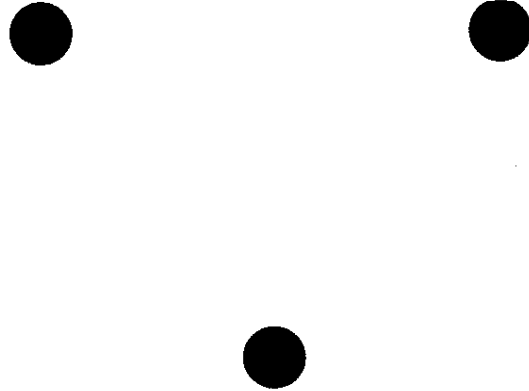


**Best practice in HIV/AIDS prevention and care  
for injecting drug abusers**

The Triangular Clinic in Kermanshah,  
Islamic Republic of Iran



World Health Organization  
Regional Office for the Eastern Mediterranean



Best practice in HIV/AIDS prevention and care  
for injecting drug abusers  
The Triangular Clinic in Kermanshah,  
Islamic Republic of Iran



World Health Organization  
Regional Office for the Eastern Mediterranean  
Cairo, 2004

© World Health Organization 2004  
All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Publications of the World Health Organization can be obtained from Distribution and Sales, World Health Organization, Regional Office for the Eastern Mediterranean, PO Box 7608, Nasr City, Cairo 113/1, Egypt. (tel: +202 670 2535, fax: +202 670 2492)  
email: DSA@emro.who.int.

Requests for permission to reproduce WHO EMRO publications, in part or in whole, or to translate them – whether for sale or for noncommercial distribution – should be addressed to the Regional Adviser, Health and Biomedical Information, at the above address (fax: +202 276 5400; email HBI@emro.who.int.)

**Concept, Design and Printing:** Design Frame Egypt

**Document WHO-EM/STD/052/E/U/05.04/1000**



<b>1. Introduction</b>	9
<b>2. HIV/AIDS and injecting drug abuse in the Islamic Republic of Iran</b> Drug abuse / HIV/AIDS / The emerging dual epidemic / The response to the emerging epidemic	10
<b>3. The response to the dual epidemic in Kermanshah</b> HIV/AIDS and injecting drug abuse / Strategic planning / Establishment of the Triangular Clinic	16
<b>4. The Triangular Clinic in Kermanshah</b>	18
<b>5. Key elements of the Triangular Clinic model</b> The Triangular Clinic model / Advocacy / Integration of services / Adopting a "patient-centric" approach	24
<b>6. Scaling up the Triangular Clinic model</b> Teheran / Prisons / Drug abuse rehabilitation centres	34
<b>7. Increasing coverage</b>	42
<b>8. Future developments</b>	47
<b>9. Conclusion</b>	51
<b>10. Bibliography</b>	52

ADDICTION



## Acknowledgements

WHO/EMRO wishes to acknowledge Dr M. Suresh Kumar, the consultant responsible for writing the report on which this best practice case-study is based, and the officials of the Ministry of Health and Medical Education of the Islamic Republic of Iran and other governmental bodies who facilitated his mission to the country.

WHO/EMRO also wishes to acknowledge the important contributions of Kermanshah University of Medical Sciences and Health Sciences for the establishment and success of the Triangular Clinic in Kermanshah.

WHO/EMRO further acknowledges the financial and other support of UNAIDS and the UN HIV/AIDS Theme Group for the development of this document.

## List of acronyms and abbreviations

AIDS	acquired immunodeficiency syndrome
ART	anti-retroviral therapy
EMRO	Regional Office for the Eastern Mediterranean
HAART	highly active anti-retroviral therapy
HIV	human immunodeficiency virus
NA	Narcotics Anonymous
NGO	Nongovernmental organization
ODCCP	Office for Drug Control and Crime Prevention
PEP	post-exposure prophylaxis
PCP	<i>pneumocystis carinii pneumonia</i>
PLWHA	people living with HIV/AIDS
PPD	purified protein derivative test
STD	sexually transmitted disease
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on AIDS
UNDCP	United Nations International Drug Control Programme
UNODC	United Nations Office on Drugs and Crime
VCT	Voluntary counselling and testing
WHO	World Health Organization



100%



Section 1

Introduction

This is a case-study of the experience in Kermanshah province, in the Islamic Republic of Iran, of providing comprehensive HIV/AIDS prevention and care for injecting drug abusers. In particular, it focuses on the establishment and implementation of the innovative Triangular Clinic. The Clinic seeks to address injecting drug abuse through a harm reduction approach, while also providing services for the treatment of sexually transmitted diseases (STDs) and the treatment, care and support of people living with HIV/AIDS (PLWHA). Prevention and care are integrated across these services and the Clinic has sought to incorporate many of the key elements that underpin successful HIV prevention approaches.

This innovative model is being replicated elsewhere in the Islamic Republic of Iran, including the

establishment of triangular clinics within prisons and in 21 provinces. This is happening within the context of the development of a country approach to tackling the dual epidemic of HIV and injecting drug abuse within the Islamic Republic of Iran. The model is described in detail to highlight the key factors that have led to its success. Hopefully, this may serve as a useful example for those who wish to develop a similar approach elsewhere in the Region, or indeed, beyond it.

Section 2 provides background by describing the dual epidemic of HIV and injecting drug abuse facing the Islamic Republic of Iran, and the national response to the problem. Section 3 describes the situation in the province of Kermanshah and the establishment of the Triangular Clinic, while section 4 provides an overview of its services. Section 5 outlines

the key elements that are the basis for the model adopted by the Triangular Clinic and describes how they have been put into practice. Section 6 looks at the "scaling up" of the Triangular Clinic model through its extension to Teheran, prisons and drug rehabilitation centres. Section 7 outlines some of the key issues involved in further extending service coverage, while section 8 looks at future service developments and section 9 offers some concluding remarks. Throughout the report individual service user case-studies are provided, presented as box texts. It is hoped that these will give some sense of the real life issues faced by HIV positive injecting drug abusers and their families, as well as their experiences and views of service use.

## Drug abuse

The Islamic Republic of Iran borders Afghanistan, Azerbaijan, Iraq, Pakistan, the Russian Federation and Turkmenistan. It has a total population of 71 368 000, about three-quarters (72%) of whom are literate, while a quarter (25%) are unemployed. Life expectancy at birth is 70 years and two thirds of the population is under 30 years, while half are under 20 years. There has been a tradition of opiate use in the Islamic Republic of Iran for centuries. While drug abuse is therefore not a new phenomenon, there has been a change in the pattern of drug abuse from opium to heroin abuse, along with an increase in the injecting mode of consumption.

### Prevalence

The national Drug Control Bureau (2001) estimates there to be between 1 200 000 and 2 000 000 drug abusers in the country. In mandatory urine testing for opiates done for marriage applicants, job applicants and those applying for a driving license (N = 960 000), 2.4% tested positive for opiates. Based on this data, it can be estimated that over 1 000 000 would test positive for opiates nationwide. In a rapid situation assessment (Rassaghi et al., 1999), it was estimated using multiplier techniques that there were about 700 000 opiate users in the country.

In the rapid situation assessment about a quarter of those drug abusers interviewed had a history of admission to drug rehabilitation centres, while 16% of those drug abusers in treatment and 37% of street recruited drug abusers had a history of incarceration (Rassaghi et al., 1999). In 2000, 144 578 drug abusers were arrested for drug abuse and/or drug related offences.

### Drugs abused

The primary drugs of abuse in the Islamic Republic of Iran include opium, popularly referred to as *thariak*, its concentrated residue called *shireh*, the half burnt opium known as *sukhteh* and heroin. The major drug problem is therefore the use of opiates, a consequence of drug trafficking from the opium producing areas of Afghanistan to Europe and the countries of central Asia. While an unknown quantity of heroin is shipped northwards from Afghanistan into the countries of central Asia, it is believed that a vast quantity of heroin enters the Islamic Republic of Iran directly through its eastern borders with Afghanistan and Pakistan. It is then transported overland to exit through the western border. The authorities seize about 10%–20% of drugs entering the country. The fight against drug trafficking costs 12 police lives per month and US \$800 million per year, while 60% of crime is estimated to be related to the use of narcotic drugs.

In the rapid situation assessment (Razzaghi et al., 1999), 73% of respondents abused opium, 39% abused heroin and 22% abused opium residue (*shireh*). Pooled data from drug rehabilitation centres indicate lifetime prevalence rates among inmates of 95% for opium, 44% for heroin and 51% for opium residue. Data from outpatient treatment clinics indicate that 69% abuse opium and 28% abuse heroin.

### Injecting drug abuse

Around 20%–25% of Iranian drug abusers admit having injected at least once in their lifetime. In an unpublished government study undertaken in 2002, covering all provinces, it was estimated that 1% of the population use heroin, of whom 40% inject. It is therefore estimated that there are around 280 000 injecting drug abusers in the country. There is also evidence that injecting drug abuse is a rapidly growing trend in the country. Injecting drug abusers are younger and begin illicit drug abuse earlier compared to non-injectors. Many injecting drug abusers are adolescents, with the initiation into injecting often occurring around the age of 15. In the rapid situation assessment (Rassaghi et al., 1999) 16% of drug-abusing respondents admitted to injecting drugs in the last month.

The drugs injected are: heroin; opium solution; injectable buprenorphine, alone or in combination with drugs such as diazepam; morphine; and other synthetic opiates. The majority of injecting drug abusers use heroin followed in popularity by opium. Syringes and needles are available for a low cost and the majority of drug abusers (80%) obtain syringes and needles from pharmacies. Despite this, about half (49.8%) the injecting drug abusers share needles and syringes with their friends, families and fellow inmates. Needle sharing was found to be more common in street recruited drug abusers than those in treatment (Razzaghi et al., 1999).

## Profile of drug abusers

Iranian drug abusers are generally young, beginning drug abuse in their late teens and early twenties. They are predominantly male and are mostly employed. More than half are married, and most live with their families. Around 40% have a history of incarceration. (Table 1)

**Table 1. Profile of drug abusers in the Islamic Republic of Iran**

Feature	Available estimate
Mean age	33 years ( $\pm$ 10 years)
Sex	> 90% male
Living alone	< 10%
History of incarceration	~ 40% total 20–25% because of drug abuse

Source: Mokri, 2002: 186.

## HIV/AIDS

The first reported case of HIV infection in the Islamic Republic of Iran was in 1986. According to the country's National AIDS Prevention Committee, 4424 cases of HIV infection were identified during 1986–2002 (Figure 1). HIV infection is concentrated among injecting drug abusers, representing two thirds of all cases, and HIV epidemics have been reported among injecting drug abusers and in a number of prisons. Local studies indicate that HIV prevalence among injecting drug abusers is under 15% and among prostitutes is less than 5%. Although HIV prevalence is low (<0.1% of the adult population), with an estimated 20 000 people infected, the potential for rapid spread in the near future driven by injecting drug abuse is very high.

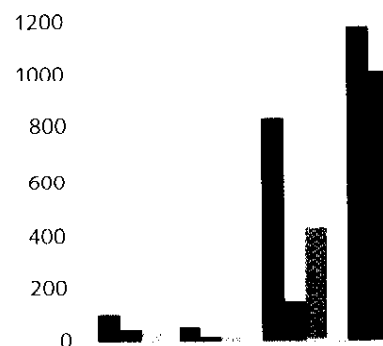


Figure 1. HIV/AIDS cases by year (1987–2002)

■ 1987-89 ■ 1990 ■ 1991 ■ 1992 ■ 1993 ■ 1994 ■ 1995 ■ 1996 ■ 1997 ■ 1998 ■ 1999 ■ 2000 ■ 2001 ■ 2002

### HIV/AIDS surveillance

HIV/AIDS surveillance to date indicates that the country's HIV problem is characterized by concentrated HIV epidemics among injecting drug abusers both inside and outside prisons in selected provinces. In addition to the routine HIV/AIDS case reporting system, the country has made a significant investment in the establishment of a national sentinel surveillance system with 75 sentinel sites being established in prisons, juvenile detention centres and university clinics. Those being tested include: the spouses of those with HIV infection; children of HIV infected mothers; children in correctional facilities; drug abusers in compulsory drug rehabilitation centres; injecting drug abusers who test voluntarily at treatment clinics; prisoners; STD patients; truck drivers; migrants; and those who come for voluntary testing. Between 1994 and 2002, of the 2827 injecting drug abusers who tested voluntarily at treatment centres, 12.6% were found to be HIV

positive; of the 78 264 tested from compulsory drug rehabilitation centres, 1.3% were found to be HIV positive; and 0.6% of the 148 196 prisoners tested were found to be HIV positive. This trend is increasing each year, with most infections occurring among the drug abusers who volunteer for HIV testing and those recruited from compulsory drug rehabilitation centres. Sexual transmission from PLWHA to their spouses is also a concern; of the 646 wives of an HIV positive spouse who were tested, 7.4% were found to be HIV positive. Moreover, 15% of children of HIV positive mothers tested were found to be HIV positive. This transmission can potentially be halted. In addition to this surveillance, qualitative situation assessments have been conducted in selected prisons and among drug abusers in 68 sentinel sites in order to develop an understanding of HIV risk practices and vulnerability in different

contexts. However, no detailed national level contextual or behavioural assessments on HIV/AIDS have been undertaken that could inform an overall national response.

Up to 2002, 4424 HIV/AIDS cases have been identified by the surveillance system. A majority (95.6%) of these were male, while the mode of transmission of two-thirds related to injecting drug abuse (66%), followed by sexual transmission (8.3%).

The total number of AIDS cases reported by the Ministry of Health and Medical Education in 2002 was 271, while the total number reported between 1987 and 2002 was 656. A majority (95%) of these AIDS cases were male and 62% were between the ages of 25–44. Injecting drug abuse was estimated to be the mode of HIV transmission for more than half (54%).

## The emerging dual epidemic

The traditional sniffing, inhaling and smoking of opium (*thariak*), its residue (*shireh*) and half burnt opium (*sukhteh*) are being increasingly replaced by the injecting mode of consumption. Moreover, the easy availability of heroin from across the border in Afghanistan has facilitated a transition from opium use to heroin use. In recent years it has been observed that opiate users increasingly use the injectable form of buprenorphine. The opium poppy ban in Afghanistan in 2000 resulted in a temporary reduction of the opium supply to the Iranian market. The

protracted shortage of opium availability coupled with the progressive shrinking of available stocks of heroin forced drug abusers to switch to injecting heroin. The low purity and escalating price of heroin also contributed to the transition to injecting. Reports from the national Drug Control Bureau (2001) indicate an increasing number of drug related deaths, with 2106 overdose deaths recorded in 2001. This is a 70% increase compared to the previous year and the increase is primarily recorded among heroin users.

Prison settings are conducive to the

sharing of contaminated needles and syringes, and many HIV infections have been reported from prison settings. The rapid situation assessment (Razzaghi et al., 1999) and other reports indicate that sharing is not uncommon among injecting drug abusers. Indirect sharing resembling "backloading" is also frequently observed. Given that there could be 1 200 000 to 2 000 000 drug abusers in the Islamic Republic of Iran, a quarter of whom will have injected at least once, the potential for HIV transmission amongst and from them is very high.

## The response to the emerging epidemics

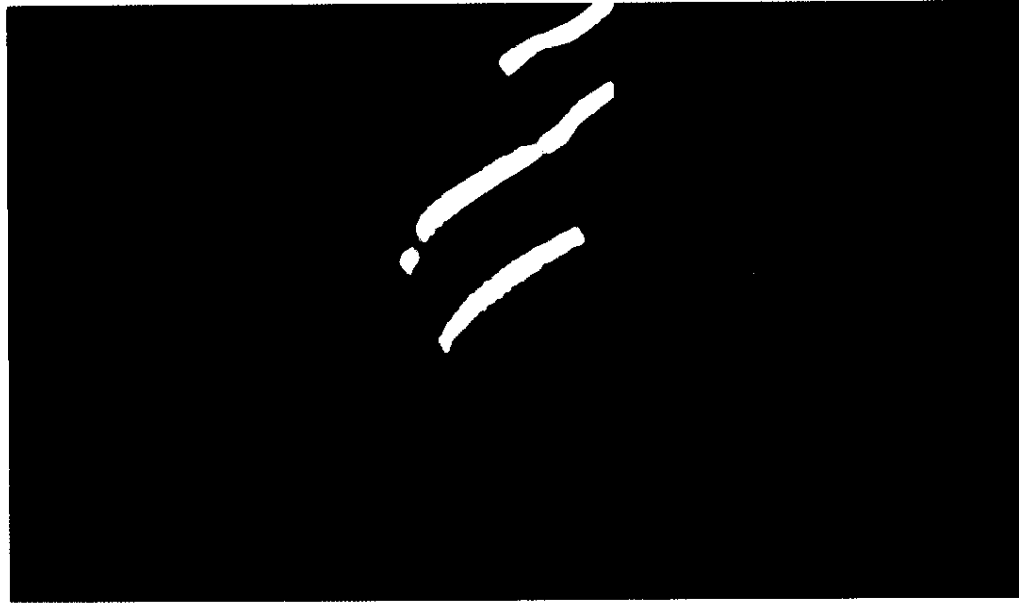
The approach formerly taken in dealing with the drug abuse problem was the arrest and legal prosecution of drug abusers and the control of drug trafficking across borders. However, despite efforts to contain the drug problem, drug abuse increased among the Iranian population and compulsory drug rehabilitation centres were established for drug abusers. These served as compulsory residential facilities for drug abusers, but no drug abuse treatment was provided. The State Welfare Organization, the premier drug treatment and rehabilitation service agency in the country, focused on

abstinence-oriented approaches, but relapse rates were very high. Psychiatric hospitals found it difficult to provide detoxification treatment as they were already burdened with the care of the psychiatrically ill.

In order to develop an adequate response to the rapidly evolving dual epidemic, a rapid situation assessment of injecting drug abuse and HIV in the Islamic Republic of Iran was carried out (Razzaghi et al. 1999). This situation assessment contributed to a better understanding of the problem and hence, to the development of appropriate interventions.

Furthermore, improvement of the surveillance system, in particular sentinel and behavioural surveillance, has proven crucial for monitoring the problem and introducing a timely and adequate response.

In response to this dual epidemic, the Islamic Republic of Iran has now adopted a balanced approach combining: preventive education, particularly for young people; the targeting of those populations most vulnerable, using a harm reduction approach; and ensuring equity of access to treatment and care for PLWHA.



### **National AIDS Committee**

The HIV/AIDS/STD Unit of the Disease Control Department of the Ministry of Health and Medical Education and Medical Education is responsible for national HIV/AIDS strategic planning. The National AIDS Committee has been formed with representatives from several Ministries (such as the Ministry of Justice) and governmental organizations (including the Prison Organization and State Welfare Organization). The priority areas that have been identified are: prisons; injecting drug abuse; youth; STD prevention and control; prostitution; HIV/AIDS treatment and care; migrant and mobile populations; and blood safety. The National AIDS Committee has several sub-committees including those on: advocacy; information, education and communication; harm reduction; treatment and care; and research. Several regional level committees with participation from universities have been formed and are responsible for monitoring and evaluating the programmes.

### **National Harm Reduction Committee**

A national Harm Reduction Committee has recently been established as a response to the urgent need to implement harm reduction approaches to halt the spread of HIV infection among drug abusers. The Committee is comprised of representatives from the various Ministries (such as the Ministry of Health and Medical Education), Prison Organization, State Welfare Organization, Teheran Institute of Psychiatry, selected nongovernmental organizations and UN agencies. The concept of harm reduction has become acceptable to professionals in the country because of the alarming rates of relapse among opiate abusers following treatment, new knowledge gained through the rapid situation assessment supported by the United Nations International Drug Control Programme (UNDCP), the escalation in drug injecting, the reluctance of injecting drug abusers to seek treatment and the HIV outbreak in prisons.

### **UN agencies**

UN agencies, in particular the United Nations Office on Drugs and Crime (UNODC), have played a critical role in advancing drug abuse treatment in the Islamic Republic of Iran. A national drug abuse treatment network has been established with UNODC support and an electronic network of drug dependence centres helps to monitor drug abuse trends in the country. This apart, UNODC has assisted in the establishment of outreach drop-in-centres that provide face to face communication about HIV transmission and drug related hazards. In a country with very little community-based activity for drug abusers, UNODC's role in initiating outreach programmes is noteworthy. UNODC has also recently been supporting pilot methadone programmes in psychiatric hospitals and prison settings.

## Section 3

### The response to the dual epidemic in Kermanshah



## HIV/AIDS and injecting drug abuse

Kermanshah is located in the western part of the Islamic Republic of Iran bordering Iraq and has a large population of ethnic Kurds. The total population of the province is 1 800 000, nearly half living in the provincial capital, Kermanshah city. The city and the province were badly affected by the war with Iraq (1980–88) during which many people lost their lives, sustained injuries and suffered great hardship. The long war caused significant economic problems, unemployment, stressful living conditions and population movements. Stress has long been recognized as one of the most powerful triggers for drug craving and relapse to drug abuse. Survivors of disasters are prone to stress related problems such as post-traumatic stress disorder and depression. People who experience major trauma and those with stress related symptoms may self-medicate with drugs to cope with stress or to relieve painful symptoms.

The first documented case of HIV infection in Kermanshah was in 1995, with a further 58 cases reported in 1996, rapidly increasing to 407 cases in 1997. In 2001, 1228 cases of HIV infection were reported in the province, mainly from Kermanshah city. The majority (81%) of reported HIV infections are among injecting drug abusers. The majority of reported cases are male (97.6%) and nearly half (49%) are single, 27% are married, 11% are divorced or widowed and for 13% the marital status is not known. In terms of age, 35% are aged 30–39, 27% are aged 40–49 and 20% are aged 20–29. For site of report, 62% were detected in prison, 27% at the Triangular Clinic, 6% at blood transfusion centres and 4% at specialist centres.

## Strategic planning

In response to the problem of HIV/AIDS in the province, the authorities in Kermanshah have developed a five year strategic plan concerning HIV prevention, treatment, care and support. The plan outlines strategies in the following areas: research, information, education and communication about HIV/AIDS; blood safety; enhancing epidemiological surveillance; universal precaution practices in all health-care settings; promoting voluntary counselling and testing, harm reduction approaches; STD control; HIV care; capacity building for professionals; and support for PLWHA.

## Establishment of the Triangular Clinic

The growing recognition that HIV infection was increasing among incarcerated injecting drug abusers led the Kermanshah provincial Medical University and Health Department to devise an appropriate response. Initially a large HIV centre affiliated to the University hospital was planned. However, fearing that such a move would stigmatize Kermanshah as the epicentre of HIV in the country, this suggestion was at first opposed. Nevertheless, in October 2000 the Triangular Clinic was established (Figure 2).

The concept of the Triangular Clinic is to tackle three important issues: addressing injecting drug abuse through a harm reduction approach; the treatment of STDs; and care and support for PLWHA. The problems of drug dependence, STDs and HIV are all behavioural in nature and hence the Clinic is a centre for the treatment of behavioural diseases. By grouping the three together, it is possible to organize a comprehensive and integrated service to the patients. Moreover, avoiding direct reference to HIV alone minimizes any associated stigmatization.



Figure 2. The Triangular Clinic in Kermanshah

Section 4

The Triangular Clinic in Kermanshah

The Clinic delivers many services, integrating both prevention and care (Figure 3). Services are provided by a dedicated staff team (Figure 4) for drug abusers, people seeking voluntary HIV counselling and testing, PLWHA and their family members, high-risk populations, patients with STDs and people exposed to potentially contaminated body fluids.

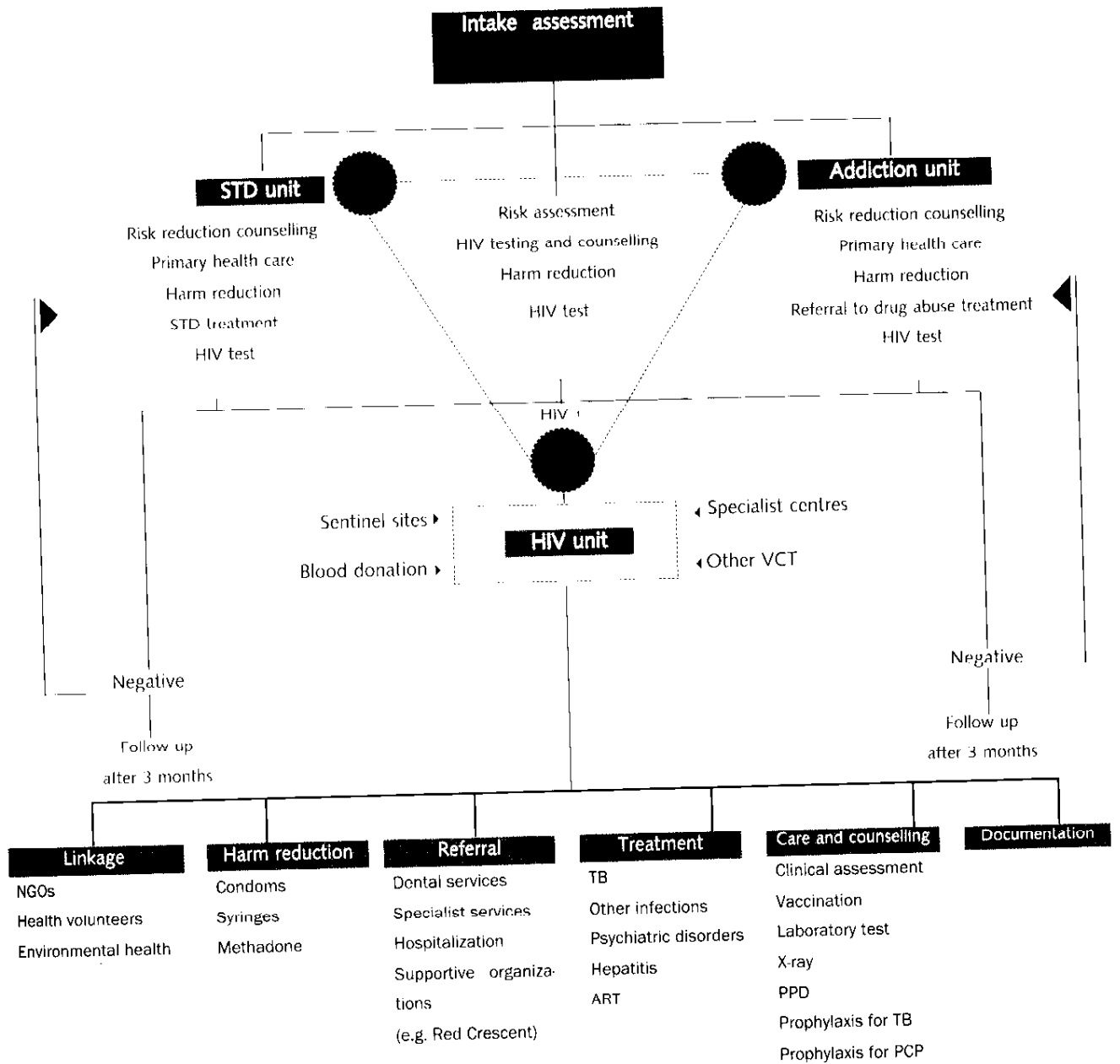


Figure 3. Triangular Clinic services



Figure 4. The staff of the Triangular Clinic in Kermanshah



Figure 5. Counselling family members of PLWHA at the Triangular Clinic in Kermanshah

### Risk assessment and risk reduction counselling

Risk reduction counselling sessions (Figure 5) are provided to

- PLWHA
- affected family members
- drug abusers
- members of high-risk groups
- STD patients

### Voluntary counselling and testing

Voluntary counselling and testing is offered at the Clinic. Up to 2002:

- 835 (62%) were offered HIV tests and of these 22% were found to be HIV positive.
- 80% (1140) of those seeking voluntary counselling and testing were drug abusers. These were 97% male and 3% female, and a majority (72%) were between 20–39.
- 25% were found to be HIV positive. A majority (91%) of these were injecting drug abusers (of 511 injecting drug abusers tested, 31% were found to be HIV positive).

- Of the drug abusers found to be HIV positive, 50% were between the ages of 20–39, 18% were unmarried, 84% were illiterate or had primary level school education, 49% had abused drugs for ten years, 35% were currently injecting drugs, and 38% were currently abstaining from drugs.
- 12% of family members of PLWHA and 13% of people engaged in high risk sexual activity were found to be HIV positive.

### Harm reduction

The Clinic provides risk reduction materials free of charge — condoms, bleach, needles and syringes. Thousands of these materials have been distributed. Serodiscordant couples are provided with condoms on a regular basis from the time of registration at the Clinic and none have seroconverted as yet. Counselling sessions have also been provided to serodiscordant couples to help keep families together and prevent divorce.

### Substance abuse treatment

Methadone treatment is provided at the Clinic and group therapy is provided for drug abusers and their families, while referral is made to the State Welfare Organization for abstinence-oriented treatment.

### Registration at the HIV unit

Most of those who have registered at the HIV unit of the Clinic are referred from the Clinic's voluntary counselling and testing services, while the other cases are referred from prisons, tuberculosis clinics, blood transfusion centres, the private sector and other provinces. Cases of HIV infection are documented at the Triangular Clinic and information relating to known cases is sent to them from the sources of referral, in particular from prisons, blood transfusion clinics, specialist centres and voluntary counselling and testing centres. Of the 1228 cases known to the Triangular Clinic, a majority (91%) are from Kermanshah.

Of the cases known, 41% are under active treatment at the Triangular Clinic and 17% have died. Efforts are made by staff members and volunteers to reach known cases of HIV infection within the province. The documentation officer of the Triangular Clinic maintains a comprehensive filing system and it is possible to identify by the colour of the files those who are in-treatment, lost to follow-up, with co-morbidity of tuberculosis and dead. For 46% of those lost to follow-up the address is not known, while 30% are in prison and 13% have migrated to other provinces.

### Medical services

Medical services provided at the Clinic include:

- Clinical and laboratory assessment of patients
- Diagnosis and treatment of STDs. Vaccinations are also provided, including hepatitis B vaccination
- Treatment of tuberculosis and tuberculosis prophylaxis
- Treatment of opportunistic infections
- Prophylaxis for HIV infected individuals and anti-retroviral treatment (ART) for eligible AIDS cases. The HIV unit has dealt with 79 cases of AIDS. Of these, 13 are receiving ART, 16 have died over time and 63% are receiving *pneumocystis carinii pneumonia* (PCP) prophylaxis.

### Prevention of mother-to-child HIV transmission and post-exposure prophylaxis (PEP)

HAART (highly active anti-retroviral therapy) prophylaxis is provided for pregnant mothers, although so far few women have received it. Health workers occupationally exposed to HIV and wives who have had unprotected sexual contact with their HIV infected husbands have also been given HAART prophylaxis.

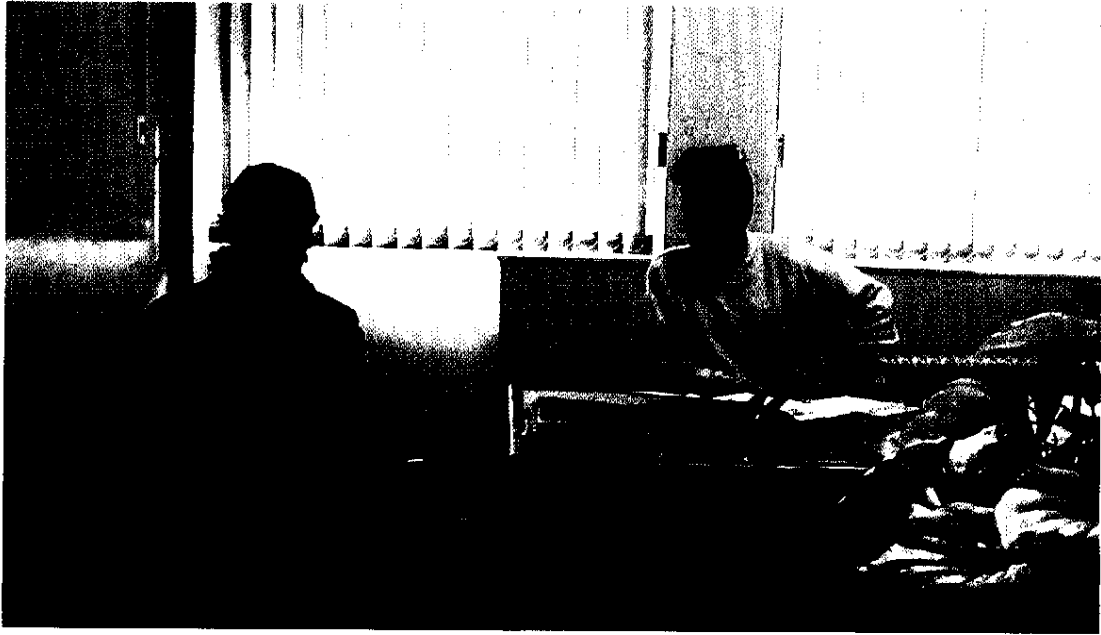


Figure 6. Risk assessment and risk reduction counselling



Figure 7. Workshop organized by the Triangular Clinic in Kermanshah

### **Referral services**

Referrals are made to:

- Specialist services
- Tuberculosis clinic
- Dental services
- Inpatient care for infectious diseases including HIV/AIDS
- Hepatitis clinics

### **Home visits**

The staff members of the Clinic regularly visit the homes of PLWHA for follow-up, although home care is currently limited.

### **Supportive therapies for PLWHA and the affected**

Psychosocial support is provided for PLWHA, including support for a PLWHA group. Affected family members of PLWHA are offered counselling support to enhance their coping abilities and most are willing to receive this help. They are counselled to provide support to PLWHA, with an emphasis on improving communication, disclosure and relationships (Figure 6). Recreational activities for PLWHA and their families and friends are also organized.

### **HIV primary prevention**

Primary prevention activities include the training of student volunteers to raise HIV awareness among their families, friends, neighbours and the general public. The volunteers make referrals to individuals seeking help. Seminars and workshops are held for targeted groups such as soldiers, health workers and teachers (Figure 7). Clinic staff are also involved in raising HIV awareness through mass media campaigns on radio, television and in the local press. In addition, peer education programmes and some outreach is conducted.

Section 6

Key elements of the Triangular  
Clinic model



## The Triangular Clinic model

The problems of drug abusing populations are complex and interconnected. They require an integrated, multifaceted and comprehensive approach. The Triangular Clinic has therefore incorporated some of the key elements of best practice in HIV prevention and care with injecting drug abusers into its approach. These include advocacy to create a public health policy environment that promotes HIV prevention with drug abusing populations, the integration of services and adopting a "patient-centric" approach.

### Advocacy

The legal, political, environmental and structural barriers to implementing HIV prevention programmes need to be considered. Government leadership and commitment to allocate the necessary resources are critical for the success of HIV prevention programmes for injecting drug abusers and other risk groups. It is therefore important to provide policy-makers with science-based evidence that: drug abuse is a chronic, relapsing condition, treatable with psycho pharmacological agents and/or behavioural strategies in a range of settings; that a comprehensive harm reduction approach is a cost-effective way to enable drug abusers to reduce their HIV risks and avert other health-related consequences associated with drug abuse; and that an integrated service that deals with HIV prevention and care is feasible and is attractive to patients.

A multisectoral approach, in particular one that includes the Ministries responsible for public health, drug control, law enforcement and religious affairs, is essential to establishing an effective HIV prevention programmes. Engaging policy and decision-makers in the planning process and action to prevent HIV transmission in drug abusing populations is therefore vital.

### The Provincial Council

From the very beginning efforts were taken to ensure government support for the Triangular Clinic. Realizing that leadership is critical to successful HIV prevention efforts, the founders of the Clinic sought the full support and complete commitment of the provincial Governor. A provincial-level council has been formed for the control of HIV infection in Kermanshah province with the Governor as Chairman and the Disease Control Manager as Secretary. To achieve comprehensive implementation of the HIV prevention approach and to establish a supportive environment, many important agencies and influential individuals have been included on the Council.

Sixteen organizations participate in the Provincial Council, including representatives from the army, Blood Transfusion Organization, Imam Khomeini Welfare Committee, Management and Planning Organization, the media, non governmental organizations, Kermanshah Medical University, Ministry of Culture and Islamic Guidance, Ministry of Education, Ministry of Housing and Urban Development, Ministry of Justice, Prison Organization, Physical Training Organization, Red Crescent Society, State

Welfare Organization, and Kermanshah University. The Provincial Council meets periodically to ensure and sustain the support. The Council advises on the decisions of a city-level committee.

Feedback based on Clinic experience is presented to the Provincial Council on interventions that have been demonstrated to be beneficial. This has helped to sustain and expand the work of the Clinic. The Clinic staff have worked hard to deliver high quality care to drug abusers and PLWHA, and this has clearly had an impact on the thinking of the Council. The involvement of PLWHA and drug abusers in the work of the Clinic has helped to remove the stigma surrounding them and the Council is in favour of involving a representative in the development of HIV prevention and care approaches. Evidence that HIV-positive drug abusers adhere to treatment and involve themselves in constructive ways of reaching out to and helping others has served to correct the inaccurate myths about providing care to them.



Figure 8. Meeting at the Triangular Clinic in Kermanshah

### Coalition building

Regular meetings are held with policy-makers, law enforcement officers, religious leaders, professionals and administrators (Figure 8). As a result, HIV/AIDS has been prioritized and included in high-level policy deliberations. Through their professionalism and dedication, the Clinic staff have helped to remove the fear of working with marginalized communities. They have actively included the police, army and clergy in the advocacy process, emphasizing public health perspectives on treatment and care for injecting drug abusers. This has reduced the potential harm that would be done by the adoption of a rigid approach to the problem, such as simply increasing arrests, which would make drug abusers reluctant to seek help.

Through advocacy by the Clinic, the public health approach to injecting drug abuse has been acknowledged and endorsed by differing agencies and individuals.

An organized effort at advocacy was required to influence decision-makers and community leaders to accept harm reduction as a pragmatic approach to deal with the dual epidemic of injecting drug abuse and HIV infection. The Kermanshah experience is a good example of gaining the confidence of key constituencies through persuasive communication and practical demonstration of the evidence that this approach is both feasible and beneficial. Coalition building was a critical step that took considerable time and energy. Diverse groups were included as coalition members and relationships of

trust were built. Several initial consultation meetings were held to gain consensus and to set clear objectives. Meetings were held periodically and the opinions of coalition partners were carefully taken into account. The role of the partners was acknowledged and credited.

This advocacy helped to get HIV/AIDS included in top-level policy deliberations in the province. The direct involvement of the provincial Governor in decision-making as the Chair of the Provincial Council helped to gather the necessary financial and other support for the Triangular Clinic. Also, it helped in the formulation of a five-year strategic plan for the control of HIV in the province.

## Integration of services

Injecting drug abusers have multiple medical and social problems, and they find it difficult to access many services. They require many things including primary health care, food and shelter, employment and recreational opportunities, drug abuse treatment, and HIV counselling and treatment. Many agencies offer these services and coordination between the various agencies ensures that drug abusers are able to access them. Lifestyle instability can affect adherence to treatment regimens and follow-up, and it is imperative that many of the pressing problems drug abusers face are addressed. A single point of service delivery (a "one-stop shop") is often more appropriate for these patients than fragmented services.

Ways should therefore be found to integrate services. Collaboration between service providers is critical and efforts are needed to establish a continuum of care. One of the most significant aspects of the Triangular Clinic is that prevention and care are closely integrated. Further, in a setting where stigma surrounds HIV infection and those infected, providing a comprehensive range of services (rather than HIV services alone) is a good strategy to attract patients.

### Integrated service delivery

The Clinic is located in a health centre premises, and the location and name of the Clinic helps people to access the centre without the stigma they might face if the service was identifiable solely as an HIV/AIDS service. When new patients are referred, they can find and access the Clinic without difficulty or encountering negative attitudes.

The diverse services provided to PLWHA at the Triangular Clinic ensure a continuum of care. This offers the opportunity to respond to a wide range of needs. Care should contain a wide range of support services. Networking with existing available services is helpful in this. At the minimum, a continuum of care should include:

- clinical management (testing, diagnosis, rational treatment and follow-up);
- prevention of mother to child transmission;
- nursing care;
- promotion and maintenance of hygiene;

- palliative care and health education to home carers on the observance of universal infection control precautions;
- counselling support to reduce stress and anxiety;
- promoting a good quality of life;
- risk reduction to prevent reinfection and new infections;
- social support (referral services for welfare and support activities).

### Referrals

Although it is not possible to deliver all the services required for a patient in a single setting, it is important that a central clinic takes responsibility that the required services are provided to the patients. Referral to appropriate services and ensuring that the needed services are offered is therefore important. In the Triangular Clinic, the staff have established the necessary links with other service agencies including laboratory and other diagnostic facilities, a tuberculosis hospital, drug abuse treatment centres,



Figure 9. Red Crescent volunteer training programme in Kermanshah

infectious diseases clinics, psychiatric facilities, dental services, reproductive health clinics, hospitals for inpatient treatment and other specialist services.

The staff of the Triangular Clinic provide follow-up to patients referred to the above services. Often the medicines that are required in the follow-up or maintenance phase are procured by the staff and given to patients at the Triangular Clinic. This reduces the patients' need to visit different places and pay the associated transportation costs. The comprehensive documentation maintained by the Triangular Clinic staff helps them to understand the multiple problems encountered by patients, the services that have been offered (in terms of referral to investigative, diagnostic and treatment facilities), and the type and dose of various treatment interventions received.

The Clinic has a rigorous data collection mechanism in place and all patients are assessed at intake using standardized instruments. The details of interventions, including the nature of the intervention, dose, frequency and follow-up, are meticulously recorded. The Clinic also periodically analyses the data to understand the intervention process and the clinical outcome. The feedback helps to redesign some of the interventions and to devise new strategies to deal with emerging and urgent problems.

### Coordination of services

One of the significant aspects of the Triangular Clinic is that the various services in Kermanshah are coordinated. The Clinic has taken enormous pains to establish this mechanism, which has ensured that the infected, affected and members of high-risk groups receive the maximum benefits. Key services coordinated with include the Red Crescent Society, Imam Khomeini Welfare Committee and the State Welfare Organization.

### Red Crescent Society

This international organization provides several services in Kermanshah: financial and material support to PLWHA, HIV counselling for those engaged in high-risk behaviour and a volunteer training programme in primary prevention (Figure 9). The Triangular Clinic supports this by facilitating the training and providing information. Volunteers attend the Clinic to help with referrals.

### Imam Khomeini Welfare Committee

The Imam Khomeini Welfare Committee offers support to the needy. The Triangular Clinic liaises with them in order to gain material and other support for clients, in particular for women who have

lost their HIV infected partners and are struggling financially. The Committee provides ten housing shelters for widowed women, financial support for some of the affected and educational support for children. The members of the Committee visit the Clinic regularly to learn about the needs of the women.

### State Welfare Organization

The State Welfare Organization provides inpatient and outpatient treatment and rehabilitation services for drug abusers. The Triangular Clinic regularly makes referrals to their abstinence-oriented treatment programmes.

Service user **case-study 1**

Farah,\* age 40, is the widow of an injecting drug abuser who died of AIDS-related illness. Her husband, who was injecting for nearly 12 years, had very erratic and violent behaviour. He forced his daughter into a difficult marriage with another injecting drug abuser culminating in her suicide (she doused herself with oil and set herself on fire). Following her husband's death, Farah attended the Triangular Clinic in Kermanshah, where she was provided with voluntary counselling and testing, and found to be HIV positive. Although she is currently well, she is concerned about her future. She is living with her son and looking for a job so she can support herself. She has been referred by Clinic staff to the Red Crescent Society and the Imam Khomeini Welfare Committee.

\* Not her real name.

Service user **case-study 2**

Samira,\* age 30, is a widow who lost her husband, an HIV positive injecting drug abuser, a year ago. On the advice of staff at the Triangular Clinic in Kermanshah, she attended the voluntary counselling and testing services. She was shocked to discover that she was HIV positive. Clinic staff provided her with psychological support to help her cope with the situation. She fears discrimination and eviction if she reveals her HIV status to others. Currently unemployed and living in rented accommodation, she is finding it difficult to manage and to look after her daughter. She is receiving financial and material support from the Red Crescent Society.

\*Not her real name

Service user **case-study 3**

Soraya,\* age 31, has a 6-year-old son and is divorced from her former husband, an HIV positive injecting drug abuser. Voluntary counselling and testing were offered to her at the Triangular Clinic in Kermanshah and she was found to be HIV positive. With the help of the counsellors at the Clinic, she is coping well and is independently managing a small business. She feels that the Clinic is her home and with their help is seeking accommodation from the Imam Khomeini Welfare Committee.

\*Not her real name.

## **Integrating prevention and care**

An innovative model has been conceptualized that addresses three critical issues in drug abuse intervention: harm reduction, STD treatment and HIV care. The offering of integrated prevention and care services to drug abusers is extremely beneficial. The Kermianshah Triangular Clinic illustrates the importance of incorporating several key principles of HIV prevention for drug abusers to ensure a successful programme. By offering a user-friendly service, operating at hours that are convenient to service users and being located in a place that is accessible, they have managed to attract and retain the "difficult-to-access" population of injecting drug abusers.

The Triangular Clinic has managed to

attract HIV positive drug abusers, an important group in maintaining the HIV epidemic, to its prevention and care services. Interventions that help PLWHA to avoid risk behaviour are highly important to long-term HIV control. No intervention has been shown to be more effective in reducing HIV transmission risk behaviour than voluntary counselling and testing. Behaviour change among PLWHA may have a substantial impact on HIV incidence by removing them from the risk environment.

A majority of HIV positive drug abusers attending the Clinic have substantially changed their risk behaviours by: giving up drug abuse; stopping injecting; stopping

the sharing of injecting equipment with others; using sterile injection equipment every time they inject drugs; adopting safe sexual practices; and bringing spouses and injecting partners to the Clinic. One of the three key purposes of the Triangular Clinic is to address sexual transmission of HIV, through promoting condoms and the early diagnosis and treatment of STDs. By addressing the sexual risk behaviour of drug abusers and through management of STDs, HIV transmission from injecting drug abusers to spouses and sexual partners can be reduced. This targeting of HIV positive drug abusers is important for the control of the rapid spread of HIV infection.

#### Service user case-study 4

Arash,\* age 40, is divorced with one child, and has been attending the Triangular Clinic in Kermanshah for the past 6 months. He started abusing drugs while serving as a soldier in the army, at the time of the war with Iraq. He shifted from opium to heroin use and eventually started injecting due to the escalating price of heroin, although he does not recollect sharing needles and syringes with others. He was arrested for heroin possession and while in prison he stopped his drug abuse. Tattooing was very common in the prison and he was tattooed while there. His wife left him following his arrest and when he came out of prison he had unprotected sex with prostitutes. At the suggestion of a friend he started coming regularly to the Triangular Clinic to obtain needles and syringes. While attending the harm reduction services, he was counselled to seek voluntary testing. He was tested at the Clinic and found to be HIV positive. A comprehensive health assessment was made, and he receives regular support and counselling from the Clinic. He likes the counselling and is impressed that the staff visit him at home and also take care of the health of his child. He has stopped injecting heroin and is currently consuming oral opium (*thariak*).

He thinks that interventions focusing on drug abuse and HIV prevention should be made available to soldiers in the army, and that interventions in prisons should also address the risks related to tattooing and sexual transmission.

\*Not his real name.

## Adopting a “patient-centric” approach

The approach of the Triangular Clinic is “patient-centric” rather than “disease-centric”. This is important when dealing with marginalized populations that have complex problems that can make them “hard to reach”. Attention needs to be paid to the factors that hinder their access to services and to the range of different needs that service users have, not only their medical needs. Empowering these populations and their families can have significant benefits for HIV/AIDS interventions with injecting drug abusers.

### A non-judgemental approach

Injecting drug abusers and HIV/AIDS are surrounded by negative attitudes, stereotypes and stigma. A non-judgemental approach in the provision of services to injecting drug abusers and

PLWHA is therefore critical to the success of interventions targeting these marginalized communities.

A notable feature of the services provided at the Triangular Clinic is the accepting attitude and dedication of the staff. Their compassion and commitment is manifest in many ways. The complex needs and problems of the patients are well understood by the staff, who are flexible and pragmatic in their approach. Staff make regular home visits and respond to the needs of patients. This makes patients feel valued. The Triangular Clinic is seen by most patients as a “home away from home” and is a place where they feel secure, protected and wanted.

At the same time, staff members are careful not to foster dependency and strive hard to facilitate independent living

and coping skills. Most staff members serve as “mirrors” to reflect the problems of drug abusers. PLWHA and those affected, and provide guidance and support. Important elements of the counselling offered to individuals include problem solving, increasing self-efficacy, enhancing coping skills and the provision of support.

### Needs-based services

The response to the problems of drug abuse and HIV should be based on assessed needs and should be appropriate to cultural, ethnic and other forms of diversity. Specific populations such as young injecting drug abusers, prison inmates, street children and certain ethnic groups require interventions tailored appropriately to their assessed needs. It is

important to see “needs” in terms of people’s own definitions and priorities. Providing multiple intervention strategies is necessary to enable drug-abusing populations to change behaviour and reduce HIV transmission risks. No single intervention will be equally effective for all drug-abusing population sub-groups or at all stages of the HIV epidemic.

The Triangular Clinic attracts the most marginalized communities such as drug abusers, persons who have been incarcerated and prostitutes. Services are not pre-determined but attend to their priority concerns. Real life problems can potentially interfere with patients making full use of the medical services offered and all efforts are taken to address these.

## Involving PLWHA

It is important that the voices of the infected and the affected are heard. This is very useful in the design, implementation and evaluation of HIV prevention and care activities for injecting drug abusers. Their engagement and involvement leads to better quality programmes that meet their needs.

The Triangular Clinic has facilitated the organizing of a support network for PLWHA and their friends (Figure 10). The network is being registered as a nongovernmental organization, called the Society of Love and Hope (*Anjoman e Mehr o Omid*), and the members meet regularly within the premises of the Clinic. The main objectives of the network include: providing advice, help and support for PLWHA; providing information about addiction and related hazards; utilizing existing resources and services efficiently; creating opportunities for recreational and cultural activities for members; and organizing funds to sustain the support activities.

Their meetings are held in a separate room in the centre that has been offered exclusively for their activities. HIV positive drug abusers discuss their various concerns in small group meetings. The meetings give them the opportunity to share and express their ideas and feelings. The Clinic organizes a regular training programme for the members that addresses education about HIV transmission and prevention, communication and leadership skills,

acquisition of harm reduction materials, organizing care and support for PLWHA, links with other support services and care of the family. There are about 30 members and a majority of them are HIV positive. Many of its members have a long history of drug abuse, incarceration and are extremely knowledgeable about drug abuse in the province. This is the first group in the province for PLWHA and has the potential for expanding the scope and nature of its work. Though the organization is an independent, self-supporting network, it enjoys considerable support from the Triangular Clinic.

The Clinic has also facilitated a camp for PLWHA, their close friends and family. The group undertook a mountaineering expedition and learnt about healthy lifestyles. The camp helped to strengthen bonds and reduce the fear and stigma surrounding the disease. Participants recognized that they were not “alone” in their problems and the sense of “togetherness” helped them to develop a positive outlook, appreciate the importance of mutual support and cope with stress.

### Service user case-study 5

Mina,\* age 34, is married with three children. She was asked to attend the Triangular Clinic in Kermanshah where her husband, an HIV positive injecting drug abuser, was receiving ART. She was counselled, tested and found to be HIV positive. Her husband is unable to work due to sickness, which has caused significant economic problems for the family. Moreover, their eldest daughter overheard a heated argument between the parents and discovered that both were HIV positive. Finding this knowledge very difficult to cope with, she was visited by Clinic staff, given counselling and referred to psychological support at the Clinic. She is now adjusting well to the situation. Mina is keen to get a job and find housing support, and is being supported by Clinic staff in this.

\*Not her real name.





Figure 10. Meeting of the support network for PLWHA and their supportive friends at the Triangular Clinic in Kermanshah

### Services for affected individuals

The Triangular Clinic also provides services for HIV affected individuals. The family members, and in particular the spouses, of HIV infected injecting drug abusers therefore also attend the Clinic. They are initially offered voluntary counselling aimed at risk assessment and are then provided with appropriate risk reduction counselling. Risk reduction resources such as condoms are available to them and they are encouraged to discuss issues relating to sexuality and pregnancy with the counsellors. Sexual transmission of HIV is addressed and early diagnosis and treatment of STDs promoted. Voluntary testing and counselling is available to them and those testing positive are provided with

the necessary services.

Widowed, divorced or separated spouses face significant economic hardships and providing advice on income-generating activities is important. By coordinating with agencies such as the Red Crescent Society and the Imam Khomeini Welfare Committee, and other governmental agencies, the Clinic helps spouses to obtain economic and other material support. Concerns relating to housing, employment, food and children are prioritized and have to be accorded immediate attention.

## Scaling up the Triangular Clinic model

## Teheran

The success of the Triangular Clinic in Kermanshah has led to the extension of the model to other parts of the country, including Teheran, demonstrating that the model can be replicated. Achieving adequate geographic coverage is important within a national approach to the dual epidemic of HIV/AIDS and injecting drug abuse.

### West Teheran Health Centre Triangular Clinic

The Triangular Clinic in West Teheran Health Centre formerly operated as a hepatitis prevention and treatment clinic (Figure 11), but now offers HIV care, STD care and harm reduction services for drug abusers. Patients at the Clinic are largely referred from drug abuse treatment centres and are primarily referred for HIV counselling and care (Figure 12). Good liaison exists between the Clinic and various other agencies including welfare organizations, Nawab Psychiatric Hospital, Teheran Psychiatric Institute, the hepatitis treatment clinic and university hospitals



Figure 11. Triangular Clinic in West Teheran Health Centre



Figure 12. HIV counselling at West Teheran Health Centre Triangular Clinic

#### Service user **case-study 6**

Fard,\* age 30 and unmarried, heard about the West Teheran Health Centre Triangular Clinic through a drug-abusing friend and his main purpose for attending is to obtain syringes and needles. Though obtaining syringes from pharmacies is easy, the type he prefers are expensive and not available everywhere. He has shifted from injecting heroin to injecting opium, as heroin is more expensive in Teheran. He has shared injecting equipment in the past, but a year ago he was offered HIV counselling and testing in a treatment centre and was found to be HIV negative. Since then he has not shared with anyone or had unprotected sex. The Clinic provides him with harm reduction materials, including syringes, needles and condoms. He is willing to have another test at the Clinic and to be referred to a treatment centre for abstinence-oriented treatment. He has been advised to come for voluntary counselling and testing, and offered referral for inpatient treatment at Nawab Psychiatric Hospital.

\*Not his real name.

#### Service user **case-study 7**

Habib,\* age 35, is a male migrant from Kermanshah who has been attending the West Teheran Health Centre Triangular Clinic for the past few months. He is single, homeless and works as a construction worker. He has been abusing opium (*thariak*) for the past 12 years, but the escalating cost and his increasing drug tolerance has made him shift to injecting. He prefers opium to heroin, which is too expensive for him. He shares injecting equipment and because he keeps changing jobs due to the temporary nature of his work, he often abuses drugs with different groups of people. When he approached the State Welfare Organization to stop his drug abuse, he was found to be HIV positive. Referred to the Clinic, he was assessed in detail and has been advised to start ART. He is also being helped by the Clinic for hepatitis C infection. Although he feels distressed, he feels that the psychosocial interventions he has received have been of immense benefit to him.

\*Not his real name.

#### Service user **case-study 8**

Saeed and Jamileh\* have been married for 2 years. Saeed started abusing drugs while serving in the army. After leaving the army he was arrested for drug possession and imprisoned for 4 years. While in prison he stopped drug abuse, but was tattooed. After developing continuous diarrhoea, an HIV test was done and he was found to be HIV positive. Jamileh was referred for voluntary counselling and testing, and was also found to be infected. Both are now registered at the West Teheran Health Centre Triangular Clinic and are receiving counselling and support services from the staff. Saeed is receiving ART, which has improved his health and he is contemplating seeking work. They feel comfortable attending the Clinic and are keen to meet other couples facing similar problems and to initiate a support network. At present they are supported by Saeed's family who they have not revealed their HIV status too, fearing rejection. Jamileh is worried about her future and the possibility of having an infected child, but is grateful for the excellent support that she receives from staff members.

\*Not their real names.



## North Teheran Health Centre Triangular Clinic

The Clinic was established recently in an existing health centre in North Teheran. The centre provides family planning, mother-and-child care, and vaccination services during the mornings and services for drug abusers and PLWHA in the afternoon. The Clinic was established at the health centre to provide better access for patients seeking services and to address the stigma attached to HIV and drug use. The Clinic primarily offers voluntary counselling and testing, and provides care and support services for HIV positive injecting drug abusers and their partners.

### Service user **case-study 9**

Zia,\* age 35, is a former drug abuser, who is attending the North Teheran Health Centre Triangular Clinic. He was found to be HIV positive by the Kermanshah Triangular Clinic, where he received help until he moved to Teheran. When he discovered that he was HIV positive, he stopped his drug abuse and accepted treatment. He is now an active member of Narcotics Anonymous (NA), which has helped him to abstain from drug abuse.

He likes to attend the Triangular Clinic as he feels at ease with the staff, who he sees as being more like family than treatment professionals. As he is a good communicator, he acts as a peer educator and gives talks about injecting drug abuse and its related harms. Though he is a firm believer in the abstinence-oriented NA approach, he is pragmatic and believes that it is impossible for many drug abusers to stop abusing drugs. He therefore advocates harm reduction, in particular in prison settings where he believes he contracted HIV infection.

He believes that addressing the sexual transmission of HIV by injecting drug abusers is critical to preventing HIV infection in the general population, and therefore thinks that condoms should be widely promoted. He thinks that education through the media is crucial in HIV prevention efforts, and having obtained permission from NA to break his anonymity, he has appeared on television to disseminate substance abuse and HIV-related public health messages.

\*Not his real name.

## Prisons

There are 220 prisons in the Islamic Republic of Iran with a prison population of 163 989 inmates in 2001 and an annual turnover of 700 000. Nearly a half of all prisoners (47%) are in prison for drug-related offences. Law enforcement agencies have traditionally taken a law enforcement approach to drug abuse, including the imprisonment of drug abusers and the use of compulsory drug rehabilitation centres. Until recently, the prison authorities opposed harm reduction and HIV prevention measures inside the prisons. However, the rising HIV infection rates amongst prisoners, the demand for drug-related services in prisons and the ensuing debates have convinced them to look at the problem from a new perspective. HIV outbreaks in prisons clearly indicate that implementing harm reduction programmes inside prisons and compulsory drug rehabilitation centres is central to the control of HIV in the country.

Data from Ghazel Hesar prison demonstrates the importance of setting up services for injecting drug abusers in prisons: the prevalence of hepatitis C in the prison is 78% and of hepatitis B is 5%; 30% of

prisoners continue to abuse drugs inside the prison; and 20% of prisoners inject inside the prison. As it is not easy to find sterile injection equipment inside the prison, it is not uncommon for prisoners to make their own injecting equipment, popularly called *teshtesheh*, meaning "injection pump". Made from small shampoo containers, these injection pumps are shared by large numbers of drug abusers within prisons.

As HIV poses a significant public health threat, it is desirable to have a public health approach to injecting drug abuse and HIV/AIDS. Effective prevention measures that are found to be useful in the community such as methadone maintenance, needle exchange programmes, condom distribution, voluntary counselling and testing, and HIV related education are also useful in prison settings. Since drug abusers spend considerable time inside prison settings, there is an excellent opportunity to implement interventions that aim at the reduction of injecting drug abuse and sexual risk behaviour. The inclusion of the head of the Prison Organization in the National Harm Reduction Committee and the lessons learnt from the experience of the Ministry of Health and Medical Education have influenced the

response of the prison authorities to the problem. As a result, a pragmatic harm reduction approach is now welcomed.

Accordingly, the Prison Organization has now initiated and established several triangular clinics in prisons. Starting with the Triangular Clinic in Kermanshah Central Prison, there are now six triangular clinics in prisons across five provinces (Ghazel Hesar and Rejaei Shahr in Teheran province, and one each in the provinces of Kermanshah, Booshehr, West Azarbaijan and Ghom). Two more provinces (Kerman and Hormozgan) are currently establishing triangular clinics in their prisons, and ten more provinces have plans to do so. Advocacy has been critical to the establishment of triangular clinics in prisons in different provinces, while finance is the main barrier to establishing more clinics.

## Kermanshah Central Prison

Kermanshah Central Prison is the biggest prison in the province. The prison has about 3000 prisoners at any given point of time and about 12 000 are admitted each year. About half the prison population has been incarcerated for drug-related offences. Among the drug abusers, heroin is the main drug of abuse and 60%–70% of them inject. The first HIV infection was observed in the prison in 1996. A triangular clinic was established within the prison in March 2002 based on the same concept as the triangular clinics of the Ministry of Health and Medical Education, to provide interventions for drug abuse, STD treatment and HIV care.

Newly admitted prisoners are provided with an educational session on HIV prevention through an audiovisual presentation. Television sets are available in all wards of the prison and HIV prevention messages are disseminated via

them at regular intervals. These educational programmes, along with displays and pamphlets containing HIV prevention messages, aim at increasing knowledge of harm reduction measures. The Clinic organizes harm reduction programmes and a few trained peer leaders carry out peer education focusing on HIV interventions for drug abusers. They are taught about the hazards of injecting, safe injecting and safer sex. The authorities are keen to provide methadone treatment within the prison if permitted by the government. Since tattooing is common in the prison, they provide the prisoners with "transfer stickers" that imprint a temporary image on the skin without the use of needles as an alternative to prevent needle infection. Condoms are distributed to prisoners at the time of conjugal visits by spouses.

HIV positive prisoners detected by the

prison's voluntary counselling and testing service receive a comprehensive assessment by the Clinic medical team. Other health problems such as STDs, tuberculosis and psychiatric disorders are also taken care of. PLWHA stay with other inmates and are treated with dignity and care. Spouses are notified about their husband's HIV status once consent has been given and they are referred to the Triangular Clinic in the city for voluntary counselling and testing. HIV positive prisoners are reported to the external Triangular Clinic for further follow-up upon release. The social workers attached to the prison liaise with the Triangular Clinic of the Ministry of Health and Medical Education to ensure adequate coordination between the two clinics.





### Service user case-study 10

Amir,\* is a male unmarried injecting drug abuser, age 36, who has been attending the Triangular Clinic in Kermanshah for the past 18 months. He is unemployed and has only drug abusing friends. More than a decade ago, he started abusing opium and then heroin, using non-injecting methods. While in prison he was taught to inject by his peers. Sharing was the norm, using injection pumps made within the prison, with up to 50 people sharing the same injection pump. At this time he was unaware of HIV and its modes of transmission. He was found to be HIV positive during random sentinel surveillance, notified of his HIV status, and referred on release to the Clinic by the prison authorities.

At first, he was reluctant to seek help due to fear of discrimination. To his surprise, he found the Clinic to be completely different from what he feared – the staff were friendly and the atmosphere was non-threatening and supportive. The quality of the service was highly satisfactory and he began to attend the Clinic regularly. Despite his continuing drug abuse, he was not refused the services of the Clinic, which provides him with clean needles and syringes. He has also received tuberculosis treatment at the Clinic. He has hepatitis C infection and has been advised to avoid alcohol completely and has been counselled about hepatitis transmission to others. Currently he uses buprenorphine by injection, which he obtains from black market circles. After becoming aware of his HIV status, he stopped sharing injecting equipment with his friends and now injects alone. He prefers injecting buprenorphine because it does not require a companion to prepare and share the drug, which can be used by him alone.

He believes that most drug abusers are likely to share within prison. Drugs are smuggled into the prisons by people who swallow heroin filled capsules that they later evacuate. Injecting is common in prison because it is more economical and efficient to inject. Moreover, inhaling heroin is cumbersome and there is a greater likelihood of discovery by the prison wardens. HIV awareness used to be very low in the prisons and the non-availability of syringes and needles compelled the prisoners to devise their own equipment. He believes that interventions in prisons are vital for the control of HIV infection among drug abusing populations.

\*Not his real name.

## Drug abuse rehabilitation centres

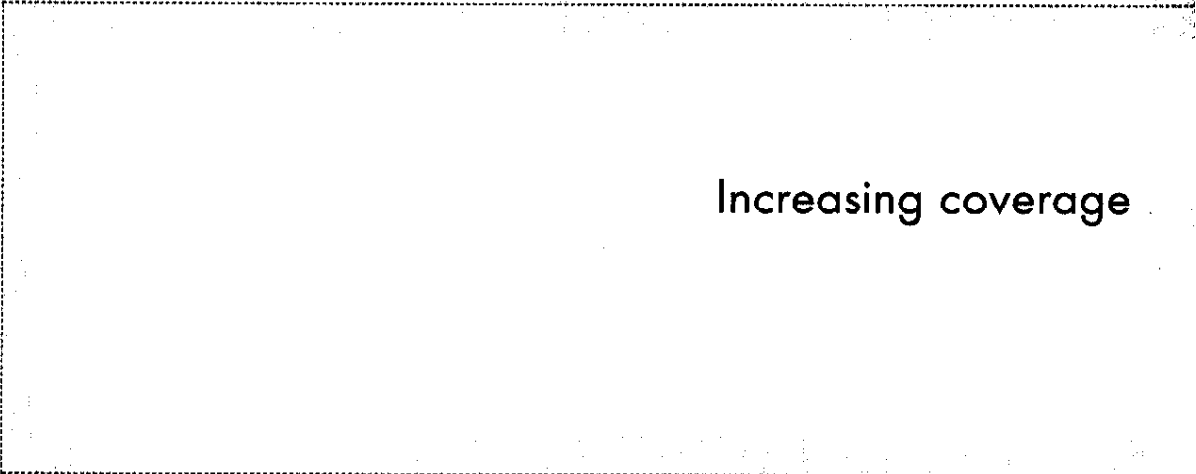
Whereas individuals arrested for drug abuse-related crimes are punished and sent to regular prisons, those who are solely drug abusers are required by the courts to attend compulsory drug abuse rehabilitation centres. It is important to provide drug abuse treatment and HIV interventions within these settings. As in prisons, drug abuse rehabilitation centres facilitate the sharing of injecting equipment due to the availability of drugs but difficulty in obtaining clean injection equipment. Since states of withdrawal induce individuals to obtain drugs, which they will use by any means available, it is likely that sharing is common in these

circumstances. Hence, providing drug abuse treatment at the time of admission is vital. Methadone is useful in these settings to ensure the prevention of injection by drug abusers. Moreover, the centres are ideal settings in which to provide psychosocial interventions. Peer interventions focusing on harm reduction can also be initiated among the inmates. The authorities are therefore keen to initiate harm reduction initiatives within these centres.

## Drug Abuse Rehabilitation Centre in Kermanshah

The Drug Abuse Rehabilitation Centre in Kermanshah, where about 920 persons are undergoing compulsory rehabilitation for drug abuse, admits around 5000 drug abusers each year, staying for up to 5 years. A triangular clinic has recently been established to address the following issues: HIV testing and counselling; treatment of opportunistic infections and tuberculosis; prophylaxis for tuberculosis and PCP; STD treatment; and referral at the time of discharge to the triangular clinics run by the Ministry of Health and Medical Education.

**Section 7**



**Increasing coverage**

A sufficient number of drug abusers have to be reached to have an impact on the HIV epidemic. Preventing new HIV infections in drug-abusing populations depends on reaching large numbers of the target population (coverage) and rapidly making evidence-based interventions available, accessible and affordable.

## Outreach

Drug abusers are a "hidden" population, partly because drug abuse is criminalized and drug abusers fear imprisonment. Effective HIV prevention with injecting drug abusers requires reaching these hidden populations and providing access to the means for behaviour change. To achieve this, services need to be provided in different places and settings (such as streets, drug using and dealing venues, health centres, pharmacies, substance-abuse treatment centres and prisons) that are accessible for drug abusers.

Injecting drug abusers use abandoned buildings and uninhabited areas to prepare and abuse drugs (Figure 13). Used, blood-stained syringes are found abandoned in these places. It is important to collect the used syringes and leave boxes of fresh needles and syringes, cotton and water in these places to reduce

the possibility of sharing with contaminated injecting equipment. Therefore, outreach workers need to offer harm reduction services to drug abusers at these "hidden" places.

One of the limitations of the triangular clinics is that coverage is not adequate. Most drug abusers access the clinics by word-of-mouth. The most efficient way to reach the majority of drug abusers with comprehensive HIV prevention efforts is through outreach. However, the outreach carried out by staff at triangular clinics is currently limited. In many countries, individuals with a drug abusing background carry out the outreach and deliver harm reduction services. These can be recruited from drug abusers seeking treatment at the clinics. Many drug abusers have expressed keenness and an interest in doing outreach.

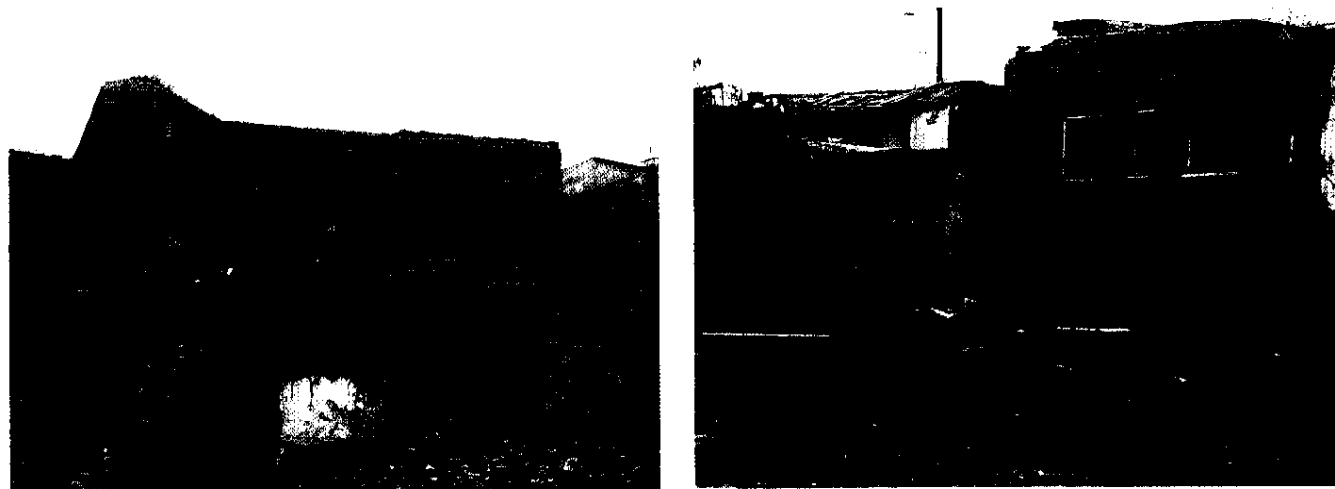


Figure 13. Venues used by injecting drug abusers to prepare and use drugs



## Peer education

Peer leaders have a greater influence than professionals on the HIV-related behaviours of their friends, relatives and sexual partners. They are able to enter a diversity of settings across a wider geographic area and can be encouraged to educate their drug and sexual networks. They are also cost-effective. Training injecting drug abusers as HIV prevention peer educators is a means to empower the members of these communities to achieve community-wide risk reduction. Peer educators can also be trained to provide harm reduction messages and materials in prisons, rehabilitation centres and correctional settings.

Supporting network interventions and drug abuser involvement in prevention is therefore important. Injecting drug abusers who are indigenous to the community can be recruited and trained to serve as peer outreach workers, role models, educators and advocates for injecting drug abusers.

## Cost-effectiveness

Cost-effectiveness is another critical issue for the long-term viability of the triangular clinic programme. Among equally effective interventions, efficiency (cost-effectiveness) will determine the choice of intervention(s). Outreach, peer education, needle exchange programmes and primary health care are all efficient interventions. To provide care for injecting drug abusers, with ART in particular, is expensive. For example, in the budget of the Triangular Clinic in Kermanshah, the allocation for the care component is 36% (excluding the salaries paid to treatment staff) in comparison with other components such as harm reduction materials distribution (16%) and methadone maintenance (7%).

## Community-based organizations

Most services in the Islamic Republic of Iran are provided by the state. Community-based services for marginalized populations are scarce and work by nongovernmental organizations in this field is in its early stages. Community-based organizations are close to communities and have a good understanding of their needs. Their role should be recognized and they need to be encouraged to involve themselves in HIV prevention and care activities. The pooling of financial and other resources is also helpful for long-term sustainability. The involvement of community-based organizations, nongovernmental organizations and the private sector will greatly increase the chances of adequate coverage. It has recently been accepted by the authorities that PLWHA should have their own nongovernmental organization, regardless of individual histories of drug abuse or incarceration.

Section 8

Future developments

---

Although the triangular clinics are a successful model, some service developments will further strengthen and extend their services and enhance their impact on the national response to the dual injecting drug use and HIV epidemic.

### **Introducing methadone maintenance for opiate dependence**

Since 2001, methadone has been made available in many drug treatment centres in the Islamic Republic of Iran for use in detoxification. Methadone is more cost effective than any other drug used in substance abuse treatment and is widely accepted by drug abusers. To increase access it is important to consider training general practitioners to provide methadone maintenance treatment and using pharmacies as dispensing centres, while ensuring that the methadone is not diverted for illicit use.

### **Increasing the availability of anti-retroviral therapy (ART)**

The availability of, and access to, ART for marginalized communities such as injecting drug abusers is very good in the Islamic Republic of Iran compared with many developing countries. But this needs to be scaled up and more anti-retroviral drugs need to be made available at an affordable cost. The capacity of the country to produce cheaper generic anti-retroviral drugs should be examined. At present the Ministry of Health and Medical Education pays the cost of providing treatment and a considerable proportion of the Triangular Clinic in Kermanshah budget is spent on ART. National protocols and guidelines for ART

are currently being developed. These can draw on the WHO publication *Scaling up anti-retroviral therapy in resource-limited settings* (WHO, 2002). Simple rapid HIV diagnostic tests and sample referral for CD4 testing should be feasible at the primary health care level, while CD4 testing at the provincial level and viral load testing and viral resistance assays at central level could be made available. Until ART can be made available to all those in need, the treatment and monitoring of opportunistic infections should be carried out for PLWHA.

### **Investing in human resources development**

The Islamic Republic of Iran has a large number of multi-disciplinary health professionals and social workers, who can be trained in injecting drug abuse/HIV prevention and care. The Kermanshah Triangular Clinic has the potential to become a training centre for the country and Region, providing training on harm reduction approaches to drug abuse, HIV/AIDS and STDs. The Clinic also benefits from the wide expertise available in the country.

### **Working with law enforcement agencies**

It is important to work further with law enforcement agencies and to conduct advocacy on the need to implement harm reduction programmes in prisons. Orientation programmes to sensitize law enforcement staff and training for key individuals is critical. Advocacy at the highest political levels is also needed for creating the appropriate legal environment for timely adequate responses to the problem.

### **Working with the clergy**

The Islamic clergy has significant influence on the policies and programmes of the country. It is important to work with this group to seek their support and endorsement for harm reduction strategies. Recently, many religious clerics have spoken positively about HIV interventions and have emphasized that the health of the nation has to be protected by taking active steps. It is important to involve the clergy in the national advocacy process to ensure the smooth implementation of harm reduction programmes for injecting drug abusers.





### **Harm Reduction Committee**

The Harm Reduction Committee, with its membership drawn from different constituencies, will play a crucial role in guaranteeing the coordination of services. For example, it will be possible to link prison triangular clinics with the triangular clinics of the Ministry of Health and Medical Education, and triangular clinics with the State Welfare Organization, methadone maintenance programmes and supportive organizations such as the Red Crescent Society and Imam Khomeini Welfare Committee. Similarly, the involvement of several key ministries will enable it to look at cross-cutting issues.

### **Registering PLWHA networks**

The experience of the Kermanshah Triangular Clinic has demonstrated the significant contribution that PLWHA networks can make to the welfare of injecting drug abusers. It is important the networks are formally registered so that they can receive the necessary funding support for their sustenance and effective contribution.

### **Expansion of triangular clinics**

The Prison Organization has taken important steps in initiating triangular clinics in some prisons and plans to expand the number of clinics to many provincial prisons.

### **Strengthening outreach**

In many countries community-based outreach is the most feasible and potentially effective public health strategy to reach the hidden and hard-to-reach injecting drug abuser populations. Currently, the service users of the Triangular Clinic in Kermanshah represent only a small proportion of drug abusers. Through community outreach it is possible to reach other groups of drug abusers who would not otherwise seek help. Indigenous people capable of outreach can be identified and given the required training. Existing outreach manuals can be adapted to local settings for use.

Section 3:

Conclusion

The emerging dual epidemic of injecting drug abuse and HIV in the Islamic Republic of Iran has triggered a positive response from provincial and central government. In Kermanshah, HIV prevention and care for injecting drug abusers is being delivered through the innovative Triangular Clinic model. This model has incorporated many of the key elements of effective HIV prevention approaches: creating an enabling policy environment; interventions targeting multiple risk behaviours; integration of prevention and care; coordinated services; non-judgemental approaches; needs-based interventions; services for the infected as well as affected; and the involvement of PLWHA.

Positive leadership from the Governor, strong commitment from Kermanshah Medical University, dedicated service by the staff of the Triangular Clinic and productive

partnerships with other agencies have contributed to the successful implementation of the project. The advocacy process is an excellent example of the garnering of support from various constituencies to sustain the work. As a result, the successful Triangular Clinic model is being extended to other provinces and to prison and drug rehabilitation settings.

The significant reduction of new HIV infections is only possible by scaling up such evidence-based interventions. Therefore, the number and scope of HIV prevention and care projects need to be increased. While resources need to be allotted appropriately in order to establish triangular clinics in all provinces, the financial sustainability of such programmes has to be considered. Although the triangular clinics can provide integrated and coordinated services to the

drug abusing population, it is important to extend basic harm reduction services to the majority of drug abusers. The hidden populations of injecting drug abusers need to be accessed, their social and risk behaviour networks targeted and the means for behaviour change provided. Government efforts in this can be strengthened by encouraging PLWHA, community-based organizations and nongovernmental organizations to become actively involved in HIV prevention and care activities.

The triangular clinics are a successful model for providing accessible and integrated HIV/AIDS services to injecting drug abusers. By strengthening and extending their services, the Islamic Republic of Iran has the opportunity to respond effectively to the dual epidemic of injecting drug abuse and HIV

## Section 10

# Bibliography

Ahmadi J, Fakoor A, Pezeshkian P, Khoshnood R and Malekpour A. Current substance use among psychiatric patients. *Archives of Iranian Medicine*, 2002; 5(2):118-121.

Drug Control Bureau. *Annual report of drug control*. Teheran, 2001.

Ministry of Health and Medical Education. *Five-year program on drug demand reduction*. Teheran, 1999.

Ministry of Health and Medical Education. *HIV/AIDS surveillance report*. Teheran, 2002.

Mokri, A. Brief overview of the status of drug abuse in Iran. *Archives of Iranian Medicine*, 2002; 5(3):184-190.

ODCCP. *Drug supply, prevalence of drug abuse and linkages to HIV: results of the ODCCP review and assessment studies in countries of the region: Iran*. Geneva, 2002

Poursamimi P, Mirhaghani L, Zamanian N and Falahi H. *Epidemiology and risk factors of hepatitis B and C or HIV coinfection in west part of Teheran*. Abstract. West Teheran Triangular Clinic, 2003.

Razzaghi EM, Rahimi MA, Hoseini M, Mohammad K, Madani S and Chatterjee A. *Rapid situation assessment of substance abuse in Iran*. Geneva, State Welfare Organization/UNDCP, 1999.

Razzaghi EM. *HIV/AIDS in association with injection drug abuse: background paper with a focus on the South Asia region*. Geneva, UNDCP, 2002.

Stimson GV, Des Jarlais DC and Ball A, eds. *HIV and injecting drug abuse: global perspectives*. London, Taylor and Francis, 1998.

UNAIDS/World Health Organization. *Epidemiological fact sheet, Islamic Republic of Iran*. Geneva, 2002.

World Health Organization. *Scaling up anti-retroviral therapy in resource-limited settings: Guidelines for a public health approach*. Geneva, 2002.



**World Health Organization**  
**Regional Office for the Eastern Mediterranean**

For enquiries please contact:  
HIV/AIDS & Sexually Transmitted Diseases Unit  
Division of Communicable Disease Control

**Tel:** 202 670 25 35

**Fax:** 202 670 24 92

P.O. Box 7608 Nasr City  
Cairo 11371, Egypt

e-mail: [aidsnews@emro.who.int](mailto:aidsnews@emro.who.int)  
internet: <http://www.emro.who.int/asd>