.4% to 4.8% (3).

In Switzerland, as reported by the Institut de Medecine Sociale et Preventive de l'Universite de Lausanne, the median age for people under abstinence treatment or methadone maintenance is 30 with a range of 30 to 49. Of those interviewed in the streets the median age is 25 with a range of 16 to 35. The median duration of injecting career for people in treatment is 10 years, the median duration in the streets is 6 years.

In Spain, the average age for drug users entering treatment in 1988 was 25.4 years, and for patients who visited emergency rooms in hospitals it was 24.9 years. In both cases these ages are slightly above the average age registered in 1987. Heroin users showed an average age lower than users of other drugs. The duration of the illicit use of opiates or cocaine of those entering treatment was 5.6 years in 1988 and 5.1 years in 1987. Again, the age at which initiation into drug use occurred was also slightly higher among those who requested treatment in 1989 (4,5).

Therefore, the Spanish report states that:

"the increase in the number of years of drug use and its coincidence with the increase in the average age in the 1988 cases, leads us to think that there is some stability in the population that uses opiates or cocaine"(4).

3.4 The magnitude of the AIDS problem among drug users

The total number of AIDS cases reported in European Community and COST Countries was 60485 up to September 30, 1990. Of these, 19579 (about 30%) were reported as IDUs and 1089 (2%) as homosexual drug users. Considering that a high proportion of AIDS cases due to heterosexual contact or vertical transmission (paediatric cases) are related to injecting drug use, we can state that more than a third of AIDS cases reported in Europe are linked to the drug problem. Therefore, we expect that injecting drug use will become a major transmission category for AIDS in Europe in 1992.

As shown in Annex 2, there are great variations in the proportion of AIDS cases reported in IDUs in different countries, ranging from 2-3% of the total number of cases in some countries (Belgium, Denmark, Finland, UK, etc.) to over 60% in others (Italy, Spain). However, France, Italy and Spain accounted for almost 90% of the number of AIDS cases among IDUs in Europe (6).

It is known that AIDS cases represent only a part of the total number of people infected with HIV, and that they reflect the past spread of HIV infection. In fact, the latency period of full-blown AIDS may be very long. Prevalence and seroconversion rates of HIV are more useful in monitoring the current spread of HIV infection.

Several studies (both cross-sectional and incidence studies) have been conducted in different European cities. The findings of these studies have shown large geographic variations in HIV seroprevalence, not only in different countries, but also in the same country among different regions/cities. Studies on seroconversion rates unfortunately involve only small numbers of IDUs in few countries, making it impossible to demonstrate a relationship between prevention measures and the incidence of HIV infection.

3.5 HIV prevalence/incidence

Because of the long latency period of AIDS, the best way to assess the current spread of HIV infection is by collection of hard data regarding either prevalence or incidence of HIV antibodies. Repeated cross-sectional studies are useful to assess the trend of HIV infection over the years, and are relatively cheap and easy to perform. Several prevalence studies have been conducted so far in different European countries (see Annex 3). The findings of these studies show large regional variations. HIV seroprevalence was less than 5% in London and Glasgow, but over 50% in Milan, Barcelona, Edinburgh. In other cities like Amsterdam or Rome the prevalence rate is 30-40% (7).

There are also variations related to socio-economical factors. In Switzerland the mean prevalence rate is around 25%. Amongst socially integrated groups the rate is around 1% whereas amongst marginalised groups the rate is around 50%.

Incidence studies on seronegative IDUs (implying long-term follow-up designs) are more expensive and difficult to perform, and show problems to recruitment (selection bias) and drop-out rate. Only a few incidence studies have been conducted so far in Europe (8,9).

The incidence of seroconversion was 1% in Stockholm in 1987-1988, but about 7% in Milan in the same period. The incidence rate decreased from 12% in 1986 to 5% in 1987 and to 3% in 1988 in Amsterdam, and from 9% (1985-87) to 5% (1987-89) in Rome.

In cities like Rome or Amsterdam, the prevalence of HIV infection remained stable over the years with a moderate rate of new infections.

4. EUROPEAN DRUG POLICY

4.1 The bases of current European drug policy

National drugs policy in most countries of the world, including the EC member states, is largely based upon two UN Conventions; the Amended Single Convention on Narcotic Drugs (1961-1972) (10) and the Convention on Psychotropic Substances (1971). These conventions are based upon the premise that the substances listed by the conventions are harmful to health and constitute a danger to society. Though individual countries determine their own national policies in the light of these UN Conventions, there is a number of common factors. All signatories base their policies upon the attempt to control drug use and drug trafficking primarily through the Criminal Justice system. This is also true of Switzerland, despite its failure to ratify either convention.

Over the last five years, there has been an increasing tendency to re-evaluate this basis, for two main reasons:

- 1) The need to control the spread of HIV infection and AIDS among injecting drug users.
- 2) The perceived failure of the criminal law to have any significant impact upon drug problems.

4.2 The impact of HIV/AIDS

This re-evaluation has had two major consequences that are often conflated. The first has been the emergence of more pragmatic treatment policies in the light of HIV and AIDS. The British Government's Advisory Council on the Misuse of Drugs gave a lead in its statement "that the spread of HIV and AIDS is a greater danger to individual and public health than drug misuse. Accordingly, services which aim to minimize HIV risk behaviour by all available means should take precedence in development plans" (11)

The European Council and Ministers for Health of Member States echoed this sentiment in their meeting on the prevention of AIDS in intravenous drug users (12). They argued that policies could no longer be solely abstinence orientated, but must seek to reduce other drug related harms, such as mortality, HIV and other infections and social marginalization. The report recognized the difficulties in reaching this group and called for a reassessment of current treatment programmes: "It would be desirable to promote alternative approaches in this area, where possible under national legislation. For example, consideration might be given to implementing or extending methods which - like support programmes using substitutes - enable a transition to be made to drug taking patterns which do not involve the risk of contracting

infectious diseases". It also pointed to the need for radical new initiatives able to overcome the barriers to contact.

To ensure that prevention initiatives should not be unduly hindered, it stated that: "Member States should, if appropriate, examine the impact of their national legislation in order to facilitate implementation of the measures put forward above, thus ensuring greater effectiveness in the fight against problems associated with the non-therapeutic use of drugs and HIV infection".

4.3 The anti-prohibitionist lobby

There is also a growing international lobby that is critical of the value of dealing with drug problems using the criminal justice system. This lobby offers a number of criticisms of existing drug policy that are increasingly influential. Their arguments note that law enforcement has failed to stop the spread of drug use internationally, that the distinctions between legal and illegal drugs are often arbitrary and have no rational basis, and that law enforcement-based strategies marginalize rather than integrate the drug user, rendering non problematic drug use problematic, and problematic drug users less likely to seek treatment.

4.4 New initiatives in drug policies

4.4.1 Treatment and rehabilitation policies

In many countries drug policy is not homogeneous, but differs region by region. Though policy is often determined centrally, its implementation may vary. The advent of HIV and AIDS has produced new imperatives for treatment policies. The life-threatening nature of AIDS has meant that abstinence can no longer be the sole goal of treatment, but other forms of behaviour change have equal importance. It has also become crucial to maximize contact with drug users in order to effect that change. As a consequence, many drug services are changing both their policies and their style of service delivery.

In 1984, Amsterdam initiated one of the first syringe exchange schemes in order to fight Hepatitis B among drug users (13). While some countries such as Britain, Holland and Switzerland are increasing the availability of injection equipment through exchanges, pharmacy sales and even vending machines, others have been reluctant to change their policies and possession in some states is still against the law.

There has been a re-evaluation of substitute drug programmes. Another example of Amsterdam's pioneering initiatives has been the low-threshold methadone programme.

The methadone buses are an example of such a programme (14). These programmes are based upon the principle of "normalizing" drug use in order to avoid additional health and social problems. Thus there is no compulsion for clients to engage therapeutically with the programme. This approach is aimed at making contact with maximum numbers of drug users and similarly innovative approaches are being attempted in the U.K., with the prescribing of injectable and smokable drugs. These are isolated cases and are not part of an overall national policy. Countries that have previously prohibited substitute drug programmes have changed their policies to admit pilot programmes, for example, Austria and W. Germany. Other countries such as the UK, Holland and Switzerland have revised their regulations in order to attract greater numbers into contact.

4.4.2 Changes in law and law enforcement policy

Due to the constraints of international treaties and conventions, legal reform is often very difficult. Where changes in the judicial order have occurred, these are mainly in law enforcement strategies. Holland is often cited as a country that is legally permissive. However, all drugs listed by UN Conventions are still currently prohibited, although the laws are often not enforced. Official guidelines exist advising non-prosecution for possession of cannabis for personal use or small-scale retailing, but these are often interpreted differently, according to area.

In the UK, changes have also occurred in law enforcement strategies. Merseyside has led the country in developing an integrated strategy on the reduction of drug related harm and, in April 1990, hosted the First International Conference on the Reduction of Drug Related Harm. One component of this strategy has been the involvement of the police, who no longer prosecute first time drugs offenders, but refer them to drugs agencies (15). Nine police forces have currently adopted this procedure aimed at removing drug users from the criminal justice system, and about half the UK police forces are expected to follow suit by 1991. The Spanish Penal Code, even under Franco, recognized the right of the individual to take drugs. Possession of any drug for personal use is not a criminal offence. Nevertheless, penalties have recently been increased for trading in and cultivation of various drugs (16).

The existing law is also currently being debated in Switzerland (17). This has followed the report of the Federal Narcotic Drug Commission which recommends decriminalizing all personal drug use and reducing penalties for drug user-dealers. In contrast, Sweden has recently passed new legislation aimed at criminalizing drug users and, in July 1990, Italy passed a similar bill which is based very largely on the approach of the USA.

European drug policy, despite the various international agreements, is not a homogeneous monolith, but varies from country to country, and often in its implementation, within particular

countries. The current situation is highly dynamic due to the pressures of HIV and AIDS and the anti-prohibitionist lobby, and as a result, drug policies are under far more critical scrutiny than ever before. However, political changes in Europe over the next few years may act as a pressure towards levelling national policy divergences and it is to be hoped that this does not have the effect of depressing the emergence of beneficial radical initiatives.

5 THEORETICAL CONSIDERATIONS CONCERNING AIDS PREVENTION ACTIVITIES

Generally, the four terms (strategy, programme, intervention, campaign) are used to describe activities that are developed to reach goals and/or objectives. They are often used indifferently. For the purpose of this paper, specific definition is attributable to each term. Strategy is the more general activity including programmes which are composed of interventions. Campaign is most specifically used for (multi) media intervention.

Public health strategies are managed at a number of different levels. These range from the political management of the programme where the Ministry of Health is lobbying for the strategy, to the health workers implementing a specific intervention in the field. At each level of this management chain there are specific objectives and planning approaches. Combining all of these together, one obtains an interdependent system striving to provide a public health strategy as efficiently and effectively as possible.

The different levels of planning common to health programmes can be grouped into the following categories:

- 1) Normative or policy planning: this type of planning surrounds the general objectives of the programme and is generally carried out at a political level.
- 2) Strategic planning: this type of planning is carried out by the officers of the Ministry of Health and is long-term in nature (5-10 years). For a national AIDS prevention and control programme this means fixing the goals and general objectives of the strategy (prevention of HIV transmission, treatment of HIV+ and AIDS patients, epidemiological surveillance).
- 3) Structural or tactical planning: at this stage, specific objectives are defined, programmes and interventions are developed and resources are mobilized. For example the objective is to promote condom use in occasional sexual relations. The interventions proposed are the targeting of specific groups (adolescents, drug injectors, clients of prostitutes, etc.) in every part of the country.
- 4) Operational planning: at this level, the responsibilities of the interventions are managing, operationalisation and implementation. This is short term planning. For example, condoms will be freely available in every "treatment" service for drug users; in areas where no service is available, there will be distribution in bars frequented by the client group.

6 AIDS PREVENTION STRATEGIES FOR DRUG USERS

6.1 Introduction

The extent of the HIV/AIDS problem, together with the awareness that there are not, at present, effective vaccines or therapies to fight the disease, necessitate a preventive approach. It is also well known that IDUs represent, in most of the European countries, one of the categories at highest risk of contracting AIDS. Taking into consideration that heterosexual and perinatal transmission from IV drug users is also becoming a serious problem, it can be understood why there is so much concern among public health authorities and political leaders.

In an excellent editorial review from 1987, Don Des Jarlais and Sam Friedman (18) formulated three target groups for future AIDS prevention:

- 1) Those who have not begun IV drug use.
- 2) Those who are willing to enter treatment to eliminate IV drug use.
- 3) Those who are unwilling to enter treatment and/or those for whom present forms of treatment are unlikely to be successful.

Subsequently, they described the various prevention strategies that are, or should be, implemented for these various target groups. Since 1987, the basics of this approach have not changed.

In "AIDS and Drug Misuse" (19), contributing articles from authors from all over the world, show the range of responses to the AIDS epidemic among drug users.

Almost all countries have established drug/AIDS policies and have adopted various preventive measures in order to limit the spread of the epidemic. Health education campaigns for the general population were carried out in all European countries and in some countries there have been community-based projects specifically targeted to IDUs.

In this chapter, various intervention projects will be described:

- 1) Information campaigns, HIV testing and counselling.
- 2) AIDS prevention through outreach programmes.
- 3) Promoting safer sex.
- 4) Methadone substitution programmes.

5) Needle and syringe exchange schemes.

6) Special measures for prisoners.

6.2. Information campaigns

Since the beginning of the AIDS epidemic, health education and information campaigns have been the first measures taken in an attempt to control the spread of the disease. However, even if general information campaigns are necessary and useful, most scientists believe that community-based projects and/or individual approaches are more effective in determining behavioural change in IDUs (see Annex 4).

In many countries, advertisements, special leaflets and brochures have been developed for IV drug users by various organizations and have been utilized in several national information campaigns. Where evaluation of the programmes has been carried out, it shows that knowledge about HIV infection among IDUs is quite high but it is not clear if they are changing their behaviours, especially those related to sexual practices. The general impression is that there are no major improvements. In many countries helplines for drug users, giving information on AIDS, are also available (see Annex 4).

6.3 HIV testing and counselling

One of the most important interventions from an epidemiological point of view, is HIV screening. It is an indispensable tool to know the prevalence and the incidence of the infection and as a matter of fact, the test has been offered to IDUs in most of the countries, on a voluntary basis.

Voluntary HIV testing has been offered to drug users in Italy since 1985. In a study carried out in 1987, the attitudes of drug users who knew they were seropositive were compared with those who were seronegative or those who were not tested. Behavioural changes in both drug use and sexual lifestyle were significantly more common in seropositive drug injectors than in seronegative subjects. The authors said that the knowledge of positive serological status induced an additional 20-25% of the subjects to modify risk practices (20).

The Dutch experience with voluntary HIV testing among drug addicts involves a longitudinal study that started in 1985 in Amsterdam (21). Data from this study, show that seroprevalence among new intakes has remained stable since 1986 and HIV incidence has decreased among a follow-up group. Another interesting finding that fully concurs with the findings of the Italian study, is that drug users who were tested and found seropositive reported a significantly higher level of condom use than participants who were negative or did not want to know the results. On the other hand, another study carried out in Amsterdam (22) in the period December 1985 to

April 1988 among 263 IDUs, recruited at six methadone outposts and at the weekly sexually transmitted diseases clinic, reported that a decrease in needle sharing occurred to the same extent regardless of knowledge of serostatus.

In studies carried out in Switzerland in 1987 among 37 IDUs from different regions and in 1990 among 207 drug users undergoing treatment, it is possible to ascertain that 90% to 95% of those interviewed had undergone an HIV test and the hypothesis that emerged is that once the decision to undergo the test is taken, the risk is accepted and the person is ready, if he or she will disclose the seropositivity, to adopt preventive behaviour. In contrast, seronegatives, through repeated tests, feel assured that they can continue with risky behaviour. This has not been verified in further studies done in 1989 and 1990.

In Sweden, HIV-testing has been widely used as a standard measure in the care of IDUs. The majority of them have been tested; the percentage ranges between 90% and 70% (22,23).

In Norway, about 75% of the IDU population have been tested at least once, while 50% have been tested twice or more. An interesting observation made by the Norwegians is that the more risky behaviour a person engages in, the more likely he or she is to have taken one or more tests (24).

A survey carried out in Germany showed that 9% of persons with HIV positive results stated that they had injected more drugs more frequently since they had known about the results.

In Denmark, on the contrary, the frequency of HIV testing in the population according to sex, age, risk-group is unknown. It is also unknown how many of the HIV positive persons are also IDUs (25).

Another important finding, common to all the evaluations, is the role of counselling, before and after the test. The need to prepare the individual for the test result has been pointed out by the Dutch and Swiss experiences. The IDUs have exactly the same emotional reactions (grief, fear, denial, escape) as others when they hear that they are seropositive. Therefore, it is evident that post-test counselling is necessary in order to reduce the shock of the result, clarify the difference between seropositivity and disease, to answer all the other questions that the patient might raise and to give him or her the means to react to this new situation.

In Portugal, prevention among IDUs is essentially carried out in the centres that work with them: information is given and an educational approach is made whenever a blood sample is taken, counselling is available and therapists are aware of their educational role. Data available from the Centro das Taipas in Lisbon, show that in a sample of 91 drug users, almost 50% did not share syringes or needles and another 32% were changing their behaviour in that direction. 38.9% of them had safe sex and 67.8% had had no sexual partner or only one partner in the last

three months, although they did not understand this behaviour as AIDS prevention (26). In Norway and in the Netherlands (27,28,29), in health education, the main emphasis is on person to person contact. Counselling and advice about safer behaviour are given to IDUs by the staff working with them, using leaflets, posters, cartoons and audiovisuals as teaching AIDS.

Although, in almost every country HIV testing has been made available for IDUs, on a voluntary basis and mainly free of charge, further evaluation of this activity has not been undertaken.

6.4 AIDS prevention through outreach programmes

In various international meetings of experts in the AIDS and drug fields, as well as meetings of political leaders, the necessity of promoting outreach activities has been stressed (see Annex 5).

Outreach activities directed toward drug users are effective in reaching the "unreached", in teaching drug users "survival skills" and attracting drug users into more formal modes of treatment. In a paper prepared for the European Region of the WHO, the Amsterdam Municipal Health Service provided an overview of AIDS related outreach among drug users in the European Region (30,31). Information was collected from over 50 outreach projects in 10 different European countries. Based on the collected information, the following points were stressed:

- 1) The majority of outreach projects provide basic assistance in the form of:
 - condom provision
 - clean needle and syringe provision or exchange
 - referrals, crisis interventions, providing counselling and advice
- 2) AIDS education takes a prominent role. Generally this is done through the provision of condoms and clean injecting material, the dissemination of educational material, referrals to HIV-test sites and counselling.
- 3) "Bridge-building" is an essential part of outreach work. Operating in the drugscene and contacting many drug users who do not have contact with formal helping agencies, outreach workers form a bridge between drug users and these agencies. Through personal contact with service suppliers, outreach workers try to encourage them to give aid to drug users.

4) Variations were found between various outreach projects in terms of:

- the use of volunteers
- the use of (ex) drug users
- the use of drop-in centres
- "peripatetic" versus streetwork.

The use of volunteers was found to be cheaper but very time-consuming because of the need for supervision. Some projects have very positive experience with using drug users and stipulate the advantage of having better access to the drugscene. Most projects indicate that extra attention needs to be given to the risk of drug using staff members relapsing into problematic drug use.

Drop-in centres were considered to be highly useful in building up networks of drug users, although the risk of neglecting actual streetwork was mentioned in situations where the centre is open too many hours a day.

"Peripatetic" work refers to activities organized in other agencies (such as police stations, hospitals etc.), whilst "streetwork" is a more traditional method of outreach work and actually takes place in the drugscene itself.

5) Problems relating to outreach work were also described. In countries where authorities have only recently allocated extra money for outreach activities, the projects are mostly small and still in an initial phase. In such situations, outreach workers spend a lot of time in justifying their existence, finding the right mode to operate and securing funds for continuation of the work.

A lack of services in the given area was also seen as problematic. Outreach workers were put in a situation where they had to prioritize requests from clients and were faced with agencies reluctant to provide care for drug users.

Problems with the police were mentioned as well. In some situations, actions by the police were seen as counterproductive to AIDS prevention measures (police actions against prostitutes, confiscation of needles, dispersion of the drugscene by police raids etc.).

6) Since most outreach activities are still in their initial phase, proper evaluation of these projects was recommended. Information from such evaluations should serve as feedback for the aims, objectives and strategies of the project.

Based on the above information, it can be concluded that in many European countries, outreach activities among drug users are increasingly seen as valuable instruments to contact drug users and assist them in refraining from AIDS related risks.

Data on the effects of outreach interventions are still limited and therefore more evaluation is highly recommended.

6.5 Promoting safer sex

At an international workshop organized by the Dutch STD Foundation in May 1989, a group of 20 international experts on AIDS prevention among drug users, discussed the area of "promoting safer sex among injecting drug users" (32). In their report they concluded that "the level of condom use among injecting drug users is still low (although higher than in the general population) and that education programmes affect the level of knowledge, yet, still lack impact on actual behaviour". Various obstacles in addressing drug users about safer sex were mentioned, such as political, moral and religious issues, resistance among the staff to discuss this topic with their clients and the fact that many drug users don't see safer sex as a high priority since most of their energy is spent on short term "survival" activities.

6.5.1 Examples of activities aimed at promoting safer sex

In Oslo, Norway (22,33), the Directorate of Health employs two women, who themselves sell sex, to do outreach work with prostitutes (including drug injecting prostitutes). Amongst others, they give information about safer sex and provide condoms. The two women have been very well received by their colleagues.

In Berlin, West Germany, in December 1987 a contact cafe called "Olga" was installed for addicted prostitutes. The cafe is close to the drugscene and opens between 17.00 and 23.00. The centre has an open atmosphere, where clients can feel welcomed by the staff. "Olga" provides medical and legal assistance and condoms (about 1,000 per month). About 20 to 30 women visit the centre daily, whilst a total of about 100 addicted prostitutes are in contact with the centre. Two streetworkers are attached to "Olga" as well.

In Utrecht, The Netherlands, a similar project to "Olga" has been operational since 1986. Every night between 20.30 and 1.30 a bus is parked in an area where street prostitutes are active (33,34). A recent booklet on "tips for safe sex" contains the answers of 28 prostitutes who sent in their reaction to a competition about "condom negotiations with your client". The project also made a flyer for clients of prostitutes. This flyer was a photocopy of a 50 guilder bill with the text "a minimum price for maximum safety". Finally, the project hired professionals to teach about various topics. To emphasize the fact that prostitution is a "real job", a physiotherapist was hired

to teach the prostitutes proper techniques and to advise them about an ergonomic body posture during their work.

In Zurich, the Lila Bus is a mobile drop in centre for women prostitutes which is situated in a quarter frequented by prostitutes and their clients. In this bus, which is open every night from 21.00 to 07.00, drug using prostitutes can rest, shower, eat and drink, get clean syringes and condoms.

In various projects, the workers accompany the clients to pharmacies where they buy condoms. In so doing, it is hoped that embarrassment will be overcome. In some projects, workers show clients how to use a condom by using a banana. That such practical skill training is still needed, can be supported by the large number of condoms which burst due to improper use.

Other projects try to eroticise safer sex by pointing out sex techniques other than copulation and by teaching techniques on how the application of a condom can be an attractive part of sexual activity.

6.5.2 Problems in promoting safer sex

Sex is a sensitive topic and does not lend itself easily to public discussion. Many workers in the drug field feel reluctant to discuss openly safer sex with their clients. Nevertheless, safer sex has become a vital issue for many drug injectors. In some countries, part of the embarrassment among the workers has been overcome through training sessions. However, a video, shown in waiting rooms of Amsterdam methadone programmes, with a very explicit safe sex message, was rejected by the clients and some staff members. Some of the clients said that "this is pornography, why don't you show that to prostitutes?", whilst the staff felt that showing the video was too disruptive to the ongoing activities in the methadone programme.

Sometimes, police regulations can be counterproductive to safer sex education. In areas where prostitution is prohibited, the police may disperse the "prostitution scene", resulting in an inability of AIDS educators to reach the drug injecting prostitutes and their clients. The most extreme example of a situation where the police frustrated the AIDS interventions of outreach workers was a city where the police were using the possession of condoms as evidence for illegal prostitution (33).

Another problem in promoting safer sex is the use of cocaine and crack. Especially if it is used without heroin, cocaine/crack can lead to a higher level of sexual activity. In areas with a high HIV-seroprevalence (for example New York City) relations were found between AIDS infections and cocaine/crack use. Since appropriate treatment for cocaine/crack use is still lacking and cocaine/crack users generally do not see their use as problematic, it is difficult to

get in touch with cocaine/crack users and educate them about safer sex. The same applies to the use of Ecstasy.

Finally, safer sex among drug users should be mentioned in the light of their sexual contact with non-injectors. These non-injecting sex partners are not reached by the drug helping agencies and depend for their information on campaigns aimed at the general public. Sometimes, these sex partners don't even know that their partner is (was) injecting. In Utrecht a league of clients of prostitutes is giving AIDS education to other clients. Though on a small scale, this approach is successful.

In Denmark, special initiatives regarding female prostitution have not, up to now, been considered necessary, since a study has shown that, even though there are relatively many HIV positive IDUs who are prostitutes (78%), sex with customers most often involves using condoms (35).

In Portugal, IDU prostitutes have not yet been reached by any special programme (26).

In Amsterdam, they have established a special V.D. clinic where condoms are distributed free, a separate consulting hour and an inpatient crisis centre is available for addicted prostitutes. Again, specialized female field workers make contact with street prostitutes at night (9,36).

6.6 Methadone substitution programmes

In the AIDS era substitution programmes represent not only a drug detoxification treatment, but they are also considered useful in contacting and keeping in touch with IDUs.

With regard to methadone programmes, there are great differences in approach among European countries owing to the different drug policies implemented. Hence, we can see on the one hand, more liberal countries, such as the Netherlands (37), where the so-called "low threshold" methadone programmes are available, and on the other hand, countries such as Norway (24), where they are not available at all and in between, countries where pilot projects are being tested (e.g. Germany , France) (38,39,40,41) or have recently been introduced (e.g. Austria). The aims of methadone programmes are:

- to contact heroin users;
- to stabilize heroin users;
- to detoxify and treat heroin users.

In some European countries "low-threshold" methadone programmes are available. In the Netherlands these programmes have been widely utilized and are complemented by AIDS

information and needle/syringe exchange and condom distribution. Usually, there are pre-conditions for participation in these projects, such as: regular contact with a physician (at least once every three months), introduction into the central methadone register, no take home dosages.

In countries in which a restrictive policy has been implemented (e.g. Norway and West Germany)) and substitution programmes are not widely available, methadone is, however, offered to IDUs with severe HIV infection as part of the general medical treatment.

In other countries in which methadone is not commonly used (e.g. France), pilot projects are now ongoing but lead to detoxification only.

In some countries (e.g. Denmark) (25), the participation in long term methadone treatment has been made easier. In the Municipality of Copenhagen, an increase in the number of persons under methadone treatment has been registered. At the end of 1982 the number of persons in treatment was 269 whereas at 30/6/89 it was 1131. The same progress has been noticed in other parts of the country.

In the UK, although methadone substitution has always been a clinical option, clinical opinion has now shifted to increased use of longer term methadone prescription (42). This has been done in order to encourage drug users into treatment and to maintain contact and compliance. In certain areas, use of diamorphine or injectable methadone preparations has been introduced, according to the patient's needs (see Annex 6).

6.7 Needle and syringe exchange schemes

Considering that the first objective of prevention strategies is the prevention of primary and secondary infection, and that it is not realistic to have as the only objective the war on drugs per se, making injecting paraphernalia easily accessible to IDUs is one of the strategies proposed by several scientists and policy makers in different countries in order to stop the AIDS epidemic.

Therefore, most European Countries have implemented either needle/syringe exchange schemes or changed the legislation making the provision of syringes by pharmacies possible without medical prescription (10,21,43,44,45,46,47,48,49, 50,51,52,53,54,55,56) (see Annexes 7-8-9).

The availability of syringes may be improved by removing legal restrictions, implementing needle exchange schemes or syringe distribution programmes, or utilizing vending machines.

Needle exchange schemes were started in Amsterdam in 1984 [10], and now in the Netherlands they have been implemented in 40 Municipalities. At the outset, approximately 1,000 needles

and syringes were exchanged weekly. In 1985, more institutions participated in the exchange system. In 1986, needle and syringe exchange was made available on the methadone buses as well. In 1989 approximately 820,000 needles and syringes were exchanged at 11 different locations (21).

It is important to evaluate the success of needle exchange schemes by monitoring the exchange rate. In Amsterdam, in 1987, the return rate was about 70%, and after consultation, the director of the Municipal Health service decided that all the exchange schemes had to operate on a "one for one" basis. This act, combined with an improvement of the exchange equipment, led to an increase in the exchange rate to over 95% (43).

In the UK, up to September 1989, there were over 100 needle exchange projects and more were planned. They provide advice on harm minimisation, safer sex, condoms and some of them also offer pre and post-test counselling and HIV antibody testing (55).

The Swiss Health Authorities identified some issues determining unsafe behaviours among IDUs such as the lack of sterile equipment availability in particular situations (nights, weekends, prisons, etc.), the priority given - by IDUs - to the procurement of drugs and not of injecting paraphernalia, and the personal attitude of IDUs. Political problems remain and make such programmes very difficult to implement especially in the French part of the country.

However, most of these problems could not be overcome by needle exchange schemes per se, but the conclusion is that the IDUs are able to adopt preventive measures against the HIV risk. Behaviour change is best facilitated by these projects near to the drugscene. Furthermore, the easy access to sterile injection material in appropriate places is a valuable and an effective preventive measure, and the intervention programmes do not constitute, in any case, an encouragement to drug use. In France, according to data available, since May 1987 the liberalization of syringe sale has taken place and they can now be bought freely, without medical prescription. This measure was taken on an experimental basis for 2 years, but since August 1989 it has been made permanent, after the demonstration by two evaluation studies of a positive effect on addicts' behaviour. In addition, two areas which are most affected by the drug problem will be the subject of trial programmes for syringe exchange.

In countries such as Denmark and Norway, although syringe and needle availability is good and they can be obtained quite freely, some initiatives have been taken. In the Municipality of Copenhagen syringes and needles have been supplied from chemists shops free of charge since 1987, and at the end of 1988, about 20,000 sets, each one consisting of 2 syringes and needles, were distributed per month (25). In addition a syringe and needle vending machine was installed, together with special bins for used injection paraphernalia. However, since the needles are not given out on an exchange basis and an increased number of needles was found in public

places in Copenhagen, some debate is going on (58). From the analysis of available data, some conclusions can be drawn on syringe and needle exchange systems:

- they do not lead to an increase in individual drug use.
- they help to contact addicts outside the methadone programmes and attract drug injectors who have never had any previous contact with treatment services.
- syringe/needle vending machines are not as effective as syringe/needle exchange systems which also provide an opportunity for person to person health education and family planning (condom distribution etc.).

6.8 Special measures for prisoners

Since IDUs represent a high percentage of people admitted to prison (up to 40% in some countries), several countries have adopted special measures targeted to this risk group (see Annex 10). People in jail are known to continue injecting drugs.

In Austria, where the prevalence of seropositivity among prison inmates has been found constant since 1985 at around 86%, information campaigns for prisoners and for prison staff, have been carried out since 1985 (59). All IDUs and other persons at risk, are given the opportunity to be tested on a voluntary basis and counselling by drug treatment or AIDS agency personnel is offered. It is also possible, if the sentence is less than 6 months, to continue methadone substitution treatment started before imprisonment.

In Norway, condoms are available free of charge in prison, there is a health information system which gives information about syringe cleaning with bleach (which is available) and there are support groups for HIV positive inmates (24). In Sweden, about one hundred coordination projects have been initiated, involving social welfare services and the prison and probation systems (60).

In Denmark, the distribution of brochures providing information on how to clean syringes and needles (free of HIV) using water, has been planned (25,58).

In Portugal, where 15% of all prisoners are in prison because of crimes related to drugs, there are no special programmes for them. No condom or syringe/needle distribution is carried out (26). HIV testing is available on a voluntary basis. In the UK an AIDS video teaching pack has been made available for prison staff, and a separate video for prisoners. In some areas, drug agencies have successfully provided education and counselling to people in prison.

In Spain, those in charge of penitentiary institutions have started massive information campaigns, including methods for syringe and needle disinfection, and have offered access to

diagnosis of infectious diseases (Hepatitis B, TB, syphilis and HIV infection) and immunization against Hepatitis B (4).

In Switzerland, an average of 10-15% of prisoners are seropositive. The preventive measures adopted consist of information for prisoners through the distribution of information materials and through individual counselling, information for the staff of the prison, HIV test and condom availability. Since 1974 a method of quick detoxification with methadone (10 days) has been adopted in the prison at Geneva, while maintenance treatments are not available. In the period 1980 to 1987, 1602 detoxification treatments were undertaken, over a total number of 17,824 admissions, i.e. 9%. As regards women, 14.8% received the treatment (61).

In Germany, IDUs in prison are offered the opportunity to be tested for HIV, and AIDS counselling is offered as well. IDUs use the needles of diabetics or needles stolen from the prison clinic or smuggled into prison. Most imprisoned IDUs share needles. Therefore, many prison staff are discussing implementing bleach programmes (62).

7. THEORETICAL CONSIDERATIONS CONCERNING EVALUATION OF AIDS PREVENTION

7.1 Theory

The concept of evaluation is widely used and includes a broad range of approaches. According to various authors, from six to more than 150 types of evaluations have been catalogued! Evaluations are carried out for a variety of reasons, such as for planning and policy purposes, to test innovative ideas, to decide the future of an existing programme, for management and administrative purposes, to assess the appropriateness of programme changes, to identify ways to improve the delivery of interventions, to meet the accountability requirements of funding groups.

Evaluations can be organized in three major classes:

- 1) Analysis related to the concept and the design of a strategy, programme, intervention; this is a short term evaluation, it is done before the beginning of the strategy, programme, intervention; the objective of this analysis is to determine the soundness of the action in relation to the other activities of the community.
- 2) Monitoring and accountability of the programme, intervention, implementation; this is a continuous activity, looking specifically at the process of the actions; the objective is primarily to help the management;
- 3) Assessment of the strategy, programme, intervention effectiveness and efficiency; this activity can be divided into short , medium and long term evaluation; purposes of these various types are slightly different; short term evaluation helps primarily the management of a project, medium term assessment is mostly useful for planning future activities, long term evaluation will look at the "real effectiveness" of a strategy; indices of change depend on the type of evaluation chosen; it is important that these various types of evaluation are linked together.

7.2 A model of evaluation

To monitor the efficacy of prevention programmes, evaluative tools need to be developed that are both flexible and allow for comparison, and which include the use of both qualitative and quantitative data (63).

A model emanated from an EC working party which examined the potential for standardising service evaluation (64). It was developed and refined during a year-long empirical evaluation of a harm minimisation initiative in the Riverside Health District of London, England. This

entailed evaluating a newly formed Community Drug Team, established to contact drug users in the community and to minimise the spread of HIV infection. The detailed methodology and results of this study have been published elsewhere (65).

The main features of the model are its interactive nature, its potential for short-term feedback, and its flexibility in evaluating any given service intervention.

A prerequisite to the use of the model in any evaluation process is that the service providers clearly outline the aims, objectives and strategies of the intervention being examined. This assists the research role, and also encourages practitioners to articulate the basis upon which their service is provided and the strategies that are to be adopted to achieve their ends.

A distinction needs to be made between global statements concerning desired outcomes (aims); specific statements on such desired outcomes (objectives) and the means adopted to attain these outcomes (strategies). So, in the example of the Community Drug Team in London, the intervention had as its aim the reduction of the spread of HIV amongst injecting drug users; the objective was to contact local drug users not in contact with established services; and the main strategy was to provide an outreach service that supplied needles and syringes and health information.

The design of the model is such that information can be fed back to the service providers, with the potential for them to reassess and adjust stated objectives and strategies. In the context of outreach interventions, research workers, in close contact with local drug scenes, can report changes in patterns of drug use, or shifting arenas where drug users congregate, and thereby assist the practitioners to make appropriate responses. As the model indicates, this does not preclude longer-term analysis and evaluation. Nevertheless, it is incumbent upon researchers to make clear at which points and in which ways their short-term feedback influenced the direction of the intervention.

The model is designed for the evaluation of a wide range of interventions at a number of theoretical levels. For example, in the case of outreach, it may be that "clients", or potential clients, comprise a target group such as adolescent male drug users. Hence, the strategy may be to conduct outreach work in a number of specific settings where young people meet (clubs, cafes, etc.), with the objective of attracting them into counselling.

One outcome measure of this "outreach service" would simply be the proportion of adolescent males in the total client group presenting for counselling. By monitoring the client caseload, the research can assess the impact of such a strategy in relation to the stated objective. In the short-term, the research may provide the service with information on appropriate venues for outreach work, gathered from ongoing ethnographic work and other intelligence.

The model is also applicable to more direct service provision, such as methadone prescribing. Let us take the case where such a service has as its objective abstinence from drugs by means of reducing prescription of methadone. Thus, the aims, the objectives, strategies and any specified target group can all be clearly identified. The stated activity would be: attending the clinic; the outcome measure would be: length of abstinence after completing the course.

Such a model, flexible, interactive and able to provide both short-term and long-term feedback and analysis, is of value in assessing AIDS prevention. This is especially so in the context of outreach work, most particularly when this is linked to action research, where common goals and working practices are shared.

8. THE OUTCOME OF AIDS PREVENTION

This chapter gives an overview of available data on outcomes of prevention programmes and changes in risk behaviour.

Firstly, self-reported data and the problems surrounding this form of data collection, are discussed. In paragraph 8.2, the use of serological data (both HIV and Hepatitis B) for evaluating AIDS prevention is highlighted. Paragraph 8.3 looks into the role of methadone and 8.4 summarizes existing data on needle exchange schemes. Finally, 8.5 gives an overview of data on sexual behaviour of drug users.

8.1 The use of self-reported data for evaluation

Behavioural studies, and in particular "knowledge, attitude, behaviour and practice" (KABP) surveys are used to assess the different steps in the process of behavioural change. Regarding knowledge, IDUs are usually as informed as the general population about transmission modalities of the AIDS virus. However, there is a gap between the level of information and the attitude to behavioural change of IDUs (see Annex 11).

Data from behavioural surveys are available from several European countries (Italy, Germany, Sweden, the Netherlands and Switzerland), but unfortunately they have little reliability and are difficult to compare since the methodology and the instruments used for data collection were not standardized. In fact, apart from the differences in the choice and the size of the samples (IDUs detained and arrested in Sweden (22,23). IDUs attending services in Italy (66), all subgroups of IDUs in the German study etc.) there are great differences in how the questions are posed and the answers analyzed. A concerted action on HIV prevalence and risk factors amongst injecting drug users in EC/COST countries should improve comparability (G. Papaevangelou, personal communication).

So, for example, in Germany (63) a multicentre study was carried out among 630 IDUs based on structured interviews including over 300 questions, in order to assess the behaviour changes in response to AIDS. In the Italian study under review, a simple standard questionnaire with 15 items was administered to 189 individuals who participated in a programme consisting of an audiovisual presentation, pre/post testing and individual counselling. In the evaluation of the Swiss prevention strategy, various studies amongst drug users have been conducted. These studies used such methodologies as standardised questionnaires, semi structured interviews and direct observations (67). Again, in the two Dutch studies (9,27), over 450 drug users were interviewed and blood sera taken in the period 1986-1987 whereas 148 IDUs were interviewed utilizing a standardized questionnaire and no blood samples were taken in the summer of 1987,

to assess specifically the impact of the needle/syringe exchange programme. In Sweden (22,23), a study consisting of two parts, one on detained and the other on arrested drug users was carried out and the total number of participants was 1152. An interview, physical examination and blood tests followed for each participant.

All studies report that seropositives reduced their syringe sharing habits more than seronegatives. In addition, those seropositive still sharing syringes seem to have adopted socially responsible behaviour (they were the last in order when sharing needles). As regards sexual behaviour, it seems that only slight changes took place, IDUs being very reluctant to use condoms. The German and Swiss surveys agree in stating that it is easier for many IDUs to reduce the number of sexual partners or to have an exclusive partner rather than to use condoms.

8.2 Use of serological data for evaluation

8.2.1. Prevalence and incidence of HIV antibodies in IDUs.

WHO Geneva (68) and the EC recommend repetition of cross-sectional studies in order to monitor the trend of HIV infection and to assess behavioural changes among injecting drug users. However, as reported before, HIV prevalence remained stable in most European cities even in the presence of a continued trend of new infections occurring in IDUs. In fact, there are many factors determining a stable prevalence rate in presence of a moderate incidence rate as reported in the table below.

Factors determining a moderate rate of incidence:

- 1 Adoption of low risk practices
- 2 Saturation of high risk subgroups

Factors determining a stable prevalence rate in presence of a moderate incidence rate (dilution effect):

- 1) Loss of HIV positive individuals because of:
 - death (AIDS, overdose, etc.)
 - exit from the drugscene;
- 2) Admission of HIV negative individuals on the drugscene

This means that to assess the current spread of HIV infection among IDUs it is useful to use more than one indicator, and to compare both prevalence and incidence data. However, cross-sectional studies are very useful, especially if complemented by information concerning behaviours.

Prevalence rates among drug users are referred to at 3.2. In one health region of England, the Mersey Region there are encouraging signs (56,69). In this area where syringe exchange schemes have been in existence since 1986 seroprevalence among drug users is below 1%. An estimated 2,000 voluntary blood tests have been carried out on Mersey drug users, of whom about 50% are injectors. Only three people have been confirmed HIV positive. One had multiple risk factors, one became infected before moving to Merseyside and one may have been infected locally. 380 saliva tests in 1990 have revealed no positivity (70).

8.2.2. Acute Hepatitis B as an indicator of behavioural change.

Since the incubation period of acute Hepatitis B is shorter than that of AIDS but the way of transmission is the same, the trend of new cases of Hepatitis B might be used as a marker (the so called surrogate markers) of behavioural change in IDUs.

In Italy, an integrated epidemiological system for acute viral Hepatitis was set up in 1984 and, to date, 146 of the local health units have joined the system. 73 (64 in the Centre-North and 9 in the South) have been followed since January 1986. Hepatitis cases decreased from 119 to 83; the resulting decrease was more evident among female than male IDUs. In Amsterdam, among drug users, notified cases of acute Hepatitis B decreased from 26 in 1984 to 5 in 1989 (3). Also in Greece, data from surveillance studies show that there has been a decrease of HBV infections during the last five years (70).

However, there are some methodological problems in using the incidence of Hepatitis B as an indicator of behavioural change in IDUs. In fact, we have to take into account the saturation effect due to the high prevalence of HBV markers in the population of IDUs. Consequently, new cases should occur mainly in younger drug users. In that case, only sustained access to new drug users in the drug scene might sustain an increasing or stable trend of acute HBV infections.

Furthermore, vaccination campaigns addressed towards IDUs have been recommended in several European countries, and may modify the trend of new acute hepatitis B cases. In those countries, the incidence of acute hepatitis B cases cannot be used as an indicator of behaviour change.

8.3 The Effects of Methadone on the Spread of HIV

Only a limited number of studies looked into the relationship between the distribution of methadone and the spread of HIV.

The Amsterdam low threshold methadone programme contacts over 50% of the IDUs yearly and integrates AIDS prevention measures, such as needle exchange, condom distribution and information campaigns into the methadone programme (3). Although various studies have been made in Amsterdam regarding AIDS and drugs, no study so far has been conducted which specifically looked into the relationship between AIDS and methadone.

One of the few European studies in this area has been conducted in Sweden by Blix et al (71). In a high threshold methadone programme, they were not able to trace any sero-conversion over a substantial period of time. The researchers conclude that methadone may provide good protection against HIV infection.

In a study carried out in Verona, Italy (72) on 189 IDUs who participated in an education intervention, it was reported that not only do significantly fewer persons share needles while in continuous methadone treatment, but that those who do share needles while in continuous treatment do so on an average of 1.7 occasions per patient during the previous three months, compared with 6 occasions per patient for those not in continuous treatment. This would seem to support the hypothesis that a patient in continuous treatment with methadone injects less because he/she is less exposed to the situation in which needles might be shared. One could also imagine that a patient in methadone treatment who does inject does so with much less urgency and therefore, might be able to plan and provide for the procurement of a clean syringe. The study notices also that IDUs in continuous methadone treatment are also those most exposed to the AIDS prevention message even before entering the programme.

Two other studies on this topic are from the USA.

Ball et. al. (73) followed up 388 patients from 6 different methadone clinics. Among clients who remained in the programme (N=388), they observed a sharp decrease in injecting (from 100% to 29% in a 4 year period) as well as needle sharing from 36.7% to 9% (in the same period). Among 105 drop outs, 67.6% relapsed to IV drug use, whilst 48% reported needle sharing.

Through a discriminant function analysis, the researchers were able to describe factors which contributed to a positive and lasting behaviour change. Interestingly, demographic data hardly had any influence on the positive outcome. Much more, a high dosage of methadone and the type of methadone programme and the attitude of the staff turned out to influence the cessation of injecting and needle sharing.

Effective programmes had high rates of attendance, a close, consistent and enduring relationship between staff and patients and year to year stability of treatment staff.

Sorensen et al. (74) conducted research on the AIDS related risk behaviour of seropositive clients of a methadone maintenance project (PACE). This concerned 42 persons. They reported a sharp decrease in the amount of money spent on drugs. Clients denied sharing needles. The self-reports were counter checked through examination of the skin for puncture marks and weekly urine testing. The authors conclude that methadone maintenance can be a powerful tool in preventing the spread of HIV from this group of seropositive clients to others.

8.4 Evidence for the Effectiveness of Syringe Exchange

In an excellent overview article, Stimson looked at the effectiveness of syringe exchange (75).

The need for anonymity and unobtrusiveness, the fact that they are new and other methodological problems, means that most syringe exchange schemes have not been evaluated.

The three criteria used so far are:

1. The ability of syringe exchange schemes to attract and retain clients.
2. Changes in risk behaviour of both injecting and sexual practices.
3. HIV prevalence rates among clients.

In the UK 2500 clients were reached by 15 agencies in 9 months (76). Of these, one third had never been in contact with helping agencies; a further one third were not, at the time, in such contact.

In Amsterdam in 1989, 820,00 syringes were distributed (3). On an estimate of 2,800 injectors this averages out to 250 syringes per head, per year. 75% of clients had been in methadone programmes in the last 5 years.

In New South Wales, Australia it is estimated that 360,000 syringes were distributed through S.E.S. in the first 6 months of 1989 (76).

In the USA, despite the difficulties encountered with syringe availability, it is estimated that one million syringes have been distributed (77).

The UK experience shows a high turnover of clients. The reasons included positive (eg cessation of injecting) and negative ones (eg death, imprisonment). The UK and Amsterdam evidence seems to suggest a failure to reach young injectors and in the UK, women. Lack of confidentiality was also cited in UK (78) and Rotterdam (78) as reasons for non attendance at

schemes. Evidence from the UK suggests that high risk injectors are not being attracted to schemes.

In the UK, clients who attended SES reported a reduction in sharing, over a three month period, from 34% to 27%. Overall, 79% showed a lower level risk behaviour (76).

In New South Wales 18% said they shared in a one month period. At one scheme, Darlinghurst, over 70% said they had not shared a needle or syringe since they first starting using the SES (79).

In Amsterdam, Hartgers et al. (80) reported that the risk level of injectors attending schemes was much lower than that of non-exchangers. Of the "exchangers", only 10% reported needle sharing in the last month, while this was 23% for the "non-exchangers". They concluded that exchange schemes did lower the risk of sharing but did not lead to an increase in injecting.

In Sweden a study in Lund showed that of a sample of 80 injectors who attended the project regularly, 80% no longer shared compared with 40% two years earlier (81).

In Switzerland the ZIPP-AIDS project has distributed 1.4 million syringes in 1989 (Hornung, personal communication).

In summary, Stimson says that despite the limitations of research design "the results from different countries are sufficiently similar and provide reasonable evidence that injectors who attend syringe exchanges report desirable changes in risk behaviour. The results support the argument that drug injectors can be helped to make changes in their behaviour which could be of cumulative importance in reducing the spread of HIV" (76).

Stimson is also rightly cautious: "The short term changes are small and whether they are sufficient in magnitude and time to have this impact remains to be seen" (76).

8.5 Data on changes in sexual behaviour

Though changes in needle sharing have been reported widely, with regard to sexual practices "there is less room for optimism" (82). In the UK study (55), Stimson noted that the difficulty of talking to clients about sexual behaviour at SES was the same in 1989 as in 1987. However, some clients did report changes in sexual behaviour in terms of numbers of partners and the selection of non-injecting partners. Condom use seems to have declined (83).

In the proceedings of the International Workshop "Promoting Safer Sex" (1989), Buning and Des Jarlais give an overview of available data on sexual behaviour of drug users (32). They state:

"At the IVth International Conference on AIDS in Stockholm in 1988, data were presented about condom use among drug users. A selection of studies indicated an overall low percentage of condom use:

USA (Battjes, n=664)	14%
Italy (Sasse, n=386 HIV+)	14%
London (Hart, n=116)	18%
San Francisco (Watters, n=553)	20%
England and Scotland (Stimson, n=182)	29%
New Jersey (Jackson, n=100)	35%

In a sample of 87 clients from a methadone programme in the province of Limburg, The Netherlands, only 2 of the 41 participants with a regular sex partner always used condoms, while this was the case for 26% of the clients with multiple sex partners.

In a sample of 74 registered drug users in London, only 20% reported regular contraception with a further 10% using occasional contraception. The majority of this group reported using the contraceptive pill, just over 35% used the condom, 20% IUD and 10% a diaphragm. Of the sample 39% had had sexually transmitted diseases previously.

One study that indicates a discrepancy between knowledge of prevention methods and actual practice was carried out by Moseley et al. While 75% of the interviewed IDUs felt that "knowing about AIDS changed how they used a condom", only 29% "always" used them and 17% never. Fifty per cent would not use a condom unless their partner brought up the subject and 33% had objections towards the use of condoms, since they felt it reduced their sensitivity. The use of condoms is not a panacea for preventing AIDS. In this study 29% stated they had either become pregnant or made someone pregnant while using a condom as a means of birth control.

Results of an AIDS education project in the US state of New Jersey showed that the knowledge of the participating drug users increased and that change in IV drug use activities was more prevalent than in safer sex practices.

In 1988, a small study was carried out in Greenwich House, New York City. Eighty-two drug users were interviewed before and after an AIDS education project; two different modes of training were used: the facilitate mode and the didactic mode. In the

facilitative mode, clients were actively involved (e.g. role-playing). The follow up interview indicated that the level of knowledge about AIDS and risk factors had improved. The facilitative mode had more effect in the short term. However, in the long term, significant differences between the two modes were not found.

Knowledge about AIDS did not significantly change sexual practices; the group as a whole indicated fewer sexual activities, but the percentage of those using a condom remained stable.

In the evaluation of the 'injecting equipment exchange schemes' in England and Scotland questions about sexual behaviour were asked as well. One hundred and forty-one injectors who attended the needle exchange were interviewed twice. There was an overall decline in the numbers who were sexually active (77% 1st interview, 69% 2nd interview). Among the sexually active subjects, there was a slight decrease in the percentage reporting multiple sexual partners (33% 1st interview, 30% 2nd interview). In the same group, there was an increase in the number reporting having a sexual partner who did not inject drugs (46% 1st interview, 55% 2nd interview), while there was a decrease in condom use, (38% 1st interview, 31% 2nd interview)" (32).

Buning and Des Jarlais conclude: "These data indicate that the level of condom use among IDUs is still low (although higher in the general population) and that education programs affect the level of knowledge, but still lack impact on actual behaviour".

In Geneva more than 50% of drug users undergoing treatment were still injecting drugs. 44% of those interviewed are using condoms with their regular partner, 62% with casual partners. These proportions are similar for the general population, and for people over thirty and for those who are infected with HIV the proportions are even higher (87).

Christina Hartgers (52) summarized data on sexual behaviour presented at the V International AIDS Conference in Montreal (1989) as follows:

"Safe sex has been promoted among IDUs for some time now, but the results so far are disappointing. Almost all studies looking at sexual behaviour mention the fact that there is little condom use among IDUs and only minor or no improvement over time. Rezza reviewed several studies and says that the majority point to the urgent need to emphasize prevention of sexual HIV transmission among and from drug injectors. Snyder finds that 33% of 3,639 IDUs had more than one partner over a period of six months. Fifty five per cent said they had sex with non-injectors, while 90% said they never or seldom use condoms. Twenty six per cent of the females and 18% of the males reported to have practiced anal sex. Corby interviewed 308 street IDUs. Eighty three

per cent were sexually active and 43% had non-injecting sex partners. Whittaker reports that 82% of the 273 IDUs he interviewed were sexually active, with 47% having one partner in the last year, 35% between two and four partners and 18% having five or more partners. Of the males in his sample 8.7% use condoms and 13.6% of the females use them. Van den Hoek finds that in private sexual relations condoms are used either not at all or infrequently and that there is no difference in this between 'steady' or casual partners. She warns against the concept of 'steady', since many of the self-reported 'steady relations' in this sample do not last very long. Private partners appear to be more at risk than commercial partners, since 90% of the prostitute IDU's use condoms with customers in vaginal sexual contact."

Data from a study on "AIDS related knowledge, attitude and behaviour among clients of methadone programmes" (84), indicate that a relatively large proportion of the clients are sexual inactive: 44% of 110 clients interviewed in the summer of 1989, reported no sexual contact in the month preceding the interview. 52% of the interviewed clients had a regular partner. In this group, 23% used condoms (5 "sometimes" and 8 "always"). 10 clients knew that they were seropositive. This group reported that they "always" used condoms in sexual contacts with irregular partners.

8.6 Discussion

The common belief that drug injectors are incapable of or uninterested in changing their behaviours and that they do not care if they spread infection to the general population, is not confirmed by the results of the surveys. On the contrary, it appears that they are as concerned as anybody to minimise the risk of HIV infection to themselves and to the general population. This is true mainly for injecting behaviour, whereas for sexual behaviour there is more resistance to change, reflecting the reluctance of the general population to use condoms and practise safer sex. We can say that health education campaigns have somehow reached their goal, even though a great deal still needs to be done.

However, one thing to keep in mind is the importance of attitudes towards the client group: if they find in the facilities' staff a friendly, non judgmental approach, if they are treated as responsible persons and provided with accurate information, compliance increases and they are able to avoid risk behaviours. Again, the transmission of the information through person to person contact and a situation of continuous contact with some kinds of health services or health workers seems much more effective than the information being given through the mass media.

9. CONCLUSIONS & RECOMMENDATIONS

9.1 Conclusions

- 1) The threat of AIDS is a greater threat to public health than problem drug use as stated by the British Advisory Council on the Misuse of Drugs.
- 2) There is no single solution to the problem but rather a combination of measures. Those which are available should be used in combination taking into account that different populations have different needs.
- 3) Any preventive measures used must take into account information about individual drug users i.e. culture, gender, drug career, socio-economic background and age.
- 4) From studies reviewed, it has been shown that preventive measures which take account of the views of and involve the target groups, in this case drug users, are more successful than those which do not.
- 5) Mass media and public information campaigns are of limited use, especially if used in isolation. They are more likely to be successful where they contain useful, practical information to enable drug users to change their behaviour rather than merely presenting a negative message warning of consequences of not changing behaviour.
- 6) The data that are available can not be used in a comparative way to allow for interpretation across countries.
- 7) Information on practical aspects is not available in an easily retrievable way.
- 8) The available training for those involved in the implementation of programmes and in research does not incorporate the potential of the available research.
- 9) There is resistance among both staff and drug users concerning the discussion of safer sex practices.
- 10) Syringe availability plays an important role in reducing risk behaviours by drug injectors.
- 11) More consideration needs to be given to the potential of prescribing as a prevention tool. Low threshold prescribing has a role in attracting IDUs into services, in stabilising sometimes chaotic lifestyles and therefore preventing the spread of HIV.
- 12) More effort is required in the active promotion of the services which exist to make them more accessible and to increase the uptake.

- 13) Outreach work has a valuable role in contacting the hidden sector of IDUs.
- 14) Imprisonment has a great potential for an increase in risk behaviour leading to the spread of HIV infection.
- 15) The role of the police is crucial in a HIV prevention programme.
- 16) Drug legislation and social policy may hinder prevention efforts in certain cases.

9.2 Recommendations

- 1) The active involvement of the target groups in the conception, design and implementation of prevention programmes should be encouraged.
- 2) Information campaigns should contain information which will enable drug users to make changes in their behaviour. Rather than merely tell them what they should not do, they should tell them what they can do and where they can go.
- 3) The standardisation of research methods in enabling comparison of data across EC/COST Countries is of paramount importance in evaluating prevention measures. We recommend the setting up of training courses in research methods.

Such courses are being developed at the Centre for Research on Drugs and Health Behaviour at London University which has established expertise in research in this field.

- 4) A network of training agencies should be implemented. As with the information exchange it should be established using agencies currently offering relevant courses. Examples of such agencies are: the Jellinek Centre in Amsterdam and The Mersey Drug Training and Information Centre. The role of such a network should be:

- to share examples of good practice.
- to stimulate the development of new courses drawing on the expertise of the participants.
- to facilitate an exchange of trainers.
- to allow trainees to attend relevant courses in other countries.
- to facilitate the dissemination of training materials.
- to facilitate international cooperation between local training centres.

An example of international cooperation is the liaison between the Mersey Drug Training and Information Centre, Liverpool and the Municipal Health Department, Amsterdam to run a course in Amsterdam for outreach workers from the UK.

Its purpose should be to allow the design of a concerted training plan, taking into account cultural and language differences in order to enable workers in the EC and COST Countries to meet the challenge of HIV infection among drug users.

It should be funded by the European Community. It should remain an ad hoc body co-ordinated through the European Commission.

5) EC/COST Countries should examine the impact of legislation on AIDS prevention programmes such as needle exchange and prescribing, and review laws and social policy which hinder HIV prevention or change policing practices within existing laws.

6) Information exchange should be further stimulated. The EC should be further encouraged to formalise the exchange of information in a systematic way. Its role should be:

- to stimulate the dissemination of information, especially about new initiatives.
- to facilitate access to already available information both published and not published.
- to facilitate visits by appropriate personnel to those cities where existing programmes run with an innovative and comprehensive approach.

Its purpose should be to enable all EC/COST countries to assess the different strategies and methods of implementation in order to consider the feasibility of their implementation in their own countries.

It should be funded by the European Community taking into account other initiatives already implemented or planned by the Commission.

7) Prisoners who have a history of injecting drug use should have access to medical support and the authorities should reconsider the policy regarding treatment programmes and other HIV prevention services in order to eradicate the sharing of injection equipment.

8) Low threshold prescribing should be further encouraged to encompass a range of drugs and modes of administration in order to attract as many drug users as possible into prevention programmes.

- 9) Prevention programmes should promote their services in the most active way possible and to the relevant target groups. Consideration should be given to marketing techniques used in other areas.
- 10) The easy availability of sterile injection equipment is essential. Measures such as needle exchange, whether agency based, pharmacy based or mobile, should be put into place in EC/COST Countries.
- 11) It is recommended that outreach work is a valuable addition to site-based prevention measures and can work in conjunction with such site based programmes or in isolation.
- 12) Drug agencies and HIV prevention programmes should have contact with police at a senior level to ensure the collaboration of police practice and the implementation of programmes. Successful models include the integrated approach in the Netherlands and in the Merseyside area of the UK.
- 13) Injecting equipment should be freely available.
- 14) Promoting safer sex among drug users is an absolute necessity. Innovative approaches such as in Utrecht and Oslo should be stimulated in EC/COST countries and training should pay special attention to these topics.

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DEMOGRAPHIC DATA OF IDUs IN EEC AND COST COUNTRIES

Country	Estim. n° of drug users	% of injecting drug users	Age	Ratio male/female	Drugs used	References
Belgium	10000-15000		30-34 years	2:1	Mainly heroin	Personal communication (S. Todts)
Denmark	5000-7000 of which 3-5000 in Copenhagen		30-40 years		Heroin, amphetamine and tranquillizers	85
Finland	NO INFORMATION RECEIVED					
France	80000-100000		50% 18-24 yrs 50% more 24 yrs	3:1	Heroin 90%, buprenorphine	40-41
Germany	50000-80000	90%	20-35 years mean age 28 years	2:1	Mainly heroin (70-80%)	62
Greece	40000		53% are 22 to 28 years old		Heroin, multiple drugs, cocaine	86
Ireland	NO DATA AVAILABLE ON THIS TOPIC					
Italy	130000-170000		mean age 27 years	4:1	Mainly heroin	Personal communication (G. Rezza)
Luxemburg	1200 (registered 668)		39% 20-24 yrs	4:1	Mainly heroin, multiple drugs	Personal communication (Hansen Koenig)
Netherlands	20000 of which 7000 in Amsterdam (3000 IDUs)	40% injects 60% chases the dragoon	mean age 30.1 yrs in 1987	70-90% male	Heroin, cocaine and minor tranquillizers	27
Norway	4000-6000					24
Portugal	36000 in Lisbon region	85% of heroin users injects			85% uses heroin	26
Spain	80000-100000		mean age 25.4 yrs	4:1	Heroin 97%, cocaine 1,7%	4
Sweden	10000-14000	7,500-10,000 injects			83% uses amphetamine I.V. 17% uses heroin I.V.	60
Switzerland	25000	probably mostly injectors	median 30 yrs range 16-49 years in the street 25 yrs	65% male 35% female	Heroin and cocaine	87
United Kingdom	75000-150000	geographic variations from 30% to 80%	mean age 28 yrs (London)	3:1	Heroin (89% of all new notification)	42-11

CUMULATIVE AIDS CASES RELATED TO IDUs IN EEC AND COST COUNTRIES

Country	Tot. n° of AIDS cases	Aids cases in IDUs	% of tot.	AIDS cases in Homo/bi IDU	% of tot.	Paediatric cases from IDUs	AIDS cases and incidence rate per million population	Total Population
Belgium	977	43	4	7	1	61	98.6	9,000,000
Denmark	870	44	5	9	1	9	170.5	5,100,000
Finland	94	1	1	0	0	0	18.8	5,000,000
France	16552	3438	21	301	2	210	291.9	56,700,000
Germany	6968	870	13	50	1	34	87.6	79,500,000
Greece	528	21	4	4	1	5	52.2	10,100,000
Ireland	215	78	36	7	3	7	61.4	3,500,000
Italy	10584	6962	66	280	3	184	183.4	57,700,000
Luxemburg	41	5	12	0	0	0	102.5	400.000
Netherlands	1857	150	8	20	1	7	123.8	15,000,000
Norway	237	27	11	3	1	1	55.1	4,300,000
Portugal	746	100	13	0	0	5	71.7	10,400,000
Spain	10101	6494	64	286	3	190	259	39,000,000
Sweden	617	32	5	4	1	4	71.7	8,600,000
Switzerland	2086	755	36	39	2	28	306.7	6,800,000
United Kingdom	5065	223	4	79	2	36	88	57,500,000
Total	60485	19579		1089		765		

Source: WHO Collaborating centre on AIDS - Paris -30 September 1991

HIV/AIDS PREVALENCE AND INCIDENCE IN EEC AND COST COUNTRIES

Country	Seroprevalence (% of HIV+, year, n° of tested)	Incidence rate	References
Belgium	4.5% in Flanders in 1990 8.4% in Brussels & Wallonia in 1986		Personal communication (S. Todts)
Denmark	18% in 1985-86		85
Finland	NO INFORMATION RECEIVED		
France	5-40% with regional variations (Lorraine Reg.15%, Paris Reg. 50%)		40-41
Germany	20% (22,1% in females and 19,1% in males) in 1988-89		62
Greece	1.1% in 1989 (263 IDUs)		86
Ireland	NO DATA AVAILABLE ON THIS TOPIC		
Italy	7.6%-54.9% in 1985-86 (11.000 IDUs)	8.9% (1985-87) 5.3% (1987-89) in Rome	88
Luxemburg	< 3% in 1990	Stable	Personal communication (Hansen Koenig)
Netherlands	33.2% in 1986 30.3% in 1987 27.8% in 1988 (Amsterdam, 531 IDUs)	11.9% (1986) 4.8% (1987) 4.1% (1988)	9
Norway	5-8%		24
Portugal	5.1% in 1989 (966 IDUs) 0.1% HIV 2 in 1989		89
Spain	69.1% in 1989 in Madrid (382 IDUs)	11.9%	90-91
Sweden	13% in Stockholm 1% in Malmo and Gothenburg regions	1% (1987-88)	60
Switzerland	22% in 1989 in Geneva (154 IDUs)		92
United kingdom	53% in Edimburgh 8% in the rest of U.K.		42

INFORMATION CAMPAIGN FOR IDUs IN ECC AND COST COUNTRIES

Country	Starting date	Target group	Kind of intervention	Message	References
Belgium	1989 in Flanders	IDUs	Leaflets warning against AIDS in Sept. '89 Information day on AIDS and IDUs for health workers in Oct.'89. New leaflet in Jan. '90	Warning against AIDS, bleach method	Personal communication (S. Todts)
Denmark		Directed only to a limited extent to IDUs	Special information campaign via treatment centres targeted to IDUs		85
Finland	NO INFORMATION RECEIVED				
France	1989	General population including IDUs	Press and audio-visual	Promotion of condom use	40
Germany			Special leaflets and brochures for IDUs have been developed by various organizations		62
Greece		IDUs, mainly addressed by private organisations	Posters, pamphlets and public lectures		86
Ireland	NO DATA AVAILABLE ON THIS TOPIC				
Italy	1988	General population including IDUs	Anti-drug national media campaign, brochures	Don't start Don't share syringes	Personal communication (G. Rezza)
Luxemburg	1989	IDUs including general population	National multi-media campaign	Don't share Promotion of condoms	Personal communication (Hansen Koenig)
Netherlands			Leaflets and posters, audio-visual materials for showing in waiting areas of clinics		27
Norway		General population including IDUs	In 10 towns IDUs are involved in HIV preventive work on the drug-scene		24
Portugal	NO DATA AVAILABLE ON THIS TOPIC				
Spain	NO DATA AVAILABLE ON THIS TOPIC				
Sweden	NO DATA AVAILABLE ON THIS TOPIC				
Switzerland	1987-88	General population including IDUs	Anti-drug national campaign	Don't share syringes Don't start	87-93
United Kingdom	1986		Anti-drug national media campaign, 3 Regional campaigns and drugs-helplines	Highlighting the risk of shared injecting re-AIDS since 1988-89	42-11

OUTREACH WORK AMONG IDUs IN EEC AND COST COUNTRIES

Country	Starting date	N° of locations	Services offered	References
Belgium	Flanders: '90 Wallonia: '89	Antwerp, Brussels, Liege and Charleroi	Provision of syringes, bleach, condoms and health education	Personal communication (S. Todts)
Denmark	NO DATA AVAILABLE ON THIS TOPIC			
Finland	NO INFORMATION RECEIVED			
France	Program implemented in Bobigny, but no detailed information available			40
Germany	1987	In more than 30 cities	Provision of condoms, needles and syringes, counseling	62
Greece	NO DATA AVAILABLE ON THIS TOPIC			
Ireland	Program implemented in Dublin, but no detailed information available			
Italy	Pilot program implemented			
Luxemburg	Program implemented but no detailed information available		Provision of needles and condoms, counselling, information material	Personal communication (Hansen Koenig)
Netherlands		2 foundations with 30 streetworkers in Amst.	Provision of condoms and syringes, counseling and advice, referrals	
Norway		In 53 towns, more than 150 streetworkers	Provision of condoms, needle and syringes, information	24
Portugal	NO DATA AVAILABLE ON THIS TOPIC			
Spain	NO DATA AVAILABLE ON THIS TOPIC			
Sweden	Outreach programs have been developed for prostitutes drug users			60
Switzerland		Zurich, Berne, Lausanne	Counseling, needle/syringes exchange, condoms distribution simple medical care, etc.	87
United Kingdom	1986	Streets, police and probation offices	Counseling, needle/syringes exchange, condoms distribution	42-11

METHADONE PROGRAMS IN EEC AND COST COUNTRIES

Country	Meth. maintenance	Detoxification	Where	Other services offered in methadone programs	N° of pers. in treatment	References
Belgium	Illegal	Not illegal but strongly discouraged	Project Lama, Brussels Free Clinic, Antwerp De Sleutel, Antwerp	Psychiatric, psychosocial and medical advice		Personal communication (S. Todts)
Denmark	Available, participation made easier	Available	General Practitioners, clinics, private outpatient centres	Social-psychological support, control measures	1131 persons in 1989	94
Finland	NO INFORMATION RECEIVED					
France	Not available	Available	In 2 hospital units in Paris			40-41
Germany	No broad scale programs 1 pilot project in 1 state		G.P.s are allowed to prescribe it			62
Greece	Not freely available	Given to IDUs with withdrawal symptoms	Specific detoxification centres			Personal communication (G. Papavangelou)
Ireland	Available	Available, lasting 3-4 weeks	Out and in-patient unit in the Nat. Drug Treat. Centre	HIV test, counselling, occupational therapy		103
Italy	Available	Available	Drug dependency units	HIV test, counselling		Personal communication (G. Rezza)
Luxemburg	Available	Available	Out and in-patient units	HIV test, counselling and social support	15	Personal communication (Hansen Koerig)
Netherlands	Available	Available	Methad. buses, G.Ps (200 out of 400), clinics	Psychosocial and medical help, contraception, N/S exch.	3,000 yearly in Municipal Health Services programs	14
Norway	Not available	Offered to IDUs with severe HIV infection				24
Portugal	Available					26
Spain	Available in some regions		In centres authorized by the regions		About 300 persons in Asturias, Valencia and Cataluna	4
Sweden	Available since 1983				Expanded from 150 to 300 persons in 1987	60
Switzerland	Available with differences among cantons	Available	Drop-in centres, G.Ps, polyclinics	Psychosocial help, condoms distribution, health education	3668 in 1988	Unpublished
United Kingdom	Available	Available				11

NEEDLES/SYRINGES AVAILABILITY IN EEC AND COST COUNTRIES

Country	Medical prescription	Vending machines	Pharmacies, shops, drop-in	Needle/sir. exchange programs	References
Belgium	Not needed	Not available (illegal)	Distributed only in pharmacies	Not implemented	Personal communication (S. Todts)
Denmark	Not needed	Available in Copenhagen since 1987	Freely distributed since 87 from pharmacies	Not implemented	85
Finland	NO INFORMATION RECEIVED				
France	Not needed since 1987		Freely sold in pharmacies	2 pilot programs in Bobigny and Marseille	40-41
Germany	Not needed	Available	Over the counter sale in every pharmacy	Implemented	62
Greece	Not needed		Freely sold in all drug store	Not implemented	86
Ireland	Needed	Not available	Not freely available	Implemented in 1989	95-96
Italy	Not needed	Not available	Freely sold in pharmacies	Not implemented	Personal communication (G. Rezza)
Luxemburg	Not needed	Not available	Freely sold in pharmacies	Implemented	Personal communication (Hansen Koenig)
Netherlands	Not needed	Available since 1989	Freely sold in pharmacies	Implemented	27
Norway	Not needed	Available in 10 towns	Freely sold in pharmacies and provided by Municipal HIV clinics	Implemented in some towns	24
Portugal	Not needed	Not available	Availability strongly increased	Not implemented	26
Spain	Not needed	Not available	Freely sold in pharmacies	1 pilot project in Bilbao	4
Sweden	Needed	Not available	Not freely available	3 pilot programs	60
Switzerland	Still needed in two cantons	Not available	Available in pharmacies, hospitals, drop-in centres	Implemented in 4 urban centres	87
United Kingdom	Not needed since 1984	Not available	Available only in pharmacies	Implemented	11

NEEDLE/SYRINGE EXCHANGE PROGRAMS IN EEC AND COST COUNTRIES

Country	N° of projects	Starting date	Location	Services offered	References
Belgium	Syringes distribution in the framework of the projects "Cool" and "Boule de Neige"		Brussels, Antwerp and Liege		Personal communication (S. Todts)
Denmark	Programs not implemented				85
Finland	NO INFORMATION RECEIVED				
France	2	1989	Bobigny and Marseille		40
Germany	Several		20 big cities		
Greece	Programs not implemented				Personal communication (G. Papavagelou)
Ireland	Programs implemented	mar-89			96
Italy	Programs not implemented				Personal communication (G. Rezza)
Luxemburg	2	1989	Luxemburg		Personal communication (Hansen Koenig)
Netherlands	Several	1984	40 Municipalities of the country		27
Norway		1987	Bergen, Lille, Hammer, Trondheim		24
Portugal	Programs not implemented				26
Spain	1 pilot program	1988	Bilbao	Health education, medical examinations HIV test	97-4
Sweden	3 pilot projects		Lund-Malmo		60
Switzerland	4	1988	Zurich, Bale, Berne, St. Gall, Nyon*	Provision of condoms, medical examination and care, health education, HIV test	87
United Kingdom	Over 100	1986	National scope	Counseling, hiv testing, advice on safer sex and drug use, provision of condoms	11

*Only during the Festival Paleo

NEEDLE/SYRINGES EXCHANGE PROGRAMS IN EEC AND COST COUNTRIES

Country	N° of attendances	N° of syringes issued	Exchange rate	N° of syr. issued per visit	Condoms distribution	References
Belgium	No data available on number of attendances and amount of of syringes issued					Persona communication (S. Todts)
Denmark	Programs not implemented					85
Finland	NO INFORMATION RECEIVED					
France	No data available on number of attendances and amount of syringes issued					40-41
Germany	No data available on number of attendances and amount of syringes issued					62-98
Greece	Programs not implemented					86
Ireland	No data available on number of attendances and amount of syringes issued					96
Italy	Programs not implemented					Personal communication (G.Rezza)
Luxemburg			15%		Yes	Personal communication (Hansen Koenig)
Netherlands (Amsterdam exper.)		1,000 weekly at the onset 820,000 in 1989	95%			43
Norway	No data available on number of attendances and amount of syringes issued					24
Portugal	Programs not implemented					26
Spain (Sept.'88 to Apr. '89)	700					4
Sweden	No data available on number of attendances and amount of syringes issued					60
Switzerland (ZIPP AIDS)	2,075 pers. daily in the second half of 1989 50-150 pers/hour	1,350,000 in 1989	91,5%	1:1	50000	87
United Kingdom (Evaluation of 15 schemes from April to Oct. '87)	769	24290	78%	Mean of 7		99

SPECIAL PROGRAMS FOR IDUs IN PRISON IMPLEMENTED IN EEC AND COST COUNTRIES

Country	Information campaigns	Condoms distribution	Needle/syringes distribution	Other interventions	HIV test	References
Belgium	Information campaign for prison staff in 1985 No coordinated campaign launched	Condoms can be bought in prison	Not carried out		Mandatory for prison inmates	Personal communication (S. Todts)
Denmark	Brochures providing information on how to clean syringes with water			Long term methadone treat. available if sentence is less than 1 year		85
Finland	NO INFORMATION RECEIVED					
France				Team of psychologists and social workers in 16 prisons	Offered on voluntary basis	40
Germany		Carried out	Not carried out	Counseling, implementation of bleach prog. under discussion	Offered on voluntary basis	62
Greece	NO DATA AVAILABLE ON THIS TOPIC				Mandatory for prison inmates	Personal communication (G. Papavangelou)
Ireland	NO DATA AVAILABLE ON THIS TOPIC					
Italy		Not carried out	Not carried out	Counseling, methadone detoxification treatment	Offered on voluntary basis	Personal communication (G.Rezza)
Luxemburg	Information leaflets and brief talks on the threat of AIDS for prisoners	Carried out	Not carried out	Counseling, methadone detoxification, psychologist and social workers	Offered on voluntary basis	Personal communication (Hansen Koenig)
Netherlands	NO DATA AVAILABLE ON THIS TOPIC					
Norway	Information about cleaning syringes with bleach	Carried out		Bleach availability, support and awareness making groups for HIV+in prison	Offered on voluntary basis	24
Portugal	Education campaigns, videotapes, bills meeting available for staff and prisoners	Not carried out	Not carried out		Offered on voluntary basis	26
Spain	Information about methods for syringes disinfection	Not carried out	Not carried out		Offered on voluntary basis	4
Sweden				100 coordination projects involving social welfare and prison & probation systems		60
Switzerland		Carried out	Not carried out	Methadone detoxification		Unpublished
United Kingdom	AIDS video teaching packs for prison staff, video for prisoners	Not carried out	Not carried out	Education and counseling, methadone detoxification treatment	Offered on voluntary basis	11-42-100

KABP SURVEY AMONG IDUS IN EEC AND COST COUNTRIES

Country	Sample structure	Sample size	Objective of the study	Behaviour changes <i>Needle sharing</i>	<i>Sexual behavior</i>	Refer.																												
Germany	All IDUs subgroups: IDUs inpatients, outpatients, Justice, private & public scene	630	To gather inf. on differential risks of HIV inf. and assess behaviour changes. To estimate HIV prevalence	76% of HIV + and 56% of HIV - reported change of needle sharing habits 20% of HIV+ never share needles in the last half year	48.2% (71.1% of HIV+ and 47.6 of HIV-) reported changes in sexual behaviour 12% (21% of HIV + and 9.8% of HIV-) always use condoms, while 61% reported no change	62																												
Italy 1987	IDUs attending a drug dependency unit in Verona	189	To assess the impact of educational intervention	<table border="0"> <tr> <td>before int.</td> <td>after int.</td> </tr> <tr> <td>34.7 of whole pop.</td> <td>12.3%</td> </tr> <tr> <td>34.7% of HIV+</td> <td>9.5%</td> </tr> <tr> <td>34.7% of HIV-</td> <td>13.5%</td> </tr> <tr> <td>reported needle sharing</td> <td></td> </tr> </table>	before int.	after int.	34.7 of whole pop.	12.3%	34.7% of HIV+	9.5%	34.7% of HIV-	13.5%	reported needle sharing		<table border="0"> <tr> <td>before int.</td> <td>after int.</td> </tr> <tr> <td>38.6% of whole pop.</td> <td>32.9%</td> </tr> <tr> <td>62% of HIV +</td> <td>52%</td> </tr> <tr> <td>32% of HIV-</td> <td>25%</td> </tr> <tr> <td>reported engaging in at risk sex</td> <td></td> </tr> <tr> <td colspan="2">Ave. % of at risk encounters in which condom was used</td> </tr> <tr> <td>Whole pop. 48.7%</td> <td>70.2%</td> </tr> <tr> <td>HIV+ 54.3%</td> <td>77.3%</td> </tr> <tr> <td>HIV- 43%</td> <td>63%</td> </tr> </table>	before int.	after int.	38.6% of whole pop.	32.9%	62% of HIV +	52%	32% of HIV-	25%	reported engaging in at risk sex		Ave. % of at risk encounters in which condom was used		Whole pop. 48.7%	70.2%	HIV+ 54.3%	77.3%	HIV- 43%	63%	66
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Netherlands 1987	IDUs recruited at 11 "exchange locations", as well as places where exchange was not possible	148	To assess the impact of the needle/syringe exchange programme	"exchangers" 9% "non exchangers" 22% shared needles in the last month		43																												
Portugal	IDUs attending the Centro das Taipas (Lisbona)	91		50% did not share syringes, 32% reported changing behaviour	38.9 had safe sex, 67.8% had no sex partners or only 1 in the last three months.	26																												
Sweden 1987	IDUs detained and arrested	1152	To estimate HIV prevalence among IDUs and to describe risk behaviour	<table border="0"> <tr> <td>1987</td> <td>1988</td> </tr> <tr> <td>15% of whole pop.</td> <td>27%</td> </tr> <tr> <td>16% of HIV-and</td> <td>26%</td> </tr> <tr> <td>39% of HIV+</td> <td>41%</td> </tr> <tr> <td>never share needles</td> <td></td> </tr> </table>	1987	1988	15% of whole pop.	27%	16% of HIV-and	26%	39% of HIV+	41%	never share needles		<table border="0"> <tr> <td>1987</td> <td>1988</td> </tr> <tr> <td>74% of whole pop.</td> <td>70%</td> </tr> <tr> <td>78% of HIV -</td> <td>74%</td> </tr> <tr> <td>44% of HIV+</td> <td>35%</td> </tr> <tr> <td>never use condoms</td> <td></td> </tr> </table>	1987	1988	74% of whole pop.	70%	78% of HIV -	74%	44% of HIV+	35%	never use condoms		22-23								
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Switzerland 1987	IDUs from different regions in contact with health workers	37	To assess the impact of Stop Sida campaign	before the campaign 81% of IDUs still share needles after 26%	25% of HIV- and 40.5% of HIV+ reported using condoms	67																												

KABP SURVEY AMONG IDUS IN EEC AND COST COUNTRIES

	Sample structure	Sample size	Objective of the study	Behaviour changes <i>Needle sharing</i>			Refer.	
United Kingdom	Regular illicit drug users in and out of treatment	127 70 of which were the "agency group" people in touch with services in the preceding year, 57 "non agency group" (non in touch with services)	to investigate injecting and needle sharing patterns and the impact of concern about AIDS upon these behaviours	N°127 12: never injected 14: stopped injecting 9: because of AIDS concern 5: for other reasons 48: still injecting 21: because of AIDS concern 27: for other reasons 37: still injecting, reduced sharing 37: because of AIDS concern 16: still injecting and sharing no behavioural change	N°115 Stopped injecting Stopped sharing Still sharing	Agency group 14% 51% 35%	Non agency group 10% 29% 61%	99