DRUG USE AND HIV-INFECTION:

The care of drug users and the treatment system
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by

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TARGET 17

TOBACCO, ALCOHOL AND PSYCHOACTIVE DRUGS

By the year 2000, the health-damaging consumption of dependence-producing substances such as alcohol, tobacco and psychoactive drugs should have been significantly reduced in all Member States.

ABSTRACT

This report lists and discusses the changes that it will be necessary to make in the management of care for drug users as a consequence of AIDS. The purpose is to give practical information and guidelines to the administrators and senior staff responsible for prevention and care of problematic drug use, in order to meet the challenges posed by HIV infection.

Management of care is used as a global term for all intervention strategies. It includes the different stages of primary prevention, early intervention and treatment of late stages, as well as different areas such as the treatment of drug use and of the HIV-related syndrome of diseases. The report covers the changes that will be necessary in care systems, including changes in the structure of facilities as well as in the care of the individual users.

KEYWORDS

ACQUIRED IMMUNODEFICIENCY SYNDROME – prevention and control
HIV INFECTIONS – prevention and control
SUBSTANCE ABUSE, INTRAVENOUS
DELIVERY OF HEALTH CARE – trends
EUROPE
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Foreword

Drugs have been known to humankind for thousands of years. The history of treatment services for drug users is much shorter. During this short period we can observe, however, significant changes in prevention and treatment policies. Better understanding of the problem has facilitated some of these changes, others have been prompted by some global trends in human development. But the most influential factors are connected with the mounting social costs of drug-related problems, the epidemic of HIV infection among drug users, and increasing evidence of the limited effectiveness of restrictive policies and high-threshold services for drug users. A harm reduction approach has been developed that takes into serious consideration public health issues along with the social stability and health status of drug addicts themselves. Official recognition and acceptance of the harm reduction strategy has had significant implications for the structure and functions of the system of care for drug addicts. During the last few years, innovative and controversial methods of treatment have been piloted in several countries. These have been developed in response to the needs of those drug addicts who have never been in contact with traditional health and social services for drug users or benefited significantly from them.

The epidemics of bloodborne infections among drug users, and particularly HIV infection, have been one of the major factors influencing public health concerns in many countries of the world. There are significant differences in the proportion of HIV-infected drug users in the countries of the WHO European Region, with an alarming trend towards rapidly unfolding HIV epidemics among injecting drug users in some countries of eastern Europe and central Asia. Policy-makers and service planners have to realize that a new, specific and large group of clients has emerged on to the drug scene, with serious implications for drug treatment services and drug-related policies.

HIV-infected drug users have particular needs, rooted in their specific medical and psychosocial status, which are not often met by existing services. On the other hand, HIV-infected clients pose a serious challenge to professional and caring personnel which determines the specific needs of staff working with such clients. New biological forms of treatment in HIV infection and AIDS give hope for many thousands of HIV-infected drug users, but at the same time pose new problems to health care and social systems.

Many problems are still far from their final solutions, if such exist. But some experience of tackling these complicated issues has been accumulated in countries which have a comparatively long history of HIV infection among drug users. With this publication, the WHO Regional Office for Europe makes its first attempt to provide the countries of European Region with an analysis of predominantly psychosocial aspects of this experience in order to increase their capacities for adapting services for HIV-infected drug users at national and local levels.

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1. Introduction

For many years the care for drug dependants in the industrialised countries was more or less the same with little variations. It could be characterized by the following aspects: Abstinence was the major target of intervention, thresholds to enter treatment in terms of motivation for change were high; dependants entered treatment late after long periods of drug consumption; their health situation was not of specific concern, the major interest was in the drug consumption itself. There were some variations between countries in the amount of methadone maintenance utilisation as an alternative treatment modality, but even then the other mentioned aspects were still valid.

The identification of the Acquired Immune Deficiency Syndrome - AIDS in 1981 and the Human Immunodeficiency Virus Type I (HIV-I) in 1984 as the cause for this new group of diseases and its rapid spread within drug users questioned many basics of the care concept and the care system. The bad health conditions of drug users with HIV and the danger of a rapid transmission into the general population made it necessary to adopt major principles of traditional care for drug users to the new situation.

1.1 Scope and purpose

This report compiles and discusses the necessary changes caused by AIDS for the management of care for drug users. The purpose is to give practical information and guidelines for administrators and senior staff responsible for prevention and care of problematic drug use in order to meet the challenges of the HIV-infection.

Management of care is used as a global term for all interventions strategies; it includes different stages like primary prevention, early intervention and treatment of late stages as well as different areas like the treatment of drug use itself and of the HIV-related syndrome of diseases. The report covers (1.) the necessary changes for the care system, e.g. for the structure of facilities as well as (2.) the changes for the care of the individual user.

The report concentrates on changes for the care system and the individual care. But one has to keep in mind, that social factors like law enforcement and public opinion towards drug use and drug dependence interact in many facets with the care system. Therefore the restrictions in this report are caused by its purpose, but necessary changes for the society in general have to be discussed as well. One has also to keep in mind that the care for drug users is expensive and that different national resources in terms of money, staff and experience are available within Europe.

1.2 Definition of terms

Drug use covers the use of different classes of psychoactive substances with the purpose to manipulate stages of mood or to reduce negative consequences of
previous drug use. The substances might be illicit according to different UN conventions and national rules or licit like certain amphetamines or dehydrocodein products (non-medical use). Drug in this report predominantly means heroin and other opiate use as the major group of injected substances in Europe. But it is also kept in mind that in specific areas of Europe other substances like cocaine, amphetamines or ecstasy play a more important role.

Problematic drug use is defined as a pattern of consumption which leads to negative emotional, physical or social consequences or has the potential for these risks. The broader term is preferred in this report instead of more narrow terms like drug dependence, as the risk of HIV-infection and AIDS is not only connected with drug dependence, but also with early stages and patterns of drug use. Therefore the use of drugs is not differentiated according to classifications like ICD-10 but according to the risk to be infected or to infect other users or non-users in the society.
2. Problematic drug use and HIV-infection

This chapter covers basic information on HIV-infection and AIDS (2.1) and its consequences (2.2). Further parts will describe the present situation in Europe (2.3) and major consequences for the care of problematic drug users (2.4).

2.1 Basic information on HIV-infection

HIV-infection

AIDS (Acquired Immune Deficiency Syndrome) is caused by a virus of the retrovirus family, the Human Immunodeficiency Virus (HIV) and several subtypes. This virus invades white blood cells (T4 or T-helper cells), that usually play a key role in the body’s defences against disease. In consequence the functioning of the immune system is damaged and the infected individuals will be affected by infections and tumours, that a normal immune system is usually able to fight off without difficulty.

AIDS is not a single disease but has various manifestations (see 2.2). There are several classification approaches for HIV infection and AIDS that are all oriented on different stages of the diseases (e.g. classification of the Centre for Disease Control (CDC), Atlanta,1985). AIDS is usually seen as a fatal disease, but there are also long-term survivors and the success of new developments of the antiretroviral therapy gives cause for some hope.

There is no evidence that everyone infected with the HIV virus will go on to develop AIDS. The proportion of individuals infected with HIV that will eventually develop AIDS is not known, but it can be estimated that the majority of the infected will suffer from the disease. The average incubation period from the HIV infection to the appearance of the first AIDS symptoms is 5 to 15 years (Jäger, 1995). On average the duration of surviving AIDS after development of the full symptoms is 7 to 13 months (effects of the antiretroviral therapy not included).

One of the main research foci is the development of a vaccine against the HIV virus. The development of the vaccine is currently at a stage that there are different approaches that allow effectiveness studies, but there is still a vehement discussion among experts about these tests. But one has to keep in mind that recent forms of medical treatment are very expensive and therefore difficult to implement in the particularly concerned regions of the third world.

Transmission of HIV

HIV is primarily a sexually transmitted disease. Semen as well as vaginal and cervical secretions can contain large concentrations of the virus and can be transmitted during sexual intercourse. The risk to become infected is given for every unprotected form of sexual intercourse, but there is a higher risk for some sexual practices (e.g. practised by homosexual men), the „receptive“ partner and in general for people with multiple casual sex partners.
HIV can also be spread through infected blood or blood products either through transfusion, transplanted organs or perinatal transmission. This route of transmission is very effective but rare: The probability to become HIV infected when receiving a contaminated blood transfusion is up to 90% (Jäger, 1995), but according to WHO (1992) the risk to become HIV infected through blood transfusion is 3-5% world-wide.

A further route of transmission are the drug injection practices of drug users. The sharing of unsterilized injection equipment heavily contaminated with blood (syringes) is the cause for the high percentage of HIV infected IV drug users.

2.2 Health and social consequences

In case of infection by the HIV virus the majority of the individuals will be confronted with severe health and social consequences.

HIV disease

Following the CDC-classification scheme mentioned above, the natural history of HIV infection can be divided in four different stages of disease progression, but not all stages are occurring in all infected individuals. During the prodromal stage the body produces antibodies against the virus. Eight to 12 weeks after infection the antibodies are detectable and the blood test for antibodies shows now a positive result (sero-conversion). At that time infected individuals often show symptoms like fever, lymphadenopathy, night sweats, headache and cough.

The following three stages of disease are characterized by an increasing number of physical and often also neurological disorders. Whereas at stage 2 the infected individuals often show no symptoms and/or pathological results, at stage 3 they develop a persistent generalised lymphadenopathy and/or pathological results and at stage 4 a long list of opportunistic infections and opportunistic tumours can occur.

Regarding opportunistic infections there is a particular problem arising in the case of tuberculosis. This mycobacterial infection HIV infected individuals often get, is currently seen as a threat to public health because of two reasons: (1) the number of cases of tuberculosis is increasing world-wide what is also to be seen in connection with HIV infection and (2) the multi resistances, that are a problem particularly for the medical staff, are also increasing. It is expected that mycobacterial infections will quickly spread internationally (Ulmer, 1996).

Interaction of drug use and HIV-infection

IV drug users are one of the main HIV transmission groups because of the use of unsterilized needles and syringes. Besides syringe-sharing, sexual transmission is also a mechanism of HIV spread in this group. Sexual transmission takes place mostly among drug users, but also often from drug users to their non-drug-using sexual partners (transmission link to the general population). One effect of this is that
many of the paediatric AIDS cases are born to women who either have IV drug use or have an IV drug using partner. A further variant of sexual transmission is the prostitution of IV drug users with the common lack of condom use.

In contrast to the fact that AIDS mainly strikes individuals aged 20-49 years (WHO, 1990), IV drug user are often younger at time of infection because IV drug starts mainly at the age between 14 to 20 years (Uchtenhagen & Fuchs, 1995). Especially at the beginning of IV drug use, the users are at risk for an infection because of lacking experience in hygienic measures or knowledge about infection risks.

In addition to the danger of syringe-exchange there are additional risks to become infected or to develop the HIV disease for the group of IV drug users. Due to the continued injections of the drug and related infections the immune system of the users is strongly affected. They often permanently suffer from physical problems as for example hepatitis, endocarditis and abscesses. Additionally, their general and nutritional condition is rather bad, and all these are factors that encourage seroconversion and the manifestation of AIDS.

The majority of IV drug users will be often involved in criminal activity in order to finance the drugs. As a consequence many of them have to spend time in prisons (Reisinger, 1993)

It is often neglected that HIV infection is not the only serious infection for which IV drug users are at risk. Hepatitis B and the newly identified and more serious form Hepatitis C are also important infectious diseases that are transmitted on the same route as the HIV virus but with a much higher risk of infection. It is estimated that about half a million IV drug user in the European Union are infected with Hepatitis C (EMCDDA, 1997). The Hepatitis C rates are rather high in many countries and also in countries where Hepatitis B or HIV infection is uncommon or low.

The social and psychological problems of infected IV drug user are partly the same as for other infected individuals but partly specific and related to their drug problem. Most of the IV drug user are living in difficult conditions: housing problems, no work, financial and legal problems. So HIV is an additional problem to many others. And above all there is often the lack of motivation for a necessary management of the drug problem because of the hopelessness in view of the fatal disease.

2.3 Present situation in Europe

Epidemiology

By end of September 1997, a cumulative total of 207,499 AIDS cases was reported from 47 European countries (European Centre for the Epidemiological Monitoring of AIDS, 1997). In 1996, the HIV-incidence was estimated at 40,000 new infections in Europe a year (Robert Koch Institut, 1996).

The situation in Europe is heterogeneous (Table 1). Spain, Italy and France have the most cumulative adult/adolescent AIDS cases and also the highest proportion of AIDS cases among IV drug users. In most of the Western countries of Europe AIDS
incidence (except Portugal and Greece) seems to decline. In the Eastern part of
Europe the HIV epidemic is more recent and shows a low annual AIDS incidence.
But due to the long AIDS incubation period it is presently not possible to record the
current extent of the epidemic. However, there are signs for a very fast spread of HIV
in some countries (e.g. Poland, The Former Yugoslav Republic of Macedonia)
especially among IV drug users. Another alarming fact is the drastic increase of
classical venereal diseases in the Eastern European countries that indicates
increasing sexual risk behaviour that might also have consequences for HIV infection
(Robert Koch Institut, 1996).

**Table 1:**
Cumulative AIDS Cases by country and transmission group (reported by 30 September 1997)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Homosexual male (%)</th>
<th>IV drug users (%)</th>
<th>Others(^1) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1,725</td>
<td>40.1</td>
<td>25.7</td>
<td>34.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>2,220</td>
<td>40.7</td>
<td>6.6</td>
<td>52.7</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>101</td>
<td>64.4</td>
<td>2.0</td>
<td>33.6</td>
</tr>
<tr>
<td>Denmark</td>
<td>2,058</td>
<td>68.2</td>
<td>8.0</td>
<td>23.8</td>
</tr>
<tr>
<td>Finland</td>
<td>259</td>
<td>68.0</td>
<td>3.9</td>
<td>28.2</td>
</tr>
<tr>
<td>France</td>
<td>46,128</td>
<td>45.8</td>
<td>23.9</td>
<td>30.4</td>
</tr>
<tr>
<td>Germany</td>
<td>16,629</td>
<td>66.4</td>
<td>14.1</td>
<td>19.5</td>
</tr>
<tr>
<td>Greece</td>
<td>1,674</td>
<td>58.2</td>
<td>3.8</td>
<td>37.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>256</td>
<td>75.0</td>
<td>0.4</td>
<td>24.6</td>
</tr>
<tr>
<td>Ireland</td>
<td>588</td>
<td>35.9</td>
<td>43.4</td>
<td>20.8</td>
</tr>
<tr>
<td>Italy</td>
<td>39,518</td>
<td>13.7</td>
<td>62.7</td>
<td>23.6</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>121</td>
<td>52.1</td>
<td>15.7</td>
<td>32.2</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>4,509</td>
<td>71.1</td>
<td>10.8</td>
<td>18.1</td>
</tr>
<tr>
<td>Norway</td>
<td>574</td>
<td>55.7</td>
<td>15.3</td>
<td>29.0</td>
</tr>
<tr>
<td>Poland</td>
<td>559</td>
<td>30.8</td>
<td>47.9</td>
<td>21.3</td>
</tr>
<tr>
<td>Portugal</td>
<td>4,456</td>
<td>23.3</td>
<td>42.5</td>
<td>34.2</td>
</tr>
<tr>
<td>Romania</td>
<td>529</td>
<td>4.7</td>
<td>0.2</td>
<td>95.2</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>167</td>
<td>45.5</td>
<td>0.6</td>
<td>54.0</td>
</tr>
<tr>
<td>Spain</td>
<td>46,866</td>
<td>14.2</td>
<td>65.6</td>
<td>20.1</td>
</tr>
<tr>
<td>Sweden</td>
<td>1,524</td>
<td>60.2</td>
<td>11.4</td>
<td>28.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>5,878</td>
<td>38.2</td>
<td>39.6</td>
<td>22.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>14,442</td>
<td>69.8</td>
<td>6.3</td>
<td>23.8</td>
</tr>
<tr>
<td>The Former Yugoslav Republic of Macedonia</td>
<td>658</td>
<td>13.8</td>
<td>50.8</td>
<td>35.5</td>
</tr>
</tbody>
</table>

\(^1\) Mainly heterosexual contact, haemophiliac coagulation disorder, transfusion recipients
The female proportion of AIDS cases is continuously increasing from 10% of all adult/adolescent cases diagnosed in 1986 to 21% in 1996. Among women there are more heterosexually infected cases (48% by end of September 1997; European Centre for the Epidemiological Monitoring of AIDS, 1997) than cases infected by IV drug use (39.8%).

Until 1994 the transmission group of homo/bisexual men had the largest proportion of all newly diagnosed AIDS cases. But since that time IV drug user became the main transmission group. And although the number of new AIDS cases a year is no longer increasing, the number of drug-related cases of AIDS continues to rise in general (EMCDDA, 1997). But following the EMCDDA data on prevalence of HIV infection among injecting drug users in EU countries (15 Western European countries), in eight countries infection rates are decreasing, in five countries rates are stable and only two countries (Belgium and Portugal) have an increasing number of HIV infections among IV drug users. One has to keep in mind that data sources for these estimations are different in year of data collection and are a mixture of data from surveys and single studies.

**Actions**

Shortly after the identification of AIDS and the HI virus, a global strategy for the prevention and control of AIDS was drawn up by WHO in 1985-1986. This strategy programme was updated in 1992 (WHO, 1992). The main objectives of the strategies are prevention of HIV infection, reduction of the personal and social impact of HIV infection and mobilisation and unification of national and international efforts against AIDS. And the strategy paper also contents a call for action regarding national AIDS programmes.

All countries of Western Europe where the AIDS problem does exist since the eighties have established various programmes and actions to a lower or greater extent. The fields of activities are AIDS prevention for the whole population of a country as well as specific prevention approaches aimed at IV drug users together with harm reduction strategies as syringe-exchange programmes and methadone maintenance. Furthermore treatment, first of all medical treatment of the physical symptoms of the HIV disease and also counselling and social help were improved or implemented. The third field of intense action is HIV research that concentrates on the development of effective medicines against the symptoms of HIV infection as well as an vaccine against the HI virus.

**2.4 Consequences for the care of problematic drug users**

The risk of problematic drug users becoming infected continues to exist as long as the IV drug use continues; that means, in most cases, several years or even decades. The risk of already HIV-infected drug users to develop severe diseases of the AIDS syndrome including the risk of death and the risk to infect relevant others continues to exist for the rest of their life. Even recent progress in the treatment of the symptoms do not really heal the different manifestation of the AIDS syndrome, but seem to interrupt the progression in the development of the most severe stages.
The lifelong threat for drug users and their environment in the general population has not only consequences for the individual treatment but also for the care system. These consequences include the implementation of more primary prevention activities, the early testing and counselling of drug users, the need for a continuous contact to drug users with and without HIV-infection, the lifelong medical and emotional support of infected users and the cooperation of the drug care system with the general medical system responsible for the care of HIV-infected and AIDS cases. It also includes the support of the immediate family. These consequences for the care system and the individual case are discussed in detail in chapter 3, 4 and 5.

The previous examples for necessary changes demonstrate that the consequences for the care system are very costly. But one should keep in mind that avoiding the risk of HIV-infection and AIDS is not only an ethical responsibility of the public health system and the society in general but that it is also a cost-effective strategy in terms of saving or at least reducing the lifelong costs of care for people with severe diseases.
3. General consequences for prevention and treatment of HIV infection in drug users

3.1 Problematic drug use becomes a public health problem

Before HIV, drug using behaviour was known to be dangerous to the health of drug users themselves but appeared to present little threat to the health of general public. As a result, in most countries, little effort was made to protect or improve the health of drug users, an alienated group from main-stream society, with poor or non-existent access to consistent health-care provision. Few appeared to be interested in their quality of life or whether they lived or died.

At best, drug users might have sporadic contact with health services for emergency treatment of drug-related incidents such as overdoses or infections and injury related to injecting drug-use or during pregnancy. Even these legitimate medical contacts might be influenced by suspicions that the drug user was trying to obtain further drugs, leading to a poor clinical relationship and little attempt at continued care. Specialist clinical drug services tended to work only with the small proportion of drug users who appeared well-motivated towards becoming abstinent and set high thresholds for drug users to be eligible for treatment. The consequences was that in most countries only a small portion of problematic drug users received treatment annually.

With the advent of HIV, there arrived a dangerous infection not only with the potential for spreading rapidly within the drug-using population via equipment sharing, but also from the public’s point of view with the more alarming potential for spreading from the expanding pool of infected drug users into the population as a whole via sexual intercourse. No longer could society ignore the health issues of drug users. An epidemic of HIV infection amongst drug users could pose a major public health problem to non-drug users as well.

3.2 Problematic drug use and HIV-infection within a public health model

In order to protect the drug users as well as the public health from the dangers of infection from HIV amongst drug users, some important basic principles must be applied:

- Prevention of new recruits into drug use by primary preventive programmes according to modern experiences from research and controlled practice. In this context the concept of early intervention that aims at an early detection of harmful use and treatment of people who have not developed physical dependence or major psychosocial complications is a further important component in reducing prevalence of drug use.
• Prevention of new infection by changing the behaviour of non-infected drug users to protect them from the risk of infection via equipment sharing, needle-stick injury or sexual intercourse with an HIV infected person of either sex.

• Containment of the existing infection by changing the behaviour of HIV-infected drug users to reduce or eliminate the further spread of infection via equipment sharing with other drug users or via sexual intercourse with either sex, whether in a casual or permanent relationship.

Taking into account these principles Table 1 shows a concept with targets and measures for non-infected and infected drug users. Many of them are untested and therefore will not know if they are HIV infected. Fortunately, the same behavioural changes are required by drug users whether infected or not both to contain the spread of HIV to others and to prevent them becoming infected, i.e. safer injecting techniques and safe disposal of equipment and safer sexual practices. Even if a drug user is known to be HIV infected, behavioural changes which prevent the spread of HIV to others, will also protect him or her from acquiring new and different strains of HIV, a risk which is thought to increase the severity of infection. This is an important issue for those poorly motivated to protect the public yet keen to protect themselves.

HIV negative drug users are at risk of becoming infected not only because of the risks of sharing infected injecting equipment but also because they are more likely to be the sexual partners of other drug users who may be infected. Non-drug users expose themselves to the risks of sexual spread of HIV because they do not see themselves as an „at-risk group“ and cannot accept that an HIV-infected person may show no signs of being infected or signs of being or having been an injecting drug user.

In connection with drug abuse a specific attention and care has to be turned on infected drug users in prisons. Imprisonment of drug users is an important factor in worsening AIDS epidemic (Reisinger, 1993), because of several reasons as for example lack of sterile injection equipment, the practice of needle sharing, the poor quality of health service care in prisons and homosexual activities also between individuals that are exclusively heterosexual outside prison. So homosexual contact between possibly infected drug users and persons who would not be at risk outside of prison is possible.

3.3 Consequences for prevention philosophies and for the individual care

The high risk for HIV-infection within problematic drug users and for the spread in the general population has consequences for the setting of goals for interventions. They can no longer be formulated only in the responsibility of the treatment system for problematic drug users, but must be developed in a broader frame of public health.

Experience in the last 30 years with the treatment of drug use has shown that any positive results in terms of reducing problematic drug use are difficult to reach and limited in terms of size and duration. Therefore one has to find additional goals in a type of cascade (Figure 1) for those who do not respond to abstinence oriented treatment goals but continue to use drugs.
Reduction of the incidence of drug use in the population is surely the best strategy to avoid HIV-infection transmitted by drug injecting practices and also one of several strategies to reduce the infection by unprotected sexual behaviour. Therefore primary prevention of problematic drug use is the first important goal of public health policy in the field of HIV-infection. However primary prevention will by far not reach 100% of the population at risk and will not be effective in all cases. Therefore a major target group for HIV-related measures are drug users that are in contact with any kind of service. For this group the ordering of treatment goals has to be modified.

Figure 1: Hierarchy of goals in relation to IV drug use and HIV infection

1) Gossop & Goos 1996, modified by authors
For problematic drug users abstinence is still the ultimate goal to avoid the negative consequences of drug use as well as the risk of an HIV-infection. But again we know that only a small group reaches this goal within a short time, that many continue their consumption pattern over years and are therefore under the risk of severe health consequences including HIV-infection and that some drug users never are able to reach full abstinence.

The following goals in Figure 1 do not belong to the traditional concept for the treatment of problematic drug use. They have been developed within a new public health view of the drug problem when the health consequences of drug use became more obvious, both for the drug user and the general population, especially under the risk of HIV-infection.

For those who do not feel ready to give up their problematic drug use the goal would be to avoid or at least reduce injection as a route of administration. This could either be done by methadone maintenance programmes with oral dispensions of the substance or by changing the administration of illicit drugs, e.g. sniffing of cocaine or inhaling heroin.

For those who are not able to give up injection practice a further goal of treatment would be to use always new and sterile equipment. If this is not possible, the cessation of equipment-sharing and use of the own equipment are further goals. The lowest goal if all previous ones will not be effective is to sterilize equipment in all cases, e.g. by bleaching.

A similar detailed hierarchy of goals for unprotected sexual activities as the second route of administration does not exist. „Primary prevention“ or „abstinence“ of sexual activities is neither an effective strategy nor an adequate goal for intervention in terms of ethical reasons. The major and most important as well as highly effective goal for the transmission of HIV-infection is the use of condoms. If condoms are not available an alternative goal would be to avoid sexual intercourse and to promote sexual practices without the risk of contamination, e.g. petting.

It is important for all the mentioned treatment goals in the field of injecting practices and sexual behaviour that they receive the same value and interest by the staff like the traditional abstinence goal and the same relevance in the treatment process in terms of promoting cognitive processes of change and training of behavioural skill necessary for reaching these goals.

3.4 Consequences for the care system

Involvement of the general health service and the population’s support

Attempting to change the drug-using and sexual behaviour of drug users is a formidable task, particularly because some have had little contact with health services to date. Yet it is imperative to contact as many drug users as possible if the public health risks of HIV are to be minimised. It is inconceivable that such an important and pressing public health task can be left to specialist drug-services alone. In some areas and countries such services are not adequately available.
In order to reach the bulk of the drug using population, all general health service access points will require utilisation and every effort must be made to attract drug users into services, whether wanting help to stop drug use or not. Particularly high-profile access points like general practice (primary care services), prison medical services, accident and emergency services, obstetric services and infectious disease units.

Medical and nursing staff in the above medical services would require considerable training and support to be encouraged to attract drug users into clinical services and work humanely with them offering health education, general health care, drug and HIV management if no specialist services exist in their area or in early stages of problematic drug use if specialist services do exist.

Such a reversal in philosophy of approach must be underpinned by increasing public understanding of the risks of spread of HIV amongst drug users and the consequent risks to public health and extra need for drug services. It would also need a commitment from politicians and health service managers to endorse such a philosophy of attracting drug users into services by allocating extra funding to drug and HIV services. Local police and the judicial system would also need to modify their approach to allow drug users to make service contact without fear of being harassed by law enforcement procedures.

Local non-clinical street drug agencies and outreach workers also have an important role to play in passing on harm reduction messages to drug users. Contraception services, genito-urinary medicine and primary health care services and health educators are all relevant existing services capable of delivering safer sex messages to the non-drug using population at risk of sexual spread.

**Linked services**

Ideally, drug management and HIV management should be linked. This would entail existing infectious disease unit staff likely to be treating HIV and AIDS cases training in drug management and social care issues and health education aimed at reducing further spread of HIV from those already infected. They should also endeavour to establish a close working relationship with local drug services and social services if they exist. Similarly, staff in specialist drug services require training in the prevention of HIV, counselling and testing for HIV, management of HIV infected clients and recognition of medical complications of HIV and AIDS as well as adapting services to cope with the drug management of those not ready to contemplate abstinence. They too should establish a close working relationship with local infectious disease services and social services wherever possible.

**3.5 Factors which can influence or interfere with choice of treatment goals: the need for a reformulation of values**

Many factors may interact with the type of treatment objectives sought by particular service-providers. Some treatment philosophies such as the abstinence model reject all forms of drug-substitution therapy. Others hold religious beliefs which render safer sexual messages impossible to deliver. Some services lack of medical staff able to prescribe substitute medication. Services dedicated to HIV positive drug users may identify different objectives and goals for their patients to those working with HIV negative drug
users, with less emphasis on achieving abstinence for example. Those working with seriously ill AIDS cases may give pain relief a higher priority than controlled drug management.

In some countries, the prescribing of substitute drugs of dependence remains illegal, in others the provision of injecting equipment is forbidden. Some countries have poorly funded and poorly staffed health provision for the most basic health needs of the community with no spare capacity to accommodate to the rising problems of drug use and HIV. Others have an overwhelming influx of cheap supplies of heroin so that methadone treatment offers no inducement of behavioural change.

A few countries remain locked in a punitive approach to problem drug use, driving drug users underground for fear of punishment with little opportunities to access them for health education about HIV risks. Some countries are receptive to advances in scientific thinking and incorporate research findings into treatment methods, others remain fixed by their cultural attitudes which remain unreceptive to new ideas and approaches, despite the serious nature of the threat of HIV.

Keeping in mind the variety of cultural, ethical, moral or legal restraints in the different countries of Europe this report argues for a more scientific approach to meet the challenges of HIV-infection to problematic drug users. The utilisation of more scientific knowledge does not mean to give up any values; values are very important for the public health view of problematic drug use and HIV-infection. But our values can not be to just minimise costs or to reduce the risk of HIV-infection in the general population without any interest in the situation of problematic drug users. Instead we argue for a value system that minimises the risks of problematic drug use and HIV-infection in the general population, in the group of present drug users as well as in subgroups of future generations with a potential high risk. This means, that primary prevention to avoid the onset of drug abuse and abstinence oriented treatment to stop problematic drug use still have a high value and continues to be the ultimate goal in reducing the risks of problematic drug use and HIV-infection.

However, we have to also keep in mind that in any given period only a minority of people reach these goals and that a large group uses drugs for some time or even lifelong. These people bear a risk for themselves and for others; the negative health and emotional problems are severe. Therefore within a modern concept of public health the best care possible has the highest value. And this must include all adequate treatment methods to reduce the risk of HIV-infection within the group of active drug users. It is also important that these goals are not only accepted and that the drug users are not only informed about, but that treatment concepts include behavioural skills to actively cope with these goals of risk reduction. It also is important that the staff is trained in this new techniques and that staff, supervisors and society in general support this new approach.

New treatment goals and strategies create new questions: Does a needle exchange programme stimulate drug use and therefore increases „harm” on the long run instead of reducing the HIV risk? And what about a public „shooting gallery” or heroin dispensing? Opinions about increasing or reducing harm for drug users or for society are often formulated in the sense of „right“ or „wrong“, with low or no scientific basis. So more sensible discussions in the sense of hypotheses about possible better
outcomes and more well-controlled experimental or field studies as a basis for an ongoing process of improvements in this field are necessary.

4. Consequences for the management of the care system

Because of HIV-infection the care system has to meet the needs of new groups of clients: The non-infected drug user, the infected drug user without clinical symptoms and the infected user with manifest AIDS related diseases (Gossop & Goos, 1996) who either want to give up drug use or want to continue. This has relevant consequences for the management of the care system in three areas: service provision (4.1), specialist drug service cooperation with other facilities (4.2) and staff (4.3).

4.1 Service provision

The traditional treatment service philosophy with its two basic principles (1.) come structure and (2.) abstinence treatment is challenged in many aspects by the HIV infection. As a first change it is necessary to be more active in attracting and keeping in contact with the greatest proportion of drug users. In order to achieve this goal, the care system has to facilitate and improve the accessibility of these subjects to all components of the general health and social care system. Drug users must also be actively encouraged by services to enter and remain in contact. This means more flexibility with respect to drug users in order to involve the majority of cases in the care system (above all with the more severe cases with social, psychological and medical problems) and different aims in their management.

As a second change, new services are necessary to provide an effective HIV-prevention and a comprehensive care for the infected drug users. According to the new goals for intervention mentioned in chapter 3.3, these services must be available and targeted not only for the small group of drug users within an abstinence oriented treatment but also for the much larger groups who do not want to give up drug taking in general or in the moment. This double objective originates changes and extensions in the type of care that have to be offered to intravenous drug users:

- Prevention programmes for HIV infection
- Outreach work
- HIV infection screening (voluntarily)
- Outpatient treatment
- Residential treatment
- Care for infected drug users in prisons
- Infectious management (HIV, hepatitis B and C, tuberculosis)

4.1.1 Prevention programmes for HIV infection

To prevent new infection and to contain the existing infection the care system has to provide educational programmes focused in HIV infection and their consequences and methods for preventing HIV exposure, that is, HIV transmission and how to decrease
the risk of infection. It is particularly important to teach safer injection techniques and safer sex behaviour to avoid sexual and perinatal transmission of HIV.

Availability of syringe exchange, bleach and condom distribution programmes, and how to use it adequately have to be provided. These programmes may be offered by the drug services or by other health-related services. Easy availability, however is an indispensable condition.

4.1.2 Outreach work

Outreach work as one important way to reach more persons at risk for drug problems, drug users and specific subgroups like for example drug using prostitutes has to be offered. Outreach work has to be linked with other health and drug services, mainly because one of the main tasks of outreach work is the encouragement of the IV drug user to enter treatment, at least medical treatment. Therefore also an increased accessibility of treatment is necessary. But outreach work is also an opportunity to inform about HIV infection and protective measures like for example needle and syringe cleaning techniques

4.1.3 HIV infection screening

The care system must offer identification of HIV serostatus to the IV drug users and their needle-sharing and sex partners. It has to be provided in general health service or in specialised drug service; and it has to be an voluntary part of outpatient and residential treatment. The HIV test has to be encouraged and confidentiality has to be guaranteed. Pre- and post-test counselling is required for all cases.

4.1.4 Outpatient treatment

The different medical problems of infected drug users makes it necessary that outpatient drug services for infected IV drug users have to be supplemented with specialised medical diagnostic and treatment offers; either by cooperation with other institutions or medical doctors or within the treatment facility.

The incorporation of harm reduction philosophy in the services implies the availability of substitution programmes like oral methadone. Here it is important to introduce „low-threshold“ methadone maintenance treatments characterized by the oriented to reduce morbidity and mortality associated with heroin use rather than to the abstinence of opioid drugs. Some low threshold methadone programmes can offer methadone simply as an inducement to attract drug users into service contact, in order to facilitate harm-reduction education and some reduction in risk behaviours. And although the change from injecting drug use to other safer routes (as oral route) are best treatment goals, the utility parental use of methadone should be studies in research projects as a further way to attract more problematic drug users to the centres.

Substitution programs must be offered on a long-term basis, taking into account that sometimes it might be indefinite. It is important to offer an easy access to the substitution programme avoiding restrictive criteria, being particularly relevant to include HIV-seronegative IV drug users in order to avoid their seroconversion.
But substitution programmes are also suited for injecting drug users who want to give up illegal drug taking in total. So there have to be other methadone programmes that make the cessation of injecting drug-use their main objective. These higher threshold programmes aim to reduce injecting and street drug-use, with defaulters penalised by threats of expulsion from the programme. As such a situation might precipitate the return to more dangerous drug using activity with the allied risks of HIV spread, drug services have to offer two-tiered methadone programmes with different treatment goals, rather than expelling relapers from treatment altogether. Low threshold methadone programmes in order to reduce the morbidity and mortality associated with IV heroin use bear the risk to increase other types of harm, e.g. uncontrolled use of several substances like methadone and alcohol, barbiturates or benzodiazepines. Therefore they require a careful monitoring of the clients and a well-trained staff.

4.1.5 Residential treatment

Residential programmes need to increase their flexibility and lower their thresholds for admission of HIV-infected patients. To meet the needs of the increasing number of infected patients some further organisational aspects have to be considered:

- **Duration of treatment**
  Duration of residential treatment is a particular problem of infected IV drug users. The treatment centres are mostly offering a long-term inpatient setting, usually of 6 to 8 months’ duration. Also only a minority of non infected drug users is motivated enough to voluntarily seek entry to these long-term and demanding programmes. But in the case of infected users there is often a limited life expectancy that hinders them to enter a long-term programme. Because of that short term treatment approaches have to be offered.

- **Medical Care**
  Residential treatment centres are usually not set up to provide the medical monitoring, evaluation, and treatment required by physically ill residents. Related problems involve the question of when to move a sick resident from the therapeutic community to a hospital. It is also a question to what degree the needs of the other clients should be subordinated to the medical and psychological needs of an individual resident with AIDS or ARC.

- **Discharge**
  Therapeutic programme has to be changed in terms of lowering of demands in work and sports, and revision of the catalogue of sanctions especially concerning discharge as a sanction. Here alternatives have to be offered.

4.1.6 Care for non-infected and infected drug users in prison

To reduce the risks of the spread of HIV for imprisoned drug users measures must be taken on two levels. First on the juridical level by avoidance or shortening of prison sentences for drug using offenders. And second within prisons by preventive measures like provision of instruction on the cleaning of needles and syringes, provision of condoms, opportunities for testing on a voluntary basis, improvement of the general hygiene and structures that guarantee an adequate provision of psychiatric, psychological and social support as well as appropriate prescribing and drug detoxification treatments.
4.1.7 Infectious management

The medical assessment must include at least a complete physical examination, and HIV, tuberculosis and hepatitis B and C screening (in the drug service or in the specialist service working together). Care of infectious diseases related to IV use, focused on HIV, hepatitis B and C, and tuberculosis has to be provided.

The tuberculosis infection has to be studied by a Purified Protein Derivate (PPD) skin test for tuberculosis unless they are known to be PPD positive. All cases with a positive PPD must receive a chest x-ray. The cases have to be referred to the appropriate facility (until of infectious diseases in the hospital, tuberculosis clinic, etc.) to provide the necessary follow-up. If the patient is placed on isoniazid prophylaxis, the drug service can be involved in treatment compliance by monitoring daily isoniazid intake (sometimes together with the methadone administration).

4.2 Specialist drug service cooperation with other facilities

The quality of management of problem drug users in other settings (i.e. prison, general hospital) has to be assured. This issue is relevant because these subjects very often are admitted to units of infectious diseases, obstetric wards or residential centres, or are in contact with the general practitioner. These settings, in turn, provide accessibility for treating these patients so that, although the care of problematic drug use is not the main reason to stay in these centres, it is important to take advantage of this situation in order to put them in contact with specialised drug services.

In the case of subjects treated with methadone it is important to offer continuity in methadone treatment in spite they have to be admitted in prison or in other services (hospital departments, residential centres, etc.). On the other hand, methadone treatment may be started in these services, and later continued by drug services. Therefore, general practitioners, hospital departments, prisons and other settings should work together with drug services to provide the best care possible to problematic drug use to avoid HIV infection morbidity.

4.3 Staff

Additional staff for providing substitution, HIV infection management, treatment of emotional disorders and social support are necessary in the drug services.

All medical, psychological, social and nursing staff who provide treatment for HIV infected drug users have to receive a special training that should cover the following topics (Gossop & Goos, 1996):

- „Basic medical and scientific knowledge about AIDS
- Psychological factors associated with behaviour change and resistance to change
- HIV antibody testing
- Prevention
- Effective methods and styles of intervention
- Sexuality
- Groups with special needs (e.g. prostitutes, prisoners, ethnic minorities)
• Family counselling
• Death and dying
• Legal and confidentiality issues“.

Depending on the different professional groups or institutions there are different needs of information and training, so each course has to be designed according to the specific needs.

The training curriculum for administrators has to include different contents except the basic information on AIDS (Gossop & Goos, 1996):
• „Staff issues such as fears of infection and burnout
• Hygiene procedures
• HIV testing policies
• Developing prevention and education strategies for their programmes
• Monitoring the delivery of services
• Developing links with other agencies
• Political and public relations issues
• Cooperation with other administrators“.

Besides training another important need of staff members dealing with HIV infected drug users is supervision. It has to deal with the therapists own anticipatory grief reactions and mourning. In planning for the management of the psychosocial sequelae of HIV infection, it is extremely important to consider how to take care of the needs of staff. AIDS can create a psychological crisis for staff working in drug treatment programmes. They are being asked to attend to the physical, psychological and social stressors of HIV infection among their patients, while their programme policies and practices may be counterproductive for coping with AIDS (for instance working with a restrictive methadone policy, large waiting list ...). In addition, confidentially dilemmas about information of HIV infection to the subject’s relatives might constitute another difficulty in the management. This combination of professional stressors and personal helplessness creates a situation that is ripe for professional burnout.

4.4 Priorities

If resources are limited, priorities have to be in the following areas: Health education related to HIV infection, harm reduction approach (syringe exchange programmes and low threshold methadone programmes) and infectious disease management. If there is a waiting list because of limited resources, populations subgroups with care priorities include prostitutes, patients with active tuberculosis and pregnant women.
5. Consequences for the individual care

In the previous chapter the consequences of the HIV-infection for the care system were described. But additionally it is also necessary to change therapeutic principles and interactions with the individual client. The first section will summarise some basic principles for the individual contact of any type of therapy with problematic drug users (5.1). The second section examines how general measures to improve substance abuse treatment can prevent the spread of AIDS (5.2). Specific preventive strategies and techniques that are useful to reduce infection risks are discussed in the next section (5.3). The final section describes specific measures for HIV infected drug users. Psychological aspects as well as the levels of individual mental health are discussed (5.4).

5.1 Basic principles for the individual care

The traditional approach for the individual care of drug users was heavily influenced by the therapeutic community approach, carried out e.g. in Synanon, Daytop and Phoenix House. The interaction of the therapist with the individual client was predominantly directed by the following principles:

- No interest in early contacts and early motivation for any kind of behavioural change; the client has to „hit the bottom“ as a prerequisite for any therapeutic engagement.
- Confrontation with a large set of fixed treatment rules regulating many detailed aspects of everyday life in a therapeutic community including the dissociation of any drug use from the first day of the therapeutic contact.
- No individualisation according to interests, needs and targets of the individual client.
- No motivation of clients in treatment to reach the defined goals; the major therapeutic agent was pressure carried out by the house rules and the interaction in the therapeutic group.
- Clients had to leave treatment because of relapses or other behavioural problems, any further treatment was refused; the client has to continue to take drugs in order to „hit the bottom“ and to start the full programme again.

Independently of the risk of HIV-infection this approach was already debated and questioned by researchers since about 1975. A need to change this concept in two directions was seen:

- Seeking actively contact to drug users in the drug scene and implementing new motivational techniques to bring more clients in treatment and at an earlier stage in order to avoid the long-term negative consequences of drug use.
- Individualising the abstinence oriented treatment by modifying several aspects like: length and content of inpatient treatment, offering outpatient treatment and accepting a longer period of drug use till abstinence is reached, methadone maintenance programmes.

These two developments, first discussed by researchers, did have very low impact on the traditional treatment service system. Outreach activities and methadone maintenance programmes were implemented in many countries, but the traditional philosophy of standardised long-term residential treatment did not change according to the mentioned principles, instead separated care systems and philosophies
developed, especially by adding outreach work and methadone maintenance programmes.

The identification of the HIV-infection and the AIDS syndrome at the beginning of the 1980s therefore hit the care system for problematic drug users in most cases totally unprepared. The increasing body of knowledge from epidemiological surveys and treatment follow up studies on the one side clearly demonstrated, that the traditional system only reaches a limited amount of drug users and that the majority of these peoples suffered severe health and emotional consequences. The rapid spread of the HIV-infection within the population of drug users on the other side made it obvious, that many traditional essentials of the therapeutic interaction with problematic drug users have to be modified.

Modern care of problematic drug users has to adopt the following basic principles:

• Individual problem analysis
  Drug users differ in factors for the onset of problematic drug use and in the course of their behaviour over time. These differences have relevance for the planning of the type of care and need therefore a careful analysis. Major areas are: Motivation for change, previous relapses, other problems in additions to drug use, future perspectives and helpful as well as disturbing factors in the social environment for therapeutic progress.

• Development of a therapeutic alliance between therapist and client in terms of an individual treatment planning, including individual goals and related activities
  According to the individual’s situation and his willingness for changes the first goals might be very short-term oriented and limited to the improvement of everyday life like offers for day-care, sleeping possibilities, HIV-testing or exchange of syringes and providing of condoms (see the hierarchy of goals in chapter 3.3).

• Motivation for change as a continuos therapeutic task
  After building a therapeutic alliance the therapist has to try from time to time to motivate the client for further changes in the direction of a further distance from the drug scene and the drug seeking behaviour. A further development might be very slow and may need months or years to reach a higher threshold methadone maintenance programme or a drug free treatment. Testing and continuous support of motivation for changes must be an integrated part of the work with problematic drug users, but is often neglected.

• Basic support for drug users
  Despite of all therapeutic engagement some clients might choose to continue their drug use behaviour for a long period of time. But even then some basic support is necessary in order to reduce the risk of long-term health and social problems. There is no untreatable client, and a continuous basic contact might help to motivate some changes even after longer periods of time.

5.2 Improvement of treatment as a general HIV-prevention strategy

A high quality drug abuse treatment is a necessary prerequisite for HIV-infected IV drug users for several reasons. First drug abuse treatment for injection drug users is a form of AIDS prevention: needle use and needle sharing are reduced through the
decrease in drug use brought about by such treatments as methadone maintenance. The reduction of impulsive, unsafe sex acts while intoxicated and disinhibited or associated with prostitution is an indirect outcome of the decrease in drug use and also a form of general HIV-prevention.

Drug use can create a pressured and impulsive lifestyle that does not encourage appropriate concern for safety, either in sexual behaviour or in the hygiene of drug use itself. Drug use may also lower resistance to the virus through impairing cell-mediated immunity. Drugs that have been implicated in immune suppression include opiates, cocaine, alcohol, marijuana, and others. Once infected with HIV, drug users may develop many forms of morbidity associated with HIV. Continued parental drug use may stimulate HIV activation and replication and also places users at risk for developing secondary infections. Finally, psychopathology associated with drug use may worsen the neuropsychiatric and mental health problems associated with AIDS itself. Reducing drug use through treatment can be expected to reduce a number of these risks for AIDS.

Drug abuse treatment for HIV-infected injection drug users is also important because it provides a setting for delivering other services needed by HIV-infected patients. These services include psychiatric care, medical care, social services, and AIDS education.

Treatment of HIV-infected patients in residential as well as in outpatient treatment presents a number of problems and requires the use of novel strategies.

So HIV prevention does not mean just to add some syringe exchange schemes or condom delivery to the traditional treatment system. Instead modern HIV prevention means also to improve the treatment interaction with problematic drug users in all stages of their drug abuse behaviour according to the mentioned principles. These principles have to be implemented in all treatment service facilities.

5.2.1 Outreach work

The main purpose of outreach work is to inform the drug addicts about existing drug services and to encourage them to make use of it. But not every addict is willing to use these services and in that case the outreach worker is the only contact to the service system. How this contact is formed depends on a number of factors as for example the setting of the contact, conditions of the local drug scene, the readiness of the drug addict to listen to etc. But despite of this preconditions one of the main objectives for this contact must be to give information and advice especially concerning AIDS-specific terms. Further condoms and sterile syringes have to be provided by these facilities. Outreach workers can distribute syringes in needle-exchange programmes. Teaching HIV-prevention methods such as safer sex or safer use must play an important part in the routine of outreach work.
5.2.2 Outpatient treatment

Counselling

Due to HIV-infection changes in contents of counselling are required. Treatment advises have to be given according to the changed life situation of infected drug users, that means, patients have to be informed about the possibilities where to undergo a short-term residential treatment, where infected patients with or without symptoms are accepted and where the necessary medical care is guaranteed. Further contents of counselling are primary prevention topics for people at risk and secondary prevention topics for HIV-infected patients, pre- and post-test counselling, psychological issues as for example fear, grief, guilt, depression, denial, anxiety, suicidality as well as social and medical issues (WHO, 1990).

Substitution treatment

Methadone maintenance is provided for patients who have failed in other treatment programmes or for those who cannot or will not enter other forms of treatment. Long-term treatment with methadone is generally effective in greatly reducing injection opiate use and associated criminality and offers a number of benefits for HIV-infected patients like an ongoing, stabile treatment setting in which medical, psychological and social services can be offered in addition to substance abuse treatment.

Methadone programmes of HIV-infected opiate users requires a number of changes from usual treatment approaches. Greater flexibility is needed in the care of these patients. HIV-infected patients generally present more psychosocial problems than other drug users do. Psychological distress is high, especially in the form of depression and suicidality. This makes substance abuse treatment more difficult. HIV-infected patients may therefore need more time than other addicts to „clean up“ their drug use. Other areas needing greater flexibility are treatment duration and dosing strategies for HIV-infected patients. An adequate doses policy (60-120 mg/day but sometimes more if its necessary) is recommended to increase retention rates in treatment and to avoid illegal opioid use. Because of their high levels of psychological distress and physical discomfort, those patients should be treated with higher methadone doses than healthy patients.

Finally, somewhat more tolerance is needed for behavioural problems, although the line must be drawn at violent or threatening behaviour. Because of both the personal health risks and the public health risks are involved, there should be generally made great efforts to avoid treatment termination for HIV-infected patients. It is often a problem for the therapist, where to set some form of limit what is required, even with HIV-infected patients, especially when all other treatment interventions have failed. If the continuation in treatment is judged to be dangerous to patients or harmful to the treatment program as a whole, some patients may eventually have to be discharged. An alternative can be a temporary suspension from treatment, followed by readmission. Suspension is a form of limit setting and informs the patients that they are not complying with treatment expectations.
5.2.3 Residential treatment

Requirements for residential treatment for the individual care are basically the same as listed above for counselling within the framework of outpatient treatment. In addition to that there have to be modifications concerning the demands to the patients during work therapy or sporting activities, sanctions (as already mentioned for methadone programmes, 5.2.1), the preparations for discharge and the involvement of relatives or significant others.

5.3 Specific measures for the prevention of HIV infection

Specific preventive approaches have to focus on two goals: 1. the use of sterile syringes or abstinence from intravenous drug use, and 2. the use of condoms during sexual intercourse. In contrast to other risk groups and the general population, it is more difficult to achieve a preventive behaviour in the group of drug users. Even though problematic drug users know about infection routes and ways of protecting themselves from HIV infection, their coping behaviour and their social background create extremely unfavourable conditions. Possible approaches for an effective prevention in drug addicts are outpatient counselling centres and residential facilities, since local counsellors and therapists are - at least sometimes - on good terms with drug users and therefore can best have efficient talks or take effective measures in the sensitive issues of sexuality and injection equipment hygiene.

Prevention in the field of HIV infection is still done almost exclusively by means of conveying information. However, psychological research has proved that conveying information does not necessarily lead to changes in attitude and behaviour. Yet this is mandatory in order to achieve a long-term change in sexual behaviour and injection equipment hygiene for protection from HIV infection. But most counsellors and therapists feel not up to this task, as - especially in the field of sexual counselling - they do not have adequate training. A large number of studies show that standard preventive measures are only in part effective with drug users, due to the reasons mentioned above.

As a result, specific psychological group programmes to prevent AIDS have been tested in several drug treatment programmes in the USA. Based on these evaluations, one example will be described in the following. This programme takes the necessary step from the pure conveying of information to therapeutically guided prevention and takes into account the standpoints and specific problems of the target group. It demonstrates also the needs in the individual care of problematic drug users to avoid HIV-infection.

The AIPP - an example for a modern HIV prevention programme

The AIDS Prevention Programme (AIPP) is presented in a manual that is divided into five major therapeutic blocks, each related to certain AIDS issues. The contents of those "building blocks" cover the following components: "Basic Information", "Coping with Fear", "Safer Sex", "Safer Use", and "Women and AIDS". The blocks include a series of learning goals and didactic instructions on their implementation. Suggested exercises, home assignments and written materials are also incorporated. Existing
prevention programmes from the United States and Germany were taken into account for the development of the programme. The manual is primarily based on cognitive and learning paradigms and on reflections on the learning conditions of drug users that have been found in the pilot study as well as on initial experiences with the HIV prevention groups.

The implementation of the AIPP requires six to eight two-hour sessions. The use of written material work papers and video films as well as individual home assignments and role playing have been found effective. The use of various work methods and materials is in line with the idea that purely cognitive information has only a limited effect on the attitude and behaviour of a person. A new experience that is self-experienced and self-reflected is more likely to promote behaviour changes than any good explanation about what is wrong and what should be done differently.

**Basic information**
First, the AIPP provides therapists with basic information on AIDS and covers the following issues: epidemiology; the immune system and HIV; the stages of HIV infection; the fight against HIV; and the influence of drugs on sexual behaviour.

**Coping with Fear**
The second therapeutic block of the AIPP deals with the HIV antibody test and high-risk situations. This block provides information on tests and introduces strategies to cope with the fear of infection and of the test results. Cognitive techniques such as reattribution, self-help strategies and problem solving help to control irrational thought patterns and reinforce health-maintaining intentions. Stress management techniques to reduce the stress resulting from testing and the confrontation with a possibly positive test result are introduced. The goal is to achieve an early cognitive confrontation with risk situations and to obtain discriminant stimuli that make it possible to maintain preventive behaviour even under stress.

**Safer Sex**
In the "Safer Sex" block, specific information about high-risk and low-risk sexual practices enable clients to increase their risk awareness. Practical exercises are employed to help clients acquire a positive attitude towards protection, increase their competency in the safe use of condoms, and initiate positive experiences. Particularly important is the social skills training which seeks to help the clients resist their sexual partners’ pressures to engage in risky practices. An analysis of individual risk behaviour is crucial for the adoption of safer sex activities. In this block, clients learn to explore their own risk situations, to recognise internal and external triggers of risk behaviour, and to develop effective strategies to cope with those situations or to avoid them. Role-playing, practical exercises, and homework assignments are suggested as therapeutic tools.

**Safer Drug Use**
The block Safer Drug Use informs intravenous drug users about possible ways to protect themselves from infections caused by HIV-contaminated needles, because a large percentage of clients will relapse. The relapse situation is a special risk situation, which is generally not planned, clean syringes are not available and, in addition, drug addicts find themselves in an emotionally difficult situation.
Women and AIDS
The main focus of the block “Women and AIDS” is on training in assertion skills which allow clients to deal with resistance from male partners. Furthermore the consequences of HIV infection for family planning are discussed.

5.4. Specific measures for HIV infected drug users

Drug abuse treatment of HIV-infected patients faces difficulties resulting from the severity of the multiple problems presented. It is particularly difficult to motivate HIV-infected patients, who may suffer from anxiety, depression, or demoralisation, possibly combined with physical discomfort.

5.4.1 Motivational strategies

Appealing both to altruism and to self-interest are two counselling strategies may help to motivate HIV-infected patients. Counsellors can attempt to evoke a sense of altruism through educational counselling about using and sharing needles can spread HIV from the patient to others whom the addict care about, such as friends and family. The second approach - appeal to self-interest or preservation of health - can also be presented in didactic counselling. This approach addresses the likelihood of increased morbidity associated with continued needle use, because continued parental exposure to foreign antigens may be an activating cofactor for HIV and some evidence that decreased needle use may be associated with decreased morbidity in infected injection drug users.

5.4.2 Psychiatric and psychological aspects

Even without the impact of AIDS, psychiatric and psychological problems are common among drug users. The majority of drug users have other psychiatric disorders. When AIDS, ARC, or asymptomatic HIV infection is added to drug abuse, the risks for psychopathology increase. There are a number of common sources of psychological distress among drug users with HIV disease. Although the stressors tend to be similar to those faced by non-drug-using HIV patients, they are more severe due to the special vulnerabilities of drug users. Some of these sources of distress include awareness of one’s terminal illness (death and dying); losses of health and sexuality and isolation because of having an infectious disease. Psychological problems are particularly important because they can increase drug use. Poor coping skills may lead them to respond to the added stresses of illness by increasing their drug use. Drug users may not have other adaptive mechanisms that are effective enough to control stress, mood disorders and anxiety disorders are among the most common psychiatric disorders seen in drug users.

Psychological support should include strategies for cognitive and behavioural changes and coping strategies for fears surrounding HIV and AIDS. So patients that cannot cope with their problems without help must be mobilised to make use of their own strengths and resources and live a life with and not despite HIV. In order to
prevent dependence in health and social services, patients must be encouraged to continue their work or education and to maintain the contact to their families and friends. Furthermore, interventions to help with grief and loss can be very important for the patients themselves, who usually are particularly vulnerable when their friends or a family member die. Also it may be necessary to assist patient’s family in coping with the impact of HIV.

Psychiatric and psychological disorders among drug users are especially important, in that they are associated with worse treatment outcome, and possibly greater risks of spreading HIV. Psychiatric severity in drug users is a strong predictor of poor outcome in drug abuse treatment. The prevalence and prognostic significance of psychological distress among these patients shows the need for early identification and intervention.

5.4.3 Social aspects

HIV infected IV drug users have far greater needs for social services than „healthy“ addicts do. Social support should involve different levels of intervention many as basic as housing, meals, welfare founds, and transportation. They also need to be assisted with regard to family, laboral and legal problems. With regard to the family level, children are an important problem: Issues of childbearing, child support and custody and the growing phenomenon of orphanhood are major questions that often require an intense and coordinated effort.

In all cases, it is better to provide these services in the drug centres. When subjects should be referred from drug services to the other appropriate facilities, it is important to work in close contact between both services. It is better to bring the services to the patients than patients to services because drug users usually are „lost“ during the transfer of services.

Recently, with the new therapeutic strategies (new drugs, new combinations of drugs, earlier onset of long-term treatment, etc.) HIV infection should be more a chronic disease. This implies that there will be another kind of young chronic population that will need health and social attention and appropriate resources for long-term.

5.4.4 Levels of individual mental health care in HIV infected drug users

Perhaps the most important level of intervention is the provision of concrete forms of practical, material assistance and support. The diagnosis of HIV seropositivity, ARC or AIDS is often accompanied by distress. Patients may experience anxiety associated with the uncertainty they experience about their disease: its severity, its time course, its treatment. Anything that can be done to reduce this uncertainty is of help to patients. Material supports such as assistance with housing, meals, transportation, and health care serve to reduce uncertainty and accompanying anxiety.
A second type of intervention consists of providing patients with helpful information. Education can have a powerful effect in reducing uncertainty and helplessness. Self-help groups are important in reducing isolation. Supportive psychotherapy is another level of mental health intervention. The goal of such therapy is to support the competencies and healthy parts of personality and to support defences and coping strategies.

These mental health interventions may need to follow a case management model, because patients will require frequent contacts, extensive networking with different agencies, and negotiation with a variety of service providers. Often, it is difficult to find treatment settings that can handle the concurrent presentation of psychiatric disorder, drug abuse, related antisocial behaviours, and medical problems. Managing these patients is a growing challenge for the field of mental health. Further work is urgently needed to develop effective models of treatment for HIV-infected drug users.
References


The care of drug users and the treatment system

The epidemics of blood-borne infections among drug users, and particularly HIV-infection, has been one of the major factors influencing public health concerns in many countries of the world. With this publication WHO Regional Office for Europe makes its first attempt to provide the countries of the European Region with an analysis of the psychosocial aspects of this experience in order to increase their capacities to adapt services for HIV-infected drug users at national and local levels.