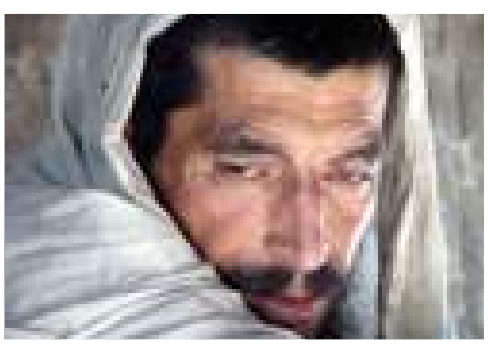
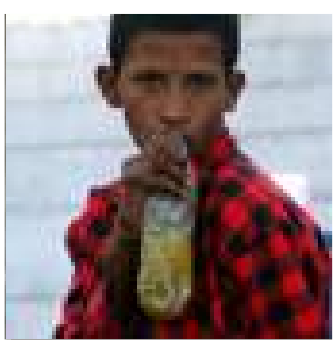

The lethal overdose

Injecting drug use and HIV/AIDS

Supported by the
Provincial AIDS Control Program, Punjab
Department of Health
Government of Punjab

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The views expressed herein are those of Nai Zindagi and can therefore in no way be taken to reflect the official opinion of PACP.

Rapid Situational Assessments on HIV prevalence and risk factors among people injecting drugs

Faisalabad . Lahore . Sargodha . Sialkot

July 2005

Executive Summary

It is evident from the findings of this study that Pakistan no longer has a 'window of opportunity' to act in advance in order to prevent the transmission of HIV/AIDS among people injecting drugs. With HIV prevalence among people injecting drugs in Faisalabad and Sargodha as high as 9.5% and 12% respectively the price of 'in-action' would be immense. We can no longer deny that although we had to act 'yesterday', we MUST at least act NOW in order to minimize further damage.

There is sufficient evidence and proof that in settings similar to ours, where people inject drugs and share syringes HIV prevalence can reach pandemic proportions in just a matter of few months. To address this very serious public health threat, lip service, tokenism and pilot boutiques will not work. We need to take stock of what works and what does not and based on experience scale up services and interventions to reach at least 60% of those at risk.

Like most Asian countries, in Pakistan people injecting drugs are highly stigmatized and criminalized. Access to generic health and social care is denied and often not available particularly for those who are also HIV positive. This further disfranchises affected and infected persons.

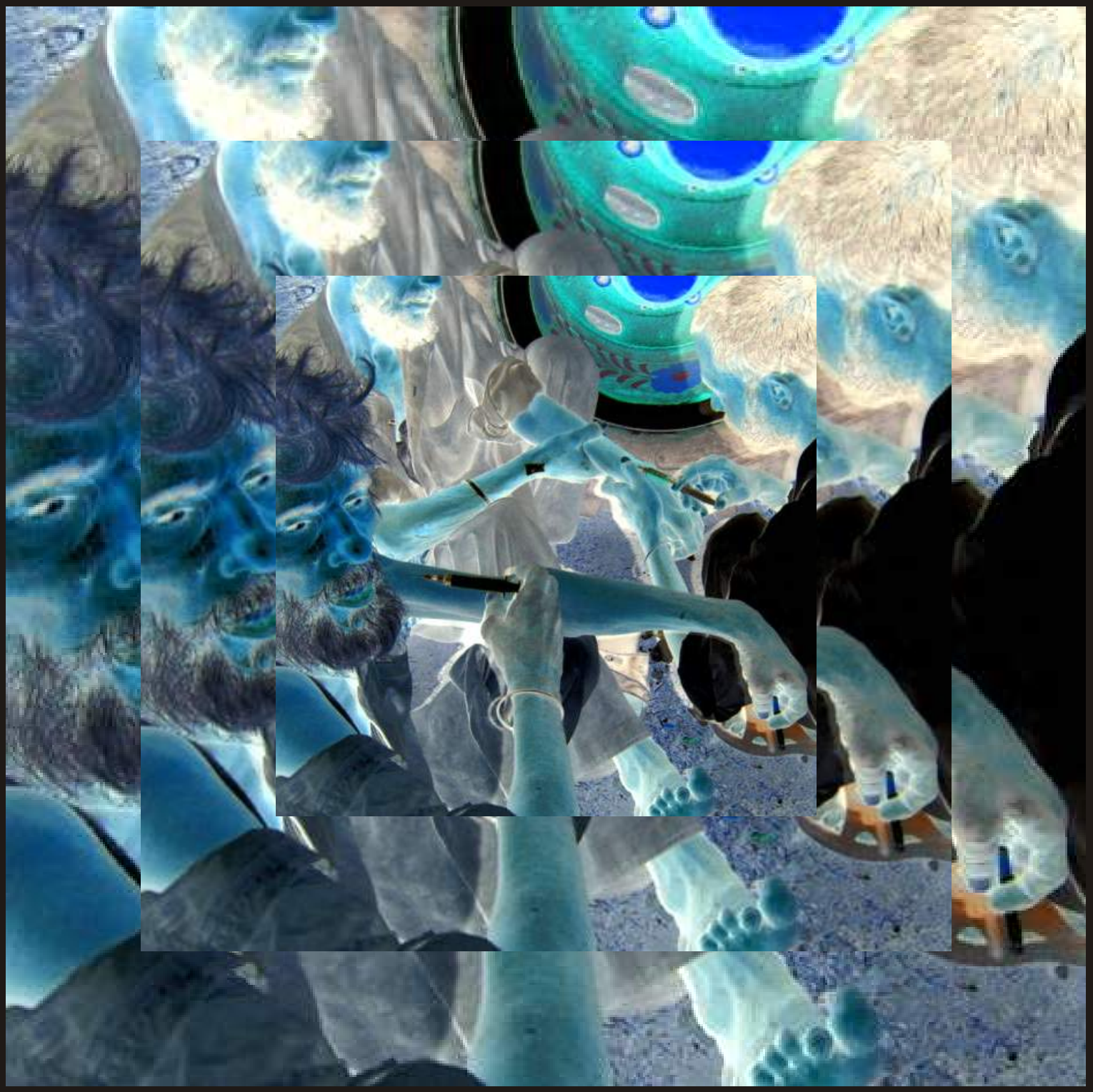
Considering that approximately 50% of the people injecting drugs are currently married and sexually active, secondary transmissions due to un-protected sex to their spouses or casual sex partners (mostly female sex workers), is inevitable.

Young people are the future of a Nation. A significant proportion (10%) of people injecting drugs are young people between 18-24 years of age. Early HIV infections due to injecting and sharing of syringes will result in large number of young persons infected resulting in loss of human resource and additional burden of disease on an already overburdened health and social care system.

In short, the stage for a large scale pandemic ignited by injecting drug use is already set to move into the general population, if it has not already happened.

In order to minimize damage and to curb the pandemic we need to decide at a policy level to immediately initiate and/or scale-up street based comprehensive harm reduction interventions to prevent HIV among people injecting drugs and those closely associated. Policies need to be pragmatic, least bureaucratic and need to keep in mind the urgency of the situation.

Interventions to prevent HIV/AIDS among people injecting drugs need to be mainstreamed within the health care system of the Government in close partnership with civil society organizations and networks affiliated with the affected communities. The Provincial AIDS Control Program, Punjab is a good example of a similar collaboration and proof that it works.



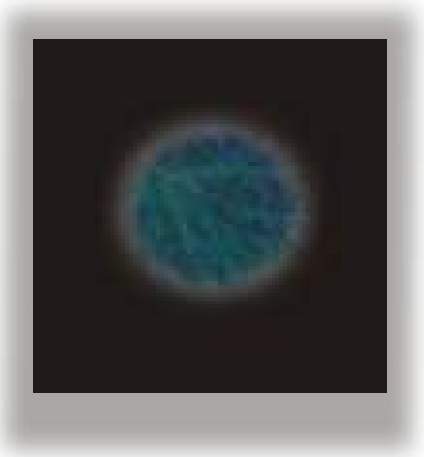
Introduction

Nai Zindagi (NZ) is a non-profit organization established in 1990 to provide continuum of care and support to people using drugs and living on the margins of society.

Our services are aimed at preventing the transmission of HIV/AIDS and other blood borne diseases. This is achieved by reducing drug related harms/risks, demand for drugs and providing opportunities to alleviate poverty through socio-economic rehabilitation.

NZ's responses to the increasing prevalence of HIV/AIDS among people injecting drugs in Pakistan are governed by principles of needs based and context appropriate services.

In February 2005, the Provincial AIDS Control Program (PACP) - Punjab contracted NZ and its Associates (partner NGOs) to establish and scale up comprehensive services for people injecting drugs in the 4 cities of Faisalabad, Lahore, Sargodha and Sialkot. This three year program at a cost of Rs. 90 million is supported under the Enhanced HIV/AIDS Control Program funded by the World Bank and Government of Punjab.



To establish a baseline and better understand the context in order to improve program design, Rapid Situational Assessments (RSAs) on HIV and STI risk behaviors among people injecting drugs in the 4 cities have been completed.

The assessment also includes the mapping of injecting and non-injecting drug users to estimate numbers, locate and geographically map the areas with high prevalence of people using drugs in the respective cities.

Mapping also facilitated in drawing a distributive sample from the target population for biological surveillance and data collection.

The Asian Context

There is an urgent need to address the twin epidemics of 'drug abuse' and 'HIV/AIDS' in Asia. A majority of people using drugs have shifted to 'injecting drugs' from traditional modes of oral use (smoking/inhaling /sniffing). The main factors contributing to increasing drug use in Asia are:

- $ A large opium/heroin producing and trafficking region.
- $ War, conflict and political instability.
- $ Severe impact of increasing population growth and poverty resulting in marginalized communities.
- $ Large numbers of homeless youth living on the streets and using drugs.
- $ Few interventions that are often inaccessible, inadequate and ineffective.

The fall out is an estimated 3.3 million people injecting drugs in Asia. This however represents only a small percentage of the overall number of people using drugs in Asia.

Of those injecting drugs, between 55-78% share syringes which is evident from the fact that even in HIV negative injecting drug use settings Hepatitis C among people injecting drugs is above 80%. *(Courtesy UNAIDS Regional Office, Bangkok)*

The infrastructure and delivery of health services in most Asian countries needs drastic improvement to increase access and enhance quality of services.

Poor coordination between donor agencies and counterparts (governments and civil society), unhealthy competition between service providers, few programs for women and youth in the drugs and HIV sector are issues that also need attention.

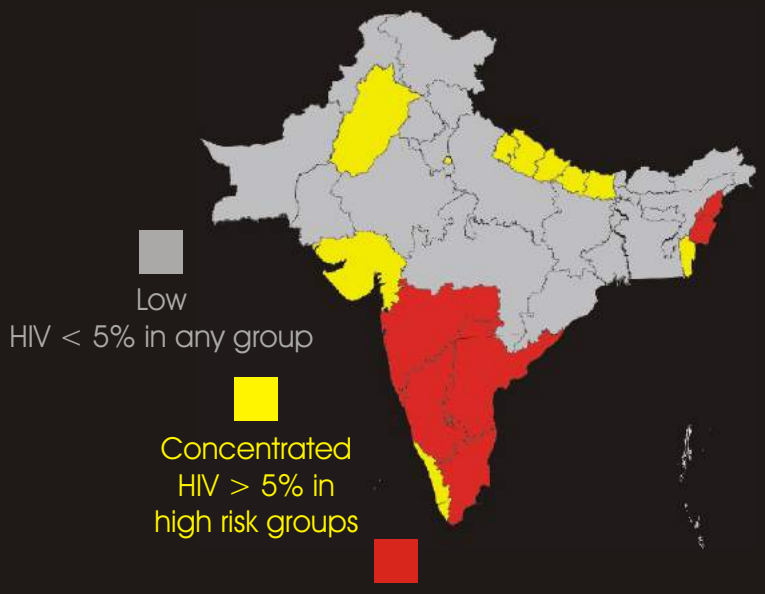
It is clear from the following map, that the HIV epidemic in Asia is primarily injecting drug use driven.

HIV ignited by injecting drug use in Asia

Courtesy UNAIDS Regional Office, Bangkok

Only 5.4% of the 3.3 million people currently injectin drugs in Asia have access to some service

Status of epidemic in South Asia - 2005



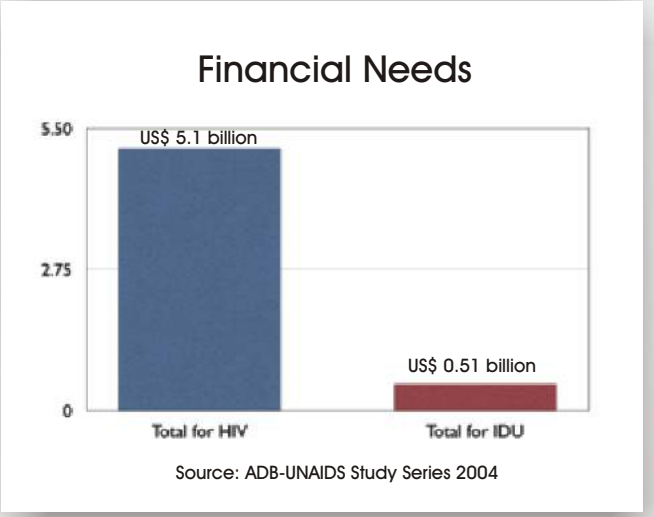
Courtesy UNAIDS Regional Office, Bangkok

There is sufficient evidence in Asia that comprehensive interventions that include extensive outreach, harm reduction approaches, syringe exchange and/or substitution programs have been effective in reducing, sharing and injecting drug use.

However, due to few substitution programs and low volume of needle exchange the scale of interventions in Asia has had no visible impact on the HIV epidemic *(see figure above)*

It is even more alarming to note that in a review of policy and strategy to address the issues of injecting drug use and HIV/AIDS in 15 Asian countries, only 7 have some policy out of which only 3 countries have some comprehensive planning for the future.

To impact the HIV epidemic among people inject drugs at least 60% should have access to and regularly use services.



It is estimated that US $. 5.1 billion is needed in 2005 to comprehensively address HIV/AIDS in Asia in all sectors. Of this only 10% (US$. 0.51 billion) is estimated for comprehensive coverage of people injecting drugs in Asia.

The price of in-action apart from loss of valuable lives would be to the tune of US$. 17 to 30 billion in 2015.

(Source UNAIDS Regional Office, Bangkok)

Even in countries where there are some plans and strategy to implement comprehensive approaches they are often not well thought through or planned, for example:

- $ The one size fits all, approach *(promoting syringe exchange programs in settings where there is no injecting)*
- $ Quick fix approaches *(short term funding; 3-4 months for initiating harm reduction services)*
- $ Tokenism *(not building local capacity)*
- $ Over emphasis on research and data collection and fewer resources for service delivery

In the Asian region there are examples of what does not work or impact the epidemic, for example:

- $ Denying reality and evidence *means no action*
- $ War on drug users *results in hidden populations which become inaccessible to service providers*
- $ Stigma, criminalization and incarceration *further denies basic rights of people and ignites HIV in prisons*
- $ Policies and laws that hamper programs and services
- $ Non evidence based approaches - *waste of resources with negative impact, poor coverage - no impact on the epidemic*

What works are comprehensive programs based on evidence and principles offering a continuum of care and including out reach, syringe exchange, substitution, health and social care and access to drug treatment services.

Providing access to skills training, job opportunities and economic empowerment are complimentary to the above.

It is ironical that when it comes to prioritizing needs Governments, Donors and Civil Society organizations in Asia often tend to incline towards less effective and least sustainable approaches.

The Pakistani Context

Pakistan is one of the countries labeled as "low prevalence and high risk" in terms of HIV/AIDS. This statement is based on limited data and cannot be generalized.

2,176 cases of HIV and 286 of AIDS have been reported to the National AIDS Control Program (NACP) up until mid 2004, the actual number however, is believed to be much higher due to under reporting.

Based on the limited surveillance data and computer modeling, UNAIDS, Pakistan has estimated that there are about 70,000-80,000 HIV positive people (approximately 0.1% of the total adult population) in Pakistan.

Several initiatives have been taken during the recent past to address HIV related issues especially for the vulnerable groups including those injecting drugs. At present a number of programs targeting people injecting drugs have been initiated in the provincial capitals of Pakistan and some of the larger cities/towns.

Nevertheless, these interventions will only cover a small proportion of the total number of people currently injecting drugs. There is strong evidence that shifting from non-injecting modes of drug use to injecting drugs is becoming increasingly popular.

The current number of people injecting drugs in Pakistan would have by now gone far beyond the estimates of 15% of the 500,000 chronic heroin users as reported in 2000 national study on drugs. (*National Assessment Study on Drug Abuse in Pakistan- UNODC & ANF - 2000)*

Like in most of Asia, the HIV/AIDS epidemic in Pakistan will be injecting drug use driven.

CHASING THE DRAGON

Is a way of inhaling heroin. It usually involves placing powdered heroin on foil and heating it from below with a lighter or candle. The heroin turns to a sticky liquid and wriggles around like a Chinese dragon. Fumes are given off and are inhaled thorough a rolled up paper, straw or pipe.

Results from a study commissioned by UNDCP/UNAIDS and carried out by NZ in 1999 in Lahore, indicated that sharing and multiple use of injection needles is common practice. (*Baseline Study on the relationship between injecting drug use, HIV and Hepatitis C among injecting drug users in Lahore - 1999)*

No cases of HIV/AIDS were detected in that study, but the high prevalence of Hepatitis-C (180 out of 200 cases) indicated an enormous potential of an HIV/AIDS epidemic and other transmittable diseases among people injecting drugs.

Based on the findings of the study, in 2000 a pilot harm reduction initiative was initiated by Nai Zindagi and supported by UNAIDS. The services offered under this project included extensive out reach, basic medical and social care, counseling, referral for drug treatment and needle exchange.

The one year pilot project was completed in 2001, however, the services have been sustained to date with support from other donor organizations. The findings of the project and lessons learnt have been the basis of expansion of similar programs in Pakistan.

NZ has liberally shared know-how and transferred expertise to other service providers and has been instrumental in assisting the Government to mainstream services for people injecting drugs to prevent the transmission of HIV/AIDS.

Other studies conducted by NZ in Lahore among people using drugs in 2000 (n=150), 2002 (n=150) and 2003 (n=300) revealed no incidence of HIV among people injecting drugs.

In 2003, an outbreak of HIV was discovered among people injecting drugs in Larkana, Sind, where, out of 170 people tested, more than 20 were found HIV positive. This was considered as the first documented epidemic of HIV in a well-defined vulnerable population in Pakistan.

Recent reports from Sindh AIDS Control Program (SACP) show a rapid increase in HIV prevalence among people injecting drugs in the city of Karachi. The preliminary findings of the National STI/RTI survey of high-risk groups indicate even higher levels of HIV positive cases estimated at 23% from a sample of 400 people injecting drugs in Karachi.

Based on increased HIV incidence and given the high mobility of people injecting drugs it was assumed that prevalence in other cities will increase. Efforts were therefore made to sensitize concerned stake holders to implement service delivery packages for people injecting drugs in Pakistan.

This report is part of an effort to reduce drug related harms to prevent the transmission of HIV among people using drugs in Faisalabad, Lahore, Sargodha and Sialkot.

An immediate need to scale-up comprehensive programs and reduce drug related harms to prevent HIV/AIDS among people injecting drugs.

Methodology

The methodology adopted for the Rapid Situational Assessments in Faisalabad, Lahore, Sargodha and Sialkot were the same. Mapping studies were conducted in all the 4 cities to estimate the number of street-based injecting and non-injecting drug users in each city prior to recruitment of sample population for behaviourial and biological (prevalence) studies.

Mapping

The mapping was based on the methodology developed by Canada-Pakistan HIV/AIDS Surveillance Project (HASP) in consultation with concerned stake-holders. The methodology was used with certain adaptations specific to injecting drug use (IDU). Moreover, the scope of the mapping was extended to include numbers of non-injecting drug users in addition to people injecting drugs.

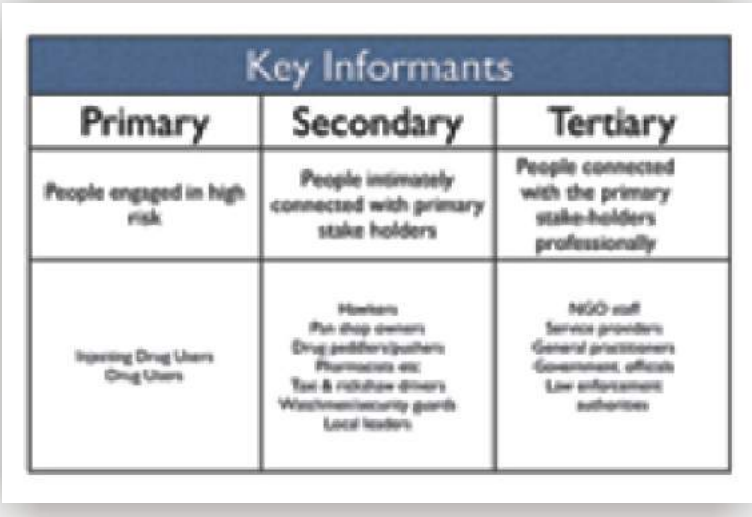
The following steps were involved in the mapping exercise:

- $ Review of already conducted mapping studies and/or other relevant data.
- $ Explaining the study objective and methodology to key stakeholders including people using drugs, law enforcement agencies as well as non governmental organizations (NGOs).
- $ Obtaining the updated maps of the area to the city.
- $ Defining geographic areas (city limits).
- $ Dividing the geographical area into "Zones".
    - # using existing geographical divisions
    - # using physical landmarks to form zones
    - # using existing information on location of people injecting drugs
- $ Geographical division and demarcation of the city into various zones on the map.
- $ Training of senior outreach workers in mapping techniques
- $ Developing an action plan to undertake the mapping exercise.
- $ Develop teams of trained outreach workers depending upon the area to be covered and time frame to complete the data collection.

The mapping exercise was divided into two phases:

$ Level - 1: Interviews with secondary and tertiary key informants

$ Level - 2: Validation of the information collected during Level 1 through interviews with primary key informants



Key Informants		
Primary	**Secondary**	**Tertiary**
People engaged in high risk	People intimately connected with primary stake holders	People connected with the primary stake-holders professionally
Injecting Drug Users Drug Users	Hawkers Pan shop owners Drug peddlers/pushers Pharmacists etc Taxi & rickshaw drivers Watchmen/security guards Local leaders	NGO staff Service providers General practitioners Government officials Law enforcement authorities

Level - 1

The teams consisting of two persons each was deployed to collect in formation from the key informants.

During Level - I, interviews were conducted with the secondary and tertiary key informants to get information about the prevalence of drug use in their respective zones and estimates of the number of injecting and non-injecting drug users.

The interviews were conducted with different community members based on their knowledge about the drug use patterns in respective areas. Specific lists of potential secondary and tertiary key informants were generated during training program as part of group work. The major categories included pharmacists, shopkeepers, hawkers, watchmen, police officials, community leaders and owners of hotels PCOs, Pan/cigarette shops.

The data was collected with the help of a questionnaire asking the name of the spots and estimates of the injecting and non injecting drugs users in that area and brief information about the key informants. The data was entered into a software developed to record information. All the spots mentioned by the key informants were listed along with the estimates given by them.

Level - 2

The information collected during Level - 1 helped in mapping of the potential spots where drug use takes place in the respective zones. The same teams were deployed to collect information from the primary key informants. During Level - 2, interviews were conducted with the primary key informants (injecting and non-injecting drug users) and visits were made to all the spots indicated by the secondary and tertiary key informants in Level-1. Although the methodology suggested random selection of a proportion of the spots for validation during Level-2, however, in order to obtain accurate estimates of injecting and non injecting drug users in the city, all potential spots were validated.

The information from primary key informants was collected using Level-2 forms and one form was used to collect information about one particular spot. The estimates of one particular spot were collected from at least 3 injecting and 3 non-injecting drug users. The interviewers were required to continue collecting information, in case of varied figures until the saturation point was reached. In some cases more than 20 interviews were conducted at one spot or the spots were re-validated by another team to cross check the information.

The number of spots mentioned during Level-1, were updated and validated based on Level-2 information which resulted in the final location of 'spots' in terms of location of people using drugs in respective cities.

The estimates given by the primary key informants for individual spots were then analyzed and an arithmetic mean of the total spots was obtained by dividing the total estimates by the number of respondents.

In some cases the duplication of estimates was checked by obtaining additional information regarding mobility of people using drugs between different spots. The estimates were re-adjusted based on this information.

The estimates from different spots were then added up to obtain the total number of injecting and non-injecting drug users for the entire city. The results of the mapping study in the 4 cities have been discussed in detail in this report.

Rapid Situational Assessments - HIV & risk factors among people injecting drugs

The results of the mapping studies were used to select a distributive sample of people injecting drugs for the behavioral and biological studies. NZ has been carrying out various behavioral and biological studies and rapid situational assessments to ascertain the prevalence of HIV and other blood borne infections among injecting and non-injecting drug users since 1999. The methodology, procedures, protocols and tools for carrying out the studies have been revised and improved on a regular basis and have been used for this study.

Sampling

Based on the results of mapping a sampling frame was developed to ensure geographical coverage of the whole city. Ten percent of the study participants were randomly recruited in order to obtain a uniform and representative sample of the total population of street-based persons injecting drugs in a particular city.

Voluntary participation and poor health condition of people injecting drugs limited the randomization to some extent.

In order to participate in the study the respondents currently injecting drugs were required to be 18 years of age or above.

Ethical considerations

Protocols were put in place to ensure and maintain confidentiality of all respondents. The team members were sensitized to ethical issues related to confidentiality during their training. Consent forms clearly explaining the objectives of the study and the procedures involved for participation were read out and signed by all the study participants.

Because a majority of the interviewers and outreach workers involved in the recruitment of the participants were ex-drug users, they were already sensitive to the environment, aware of ethical considerations and communication needs. The ethical conduct of this study was approved by the Institutional Review Board (IRB) of Nai Zindagi affiliated with Committee on Human Research of Johns Hopkins School of Public Health, Baltimore US.

Team members were also trained to take precautionary measures essential to safe guard against exposure to HIV/AIDS and other risks while conducting the study and interacting with people injecting drugs. Particular care was exercised and protocols were followed during blood collection and sampling.

Development of the Questionnaire

The questionnaire used for the study was revised and updated from an earlier study conducted by NZ in 2003 in collaboration with Johns Hopkins School of Public Health, Baltimore, US. Participants were asked about their drug use, medical history and sexual risk behaviors that could expose them or others at risk for HIV infection. Information on drug use behaviors and patterns were collected, including age at first drug use and age at which each specific drug was used for the first time, routes of administration, and drug(s) currently used. Participants were also asked about the age of first injection, duration of injection drug use, current injection behaviors and frequency of injection. Information of demographic data (i.e. age, education, marital status, employment and homelessness), and drug use in groups was also collected. Duration of overall drug use and duration of injection drug use was determined by subtracting the participant's current age from the age at first drug use and age at first injection.

Apart from the demographic information and drug use history, questions were mainly focused on current risk behaviors prevalent among the study participants. The questionnaire was translated into Urdu after finalization for better understanding of the interviewers and interviewees.

The questionnaire was approved by the PACP, Department of Health, Government of Punjab.

Training in data collection and blood sampling procedures

A team of interviewers was trained in data collection procedures and interviewing techniques for injecting drug users. The questionnaire was reviewed during the training program and interviewers were given opportunities to practice the data collection process through role plays.

Blood sampling and testing protocols were discussed and refined during the training program with medical staff and other team members. The blood transportation protocols were also reviewed and finalized particularly for Sargodha and Sialkot from where blood samples were to be brought to Lahore on daily basis due to non-availability of PACP approved testing facilities in the two cities.

Laboratory for blood testing

The laboratories for blood screening for HIV were designated by the Provincial AIDS Control program (PACP) as per obligation under the contract signed between PACP and Nai Zindagi & Associates. The list of blood testing facilities for respective cities are given below:

No	City	Sample	Laboratory
1	Faisalabad	200	Pathology Department, Allied Hospital (PMC), Faisalabad
2	Lahore	200	Microbiology Department, Institute of Public Health, Lahore
3	Sargodha	100	Microbiology Department, Institute of Public Health, Lahore
4	Sialkot	100	Department of Pathology, Jinnah Hospital, Lahore

Data management and analysis

In order to ensure proper data entry a database software synchronized with the questionnaire was designed in Microsoft Access. Responses were recorded by trained interviewers and data was entered into a customized software database developed in Microsoft Access with built-in skip patterns and response limitations.

The data entry operators were also trained in data entry using the software and data entry protocols were reviewed with them during the training program. A random sample of 50 questionnaires from each site was selected for double data entry to check consistency. Special attention was given to ensure linkage of data with the blood samples as both were coded to ensure confidentiality.

The data-set for each city was analyzed using the SPSS statistical analysis software for different variables. A comparative study of behaviourial data was also made between the four cities.

Map of Punjab

Project Sites

Study findings and discussion

In this section, the findings of mapping studies and situational assessments in the four cities are presented. The mapping data is explained city-wise separately whereas the behavioral and biological results are analyzed comparatively to ascertain major

Mapping studies

The mapping studies provide current information about different spots where drug use is actually taking place in respective cities and the estimates of the number of people using drugs (injecting and non-injecting).

Lahore

Four teams of two persons were trained to collect information from key informants during Level - 1 from 17 zones within the city of Lahore including Shahadara town across the river Ravi. In all, 754 interviews were conducted with secondary and tertiary key informants to get information about the prevalence of drug use in their respective zones and estimates of people using drugs (injecting and non-injecting). The interviews were conducted with different community members. The major categories of key informants included pharmacists, shopkeepers, hawkers, watchmen, police officials, local community leaders and owners of hotels, PCOs (Public Call Offices), pan/cigarette shops.

A brief questionnaire was used to collect and record the data which consisted of information about the informants, the name of the spots and estimates of people using drugs (injecting and non-injecting). The data was entered into a software to record information.

The information collected during Level - 1 helped in mapping of 540 potential spots in Lahore and these were included for validation during Level-2.

The same teams were deployed to collect information from the primary key informants (injecting and non injecting drug users) . During Level - 2, 1127 interviews were conducted with primary key informants (328 injecting and 799 non injecting drug users) and visits were made to all the spots mentioned by the secondary and tertiary key informants.

Of the 540 spots mentioned by the key informants during Level 1, only 248 spots were validated where drug use was actually taking place. This included 15 new spots identified during Level 2 pointed out by the primary key informants.

Out of a total of 248 spots, 110 spots had injecting drug users. However, 50 spots reported only 1 or 2 persons injecting drugs,. 60 spots were reported to have 5 or more and the highest number of people injecting drugs was reported at Data Darbar and adjoining areas of the Old City of Lahore.

Means of the maximum and minimum figures reported by the informants were calculated and the estimated number of street-based persons injecting drugs is between 1754 - 2110 in Lahore.

Similarly the number of non injecting drug users was estimated between 12,500 - 13,500, however this estimation also included, both opiate and non-opiate users (cannabis, inhalants).

These estimates are purely based on the information provided by the informants.

Limitations of Mapping

Validation of certain spots was not possible due to security issues e.g University ground, specific premises mentioned by key informants etc. Mobility of persons using drugs (injecting and non-injecting) between nearby spots could affect the accuracy of the results. Mobility of persons using drugs (injecting and non-injecting) could be explored further by using triangulation methods e.g Focus Group Discussions, which could not be conducted due to time constraints.

Sargodha

Same methodology was adopted for mapping of people using drugs (injecting and non-injecting) in Sargodha and the same trained staff who had been involved in mapping of Lahore city were engaged in Sargodha. Ex-drug users (ex clients of NZ) from Sargodha were also involved in the study due to their existing knowledge of the drug scene.

Four teams of two members each were deployed for the task and the city was divided geographically into four zones. Being relatively a new city in terms of NZ's intervention, Government officials of relevant departments, in particular, law enforcing agencies were briefed about the program and mapping activity and cooperation was sought and extended.

Level - 1 data was collected from June 20-21, 2005. The key informants pointed out 153 spots where they believed that drug use is taking place. According to the estimates given by the secondary and tertiary key informants the number of people using drugs (injecting and non-injecting) was 4077 and 7034 respectively. This was an exaggerated figure and after interviews with primary key informants, the figures became more realistic.

All spots mentioned in Level-1 were physically verified by the teams and based on the estimates given by the primary key informants, the mean of various estimates was calculated for the spots which had been validated.

It was concluded that there were 45 valid spots where the number of street-based persons injecting drugs is between 1000-1100 in Sargodha.

Number of non injecting drug users was between 1500-1550. These estimates are of street based persons using drugs who are accessible through extensive outreach services.

In Sargodha the spots where drug use prevalence is high are scattered with no major spots. This establishes a need for mobile out reach units providing harm reduction services rather than static drop in centers.

Important findings regarding drug use situation and social determinants in Sargodha are:

- $ Rapid and progressive shift to injecting drugs is significant and prominent.
- $ Mostly heroin combined with antihistamines made for veterinary usage is being used for injecting.
- $ Probably a reason for common use of heroin in Sargodha is that it is situated on a drug trafficking route.
- $ Drug use is quite prevalent in both rural and urban areas.
- $ There is no street drug usevisible in some of the areas of the city due to strict law enforcement.
- $ Syringe sharing is extremely high among people injecting drugs and not sharing ones' syringe is disliked and discouraged in the drug injecting sub culture in Sargodha.
- $ Drug pushing in Sargodha is a home based business and in some cases all family members are active in pushing drugs and facilitating drug use by providing safe spaces to use.
- $ Mortality among people injecting drugs is high due to physical deterioration and severity of the wounds and abscesses.
- $ Females and children using drugs are also present on the streets in Sargodha.

Faisalabad

The mapping study in Faisalabad took place from July 17-22, 2005. Most of the experienced staff took part in the mapping exercise and six teams were entrusted the responsibility of collecting information. The city was divided into 6 zones and it took three days to collect information from secondary and tertiary key informants. Advocacy with the local authorities was the first step in order to develop rapport with the concerned agencies and seek cooperation.

331 spots were mentioned during Level 1 in the city of Faisalabad by the key informants. All the spots were validated by paying visits to each one of them and finally 94 spots were found to be valid at the time when mapping study was carried out.

Based on the findings of Level-2 interviews with primary key informants, the number of street based persons injecting drugs was estimated to be 2400 - 2550 in the city of Faisalabad.

The number of non injecting drug users was between 4400 - 4500.

According to the estimates of an earlier mapping study on people injecting drugs, conducted in 2003 by National AIDS Control Program, there were 1765-2055 persons injecting drugs in Faisalabad.

Like Sargodha, the injecting drug use scene is spread out in various spots all over the city.

General findings regarding drug use situation and social determinants in Faisalabad are:

- $ Mostly pharmaceutical drugs are being used by people injecting drugs.
- $ Pharmacies are playing a vital role in drug pushing, and facilitating people in injecting drugs by providing space (shooting galleries) and also assisting in the process of injecting (para-medic)
- $ Pharmaceutical drugs are quite cheap in Faisalabad.
- $ Most of the people injecting drugs in Faisalabad are laborers who have migrated from other cities or villages and have a low or no educational background.
- $ Chronic drug users are common in Faisalabad and have expressed high motivation for drug treatment, in particular access to detoxification.
- $ Inability to access generic health care services has led to poor health conditions (wounds and abscesses).
- $ Females and children using drugs are also present on the streets in Faisalabad.

Sialkot

In Sialkot, the same strategy for mapping was adopted, however, the team comprised of outreach workers from partner NGOs (Associates) who were trained and involved in the mapping study in Sialkot. Three outreach workers each from Savoir Faire, Sialkot and Roshan Raasta, Lahore were provided training in mapping methodologies in Lahore from July 20-21, 2005.

During mapping the newly trained staff was associated with trained staff form Nai Zindagi for assistance.

The mapping study took place from July 22-25, 2005. Sialkot city was divided into 4 zones and each 2-member team was required to cover one zone. 161 interviews were conducted during level 1 with secondary and tertiary key informants covering the whole city. The key informants mentioned 73 spots where drug use was taking place. The estimates for people injecting drugs was 800-1000, and for non injecting drug users was between 2400-2600.

During level 2, teams visited each of the 73 spots mentioned by the key informants, however, only 27 spots were validated from where data was collected from 112 primary key informants.

Based on the estimates collected, there are 600-800 persons injecting drugs in Sialkot, however, injecting drug use is not that obvious as compared to other cities.

The estimates for non-injecting drug users are between 2000-2200. The primary drug of choice in Sialkot is injecting of pharmaceuticals whereas few cases of heroin use (whether injecting or non-injecting methods) were reported.

Summary of the findings and discussion

The findings of mapping reveal the following:

- $ Street based injecting drug use is common and increasing.
- $ Community at large is aware of drug use and in particular injecting drug use
- $ Sharing of contaminated/used syringes is high, and not discouraged in the injecting sub-culture
- $ There are no services in Faisalabad, Sargodha and Sialkot for street based persons using drugs (injecting and non injecting).
- $ Drug use is not only an urban problem, but also common in rural settings.
- $ Approximately 6560 street based persons injecting drugs in the four cities.
- $ An additional 21000 street based persons using drugs (not yet injecting) who could potentially shift to injecting drugs.
- $ Basic health care and access to drug treatment services is essential and an expressed need.
- $ People using drugs are a mobile population and this will result in the spread of blood borne diseases (HIV/AIDS, Hepatitis C) between people using drugs in different cities of the country.
- $ Non traditional approaches will need to be employed in order to drastically reduce injecting and sharing (syringe distribution through pharmacies and pushers providing safe places to use)

According to MAP 2005 report *(Monitoring AIDS Pandemic Network - Drug injection and HIV/AIDS in Asia - 2005)* , In India, injecting drug use surveillance sites are confined largely to the northern states where injecting is a common behavior. However, recently established sites in other cities show great cause for concern. Among people injecting drugs in the southern city of Chennai, for example, 26 percent of people injecting were already infected with HIV when a sentinel site was established in 2000, and by 2003 an alarming 64% of people injecting were infected.

Global evidence also dictates that at least 60% of the current number of persons injecting drugs need to be reached out with harm reduction services like out reach, syringe exchange/distribution, pharmaco-therapy (substitution) to impact the HIV epidemic among this at risk group. In addition not only coverage but regular use of services is essential and needs to be tracked to monitor and evaluate the quality of services.

Keeping the above mentioned in view there is an urgent need to access people injecting drugs in Faisalabad, Lahore, Sargodha and Sialkot and establish HIV prevention harm reduction services to reach at least 4000 persons who are currently injecting drugs on a daily basis to encourage regular use of services.

There is also an urgent need to initiate a pharmaco-therapy (substitution) trial in Faisalabad and Sargodha where syringe sharing is higher than in other cities, and an immediate need for multiple interventions is even greater.

HIV test results

Blood screening for HIV was carried out in all the 4 cities to gauge the prevalence of HIV among people injecting drugs, (a population at high risk due to sharing of syringes and other injecting equipment).

The blood screening was carried out by PACP designated testing facilities in Lahore and Faisalabad. The blood samples from Sialkot and Sargodha were brought to Lahore for testing. The tests were conducted using Elisa kits

Out of the total 600 persons in the 4 cities 37 (6.2%) persons tested positive for HIV. Since the study population was drawn from different geographical areas of the city randomly, the results may be generalized to the entire population of people injecting drugs in the respective cities. Below is a summary of the test results:

No	City	Sample	HIV +ve
1	Faisalabad	200	19 (9.5%)
2	Lahore	200	5(2.5%)
3	Sargodha	100	12 (12%)
4	Sialkot	100	1 (1%)

Since 1999, NZ has been conducting various studies to monitor the prevalence of HIV among people injecting drugs in Lahore for UNAIDS/UNODC, Pakistan and as part of studies for Johns Hopkins, Baltimore, USA. This is the first time that HIV infection has been detected among people injecting drugs in Lahore. Although prevalence is low as compared to Sargodha and Faisalabad, it is still alarming. The low prevalence can be attributed to the existence of long-term HIV prevention services since 1999 , to people injecting drugs in Lahore including consistent syringe exchange services.

High HIV prevalence rates among people injecting drugs in Faisalabad and Sargodha are very alarming. Keeping in view the magnitude of the problem it should be taken seriously. The analysis of behavioral data reveals that most of the HIV positive persons injecting drugs in these cities have only started injecting during the last three years. This indicates that due to high levels of syringe sharing newer infections have occurred and will continue to occur unless large scale interventions are put in place immediately.

The results also signify the need to carry out similar studies in other cities of the country to establish baselines and design programs aimed at preventing HIV among people injecting drugs.

It can be interpreted that overall the HIV epidemic among people injecting drugs in the 4 cities has already reached concentrated levels (where HIV in a high risk group is higher than 5%). This establishes the fact that if comprehensive harm reduction services are not put in place quickly, the epidemic could reach alarming proportions in a matter of months.

There exist sufficient examples of good practices and successful pilots in country and in the Asian region that need to be replicated and mainstreamed as an essential package of services to reduce HIV risk among people injecting drugs.

Analysis of behavioral data

The analysis of data mainly consists of frequency tables and cross tabs between different variables to extract information about potential confounders associated with injection drug use status. This includes demographic characteristics such as age, education, marital status, employment, income, and homelessness. Potential relationships between injection drug use and duration of drug use, primary drugs used, and history of ever using drugs with other drug users has also been explored.

A significant correlation was found to exist between risk behaviors, in particular sharing of syringes, utilizing the services of injecting experts and HIV status of the respondents.

Demographic profiles of people injecting drugs

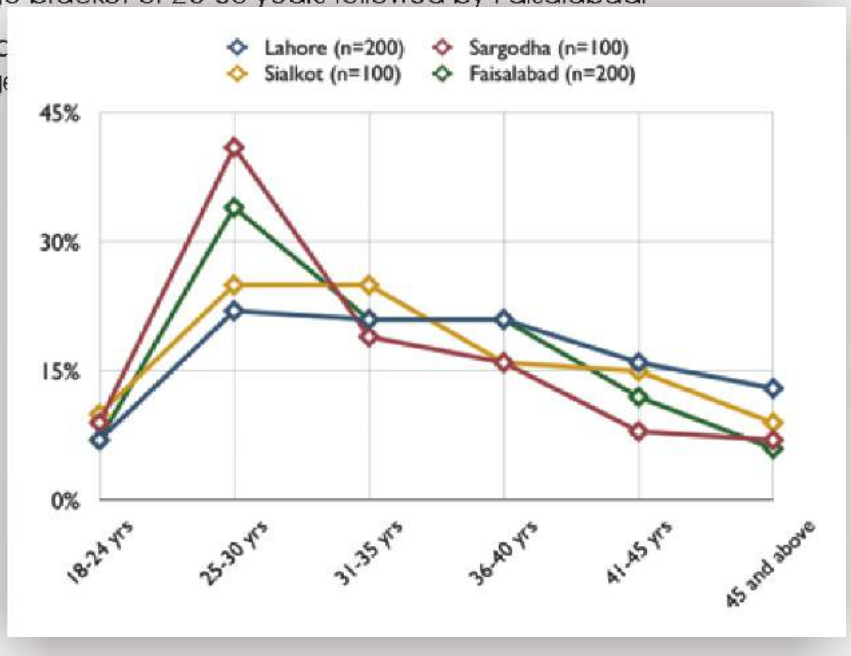
All of the study participants were male and above 18 years of age. All of them were injecting drugs regularly at the time of data collection.

Age of respondents

The age group of the respondents shows similar trends in all the 4 cities. It is of significance that between 7-10% of people injecting drugs are in the 18-24 years age bracket. This indicates a younger age group shifting to injecting drug use. Sargodha has the highest number with in the age bracket of 25-30 years followed by Faisalabad.

In both cities more than 50% of the total HIV positive p
compared to Lahore where all five were within the ag

Generally in Lahore people injecting drugs are older.



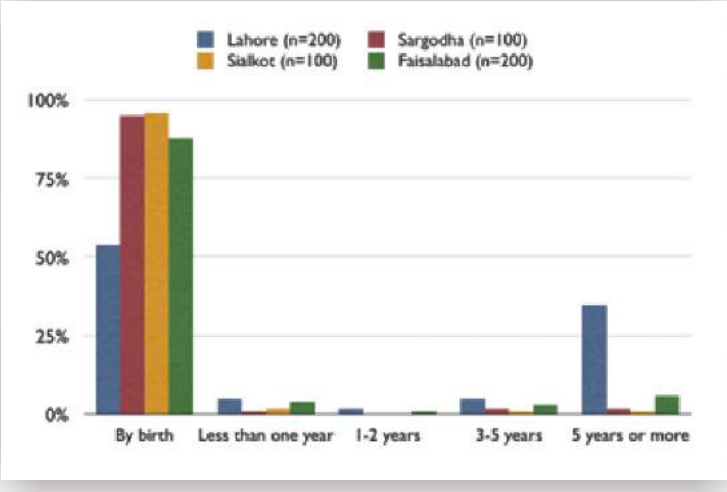
Place of origin and current living status

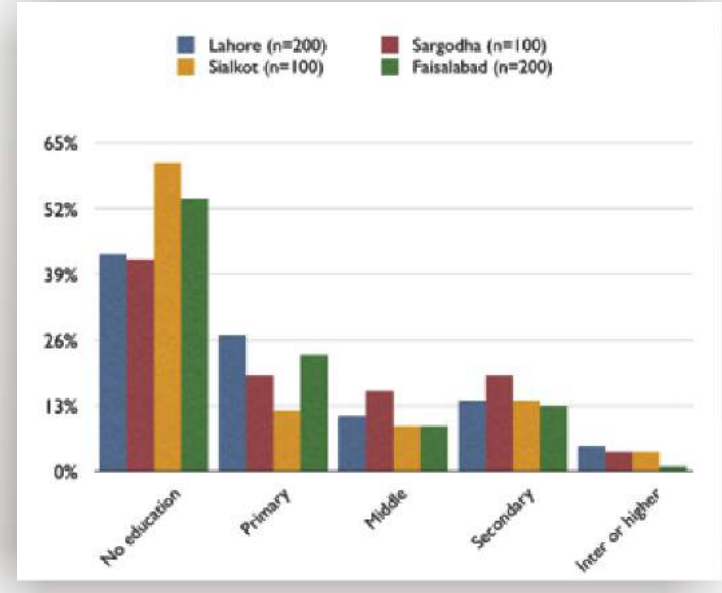
Majority of the respondents in Sargodha, Sialkot and Faisalabad were born in respective cities, where as in Lahore over 46% had come from other cities. Lahore being a metropolitan city attracts a significant number of people who come to seek jobs. 22% of the total respondents mentioned that they came to Lahore to find jobs), but most often ended up using drugs and did not return to their place of origin. Also a small proportion came to Lahore to seek free drug treatment. All HIV positive respondents in both Faisalabad and Sargodha were living in their cities since birth.

Educational level

Majority of the respondents in all four cities did not have formal education and majority of the educated ones had education up to primary level. The least number of uneducated respondents was found in Sargodha whereas Sialkot the most. This was again due to the fact that the sample was drawn from street based persons injecting drugs. However injecting drug use among literate population may not be ruled out based on this sample.

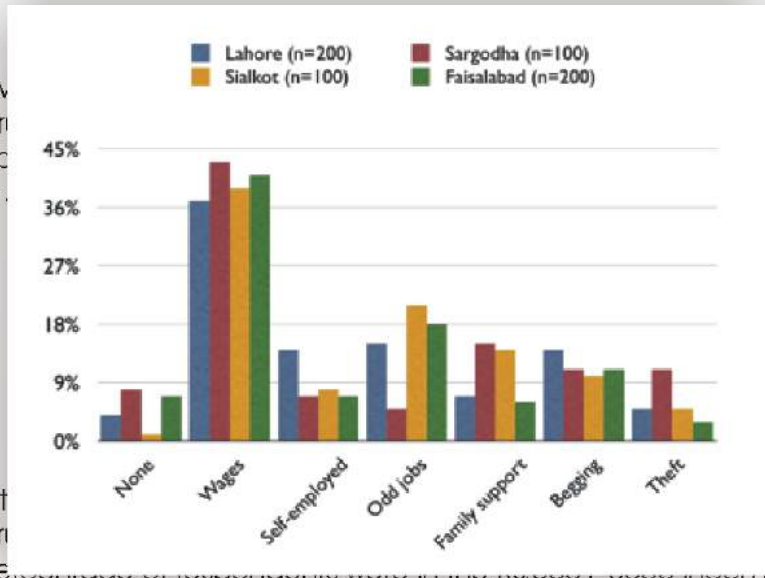
BCC (behavior change communication) materials need to be developed for street based people injecting drugs while keeping in mind the fact that most cannot read or write, and communication needs to be more visual than written.





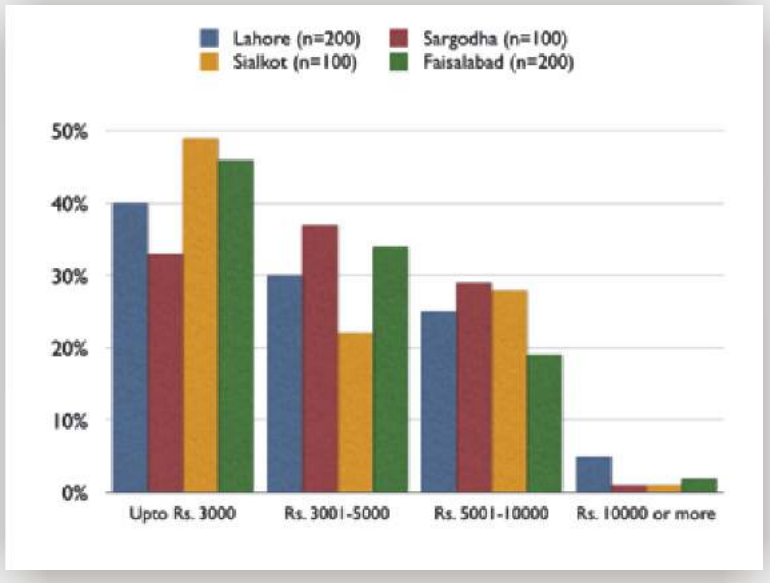
Source of income

Varied responses were obtained from different cities, howev re
daily wages dependent on availability, like paint job, constr n
all cities were beggars. For 11% of the respondents in Sargo in
other cities. No significant association was found between



Monthly income

The monthly income of the respondents was also consistent
calculation of monthly income and daily expenditure on dr
income to support their drug habit. In Sargodha a higher pe e
bracket which could be attributed to financial support from families and given the feudal environment.



Marital status

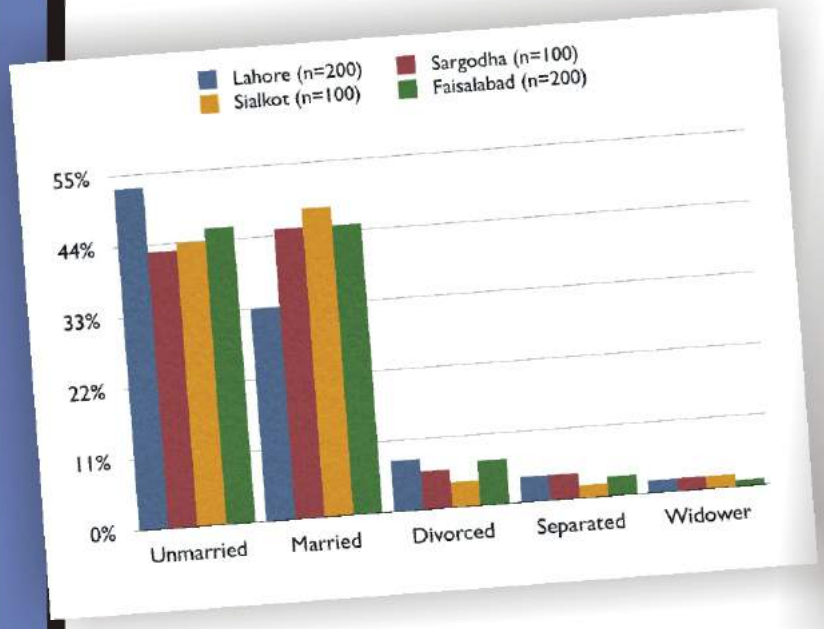
In Faisalabad, 7 out of 19 -(37%) of the HIV positive respondents were married whereas in Sargodha 4 out of 12 -(33%) were married. Considering that between 33-46% of the respondents are married, have un protected regular sex with their spouses chances of secondary transmission of HIV are very high.

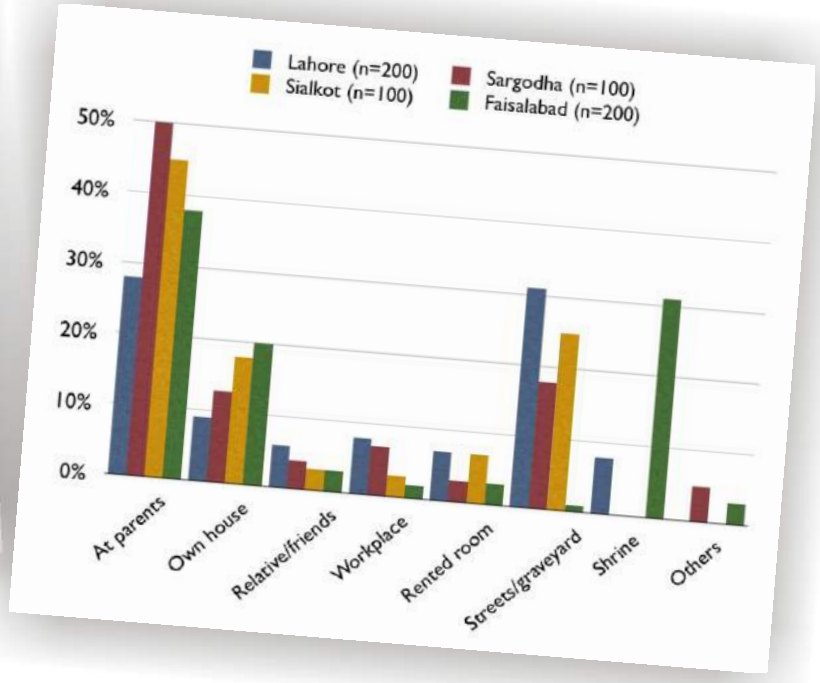
Programs need to build in a component of providing information and services to spouses and families of people injecting drugs in order to prevent secondary transmission of HIV and other infections.

Living status

Varied responses were received from respondents in different cities regarding their living status. Lahore had the majority (31%) of those living on the streets, parks, graveyards and shrines, followed by Faisalabad (30%), Sialkot (25%) and Sargodha (18%). Majority of the respondents in all cities returned home at night.

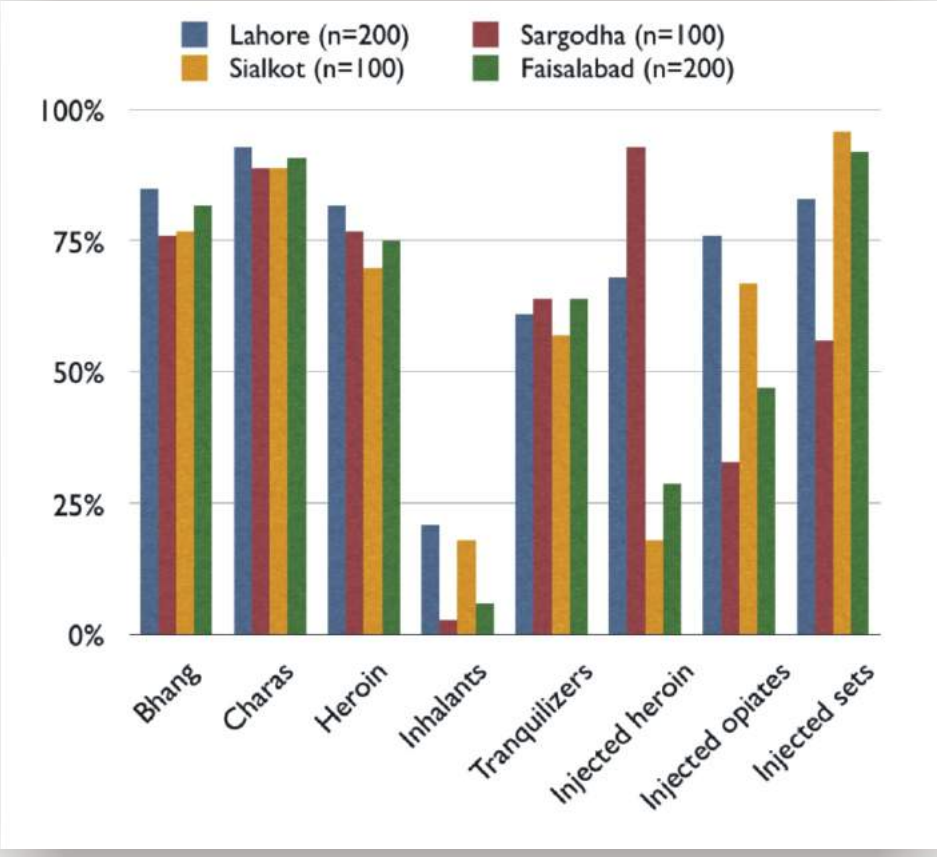
In Faisalabad, comparatively a larger number of HIV positive persons injecting drugs were living on the streets as compared to those who were not HIV positive. In Sargodha and Lahore majority of the HIV positive respondents were living at home.





Drug use history

Over 90% of people currently injecting drugs in the 4 cities had used hashish (charas) at some point in time and 76-85% had also used bhang (a drink made of cannabis plant, seeds and milk/water). Non injecting use of heroin was also reported in the past by 70-82% of the respondents (mostly by "chasing the dragon" or sniffing).



Heroin injecting was more common in Sargodha (93%), followed by Lahore (68%), Faisalabad (29%) and in Sialkot (14%).

Pharmaceutically manufactured buprenorphine (commonly known as Zanor, Gesic, Beprogesic, Dorgesic etc.) in the tablet form in combination with Avil (Anti-histamine) and Diazepam (tranquilizer) were the most popular drugs in all 4 cities.

This combination commonly referred to as "a set" is quite easily available in all study sites mostly over-the-counter.

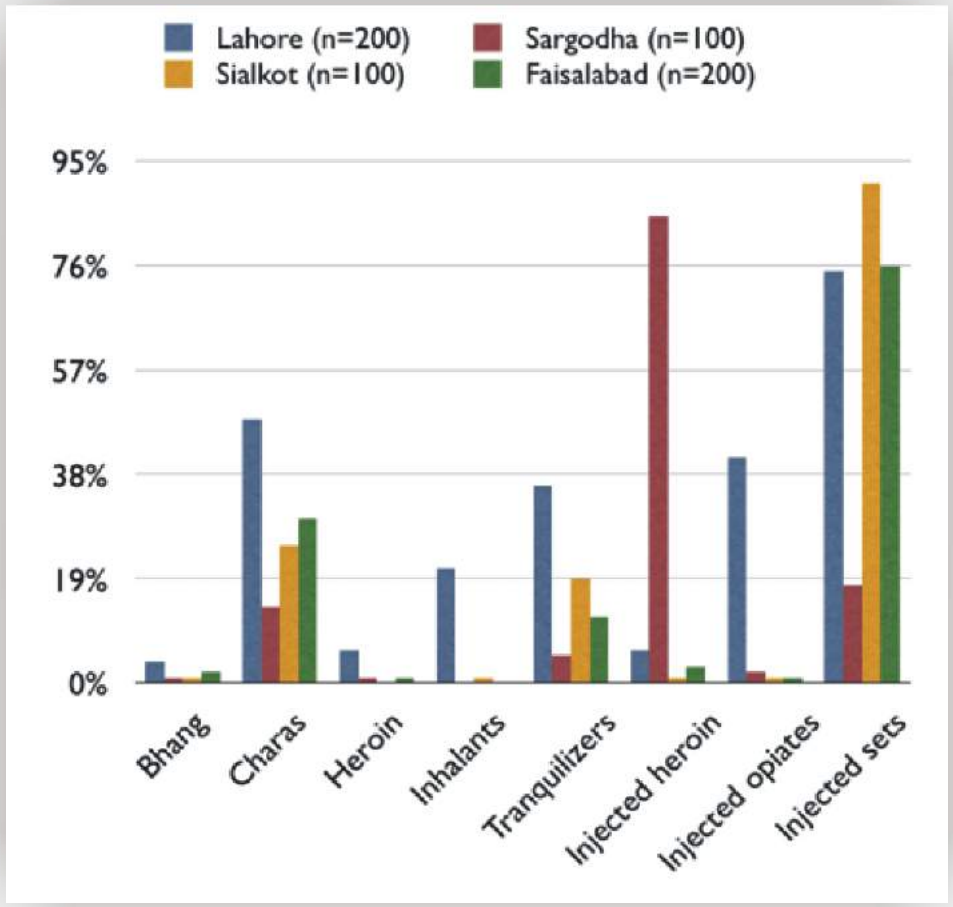
Even in Sargodha, where currently most of the respondents reported using heroin in combination with Antivil (veterinary medicine), injecting 'sets' had been reported by 56% percent of the respondents.

The findings of this study are similar to the trends prevalent in other parts of Asia. Injecting has rapidly taken over the traditional modes of intake of drugs and injecting of pharmaceuticals seems to be more popular.

Prevalent drug use

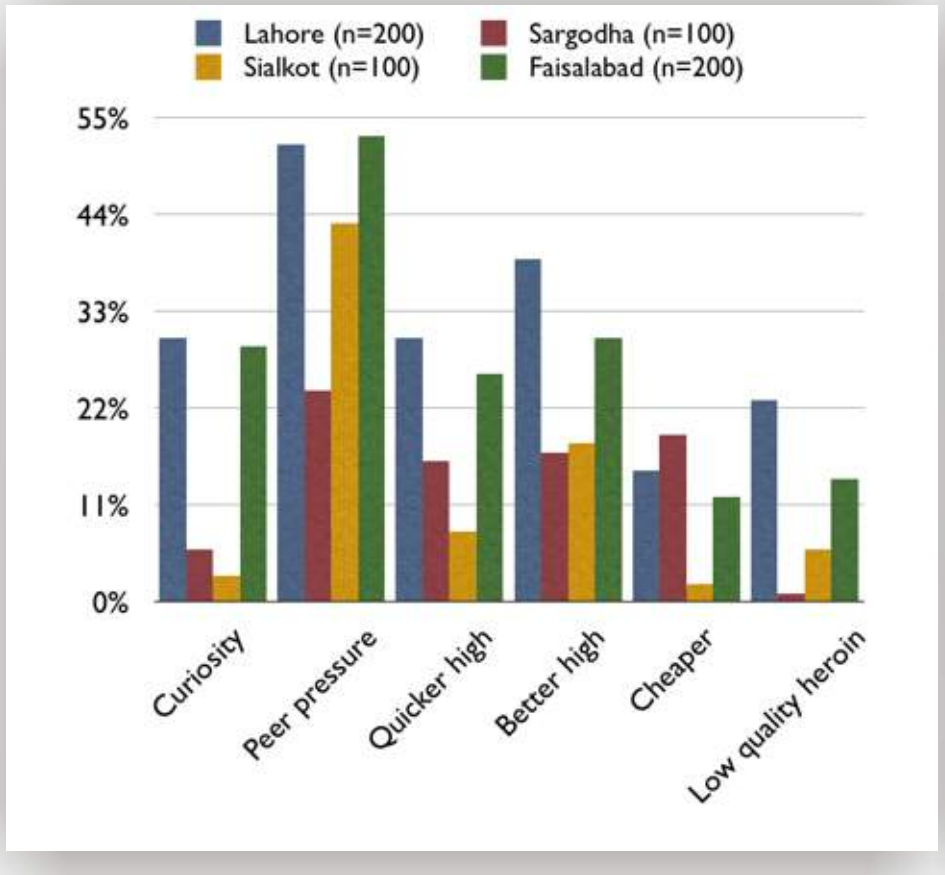
The study mainly targeted people currently injecting drugs, however, poly drug use is common among the respondents. Particularly hashish was being used by many as a secondary drug followed by inhalants and tranquilizers. Hashish use was reported in all cities where the study was conducted and the highest was in Lahore (48%) followed by Faisalabad (30%), Sialkot (25%) and Sargodha (14%). Inhalant use was reported in Lahore where 21% of the respondents were currently using glue in addition to injecting combination of pharmaceutical drugs.

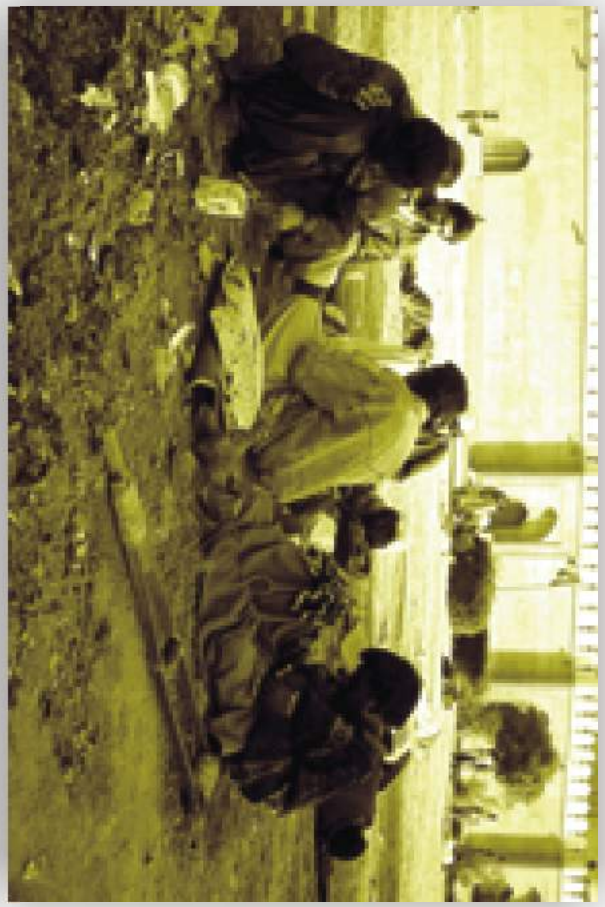
The injecting of a 'set' was very common in Lahore, Sialkot and Faisalabad as 75-91% of the people currently injecting drugs were injecting 'sets'. In Sargodha, a vast majority of the respondents (85%) were injecting heroin in combination with pharmaceutical drugs.



Reasons for switching to injecting drug use

A major proportion of the respondents (24-53%) in all four cities cited that peer pressure was the major reason to shift to injecting drugs from smoking, chasing or sniffing heroin. This was followed by a better and a quicker high as the major reasons which triggered injecting drug use in most of the cases. Curiosity was mentioned by a reasonable number of respondents in Lahore and Faisalabad whereas it was rarely mentioned in Sargodha and Sialkot.





Age at initiating injecting

The age at initiating injecting was as low as 10 years in Faisalabad and the highest was 66 years in Lahore. A review of the mean age at initiating injecting is given in the adjacent table.

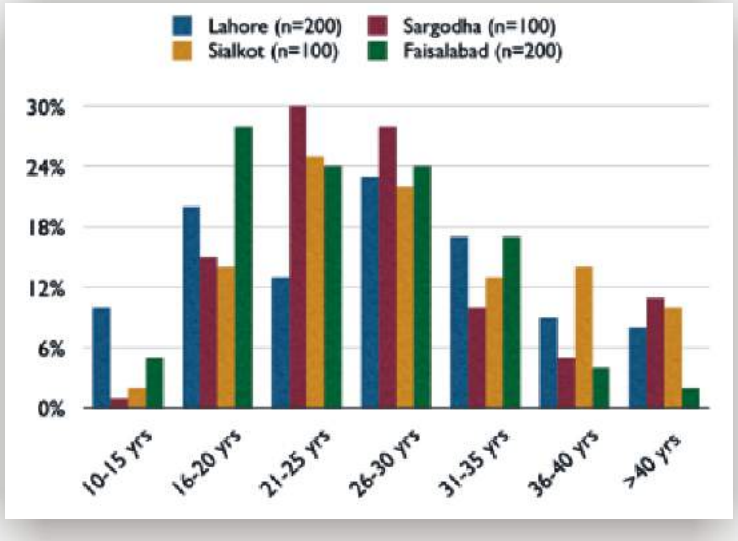
City	Age at initiating injecting		
	Mean	Min.	Max.
Lahore	28.1	12	66
Sargodha	28.3	16	57
Sialkot	29.1	14	49
Faisalabad	25.2	10	47

It is evident that a younger age group of people using drugs is shifting to injecting in all the four cities. This can be attributed to the increasing number of young homeless children who live and use drugs on the streets.

The current age of the respondents was compared with the age at initiation of injecting to calculate the period since they had been injecting. The mean difference in current age and age at initiation of injecting was highest among respondents from Faisalabad (8.77 years) followed by Lahore (7.9 years), Sialkot (5.9 years) and Sargodha (4.4 years).

This represents that respondents in Faisalabad had been injecting drugs for almost 9 years. The mean difference of age was even higher among HIV positive persons injecting drugs in all three cities, suggesting that with a longer period of drug injecting, people are more likely to get infected with HIV or other blood borne diseases.

According to a previous study conducted in 2003 by NZ in collaboration with Johns Hopkins, USA among injecting and non injecting persons in Lahore and Quetta , *'people injecting drugs who have just begun injecting (<=1 year) had significantly lower HCV-seroprevalence than those who had injected for longer, suggesting that risk of HCV infection greatly increases after the first year of injection drug use. Educational interventions can be implemented among newly-initiated injectors to help curb the further spread of HCV or HIVÕ (HIV and Hep-C Risk Factors among injecting and non-injecting drug users in Lahore and Quetta - 2003, Nai Zindagi - Johns Hopkins University www.naizindagi.com)*

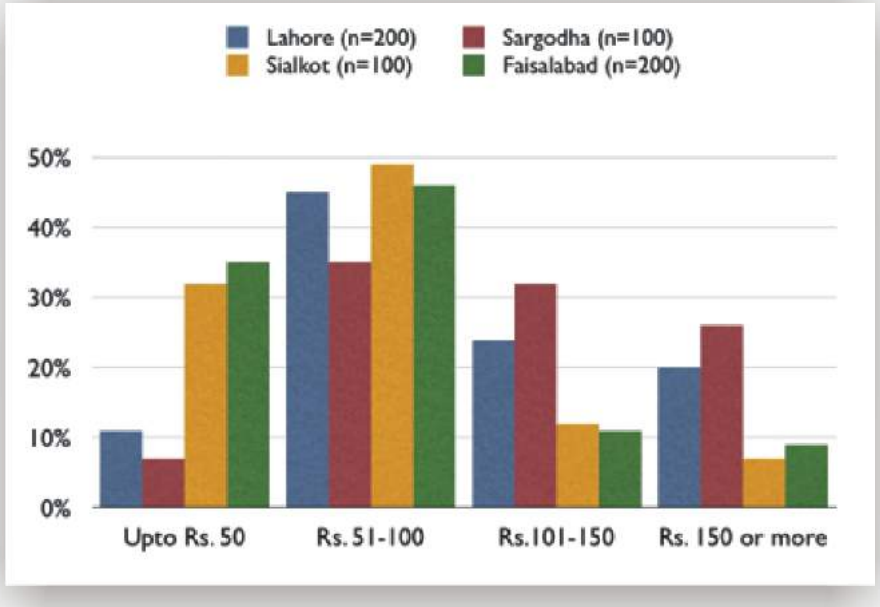


A review of the age brackets reveals that majority had started injecting drugs during their 20's, however, in Lahore and Faisalabad a reasonable proportion had started injecting during teenage.

Daily expenditure on drugs

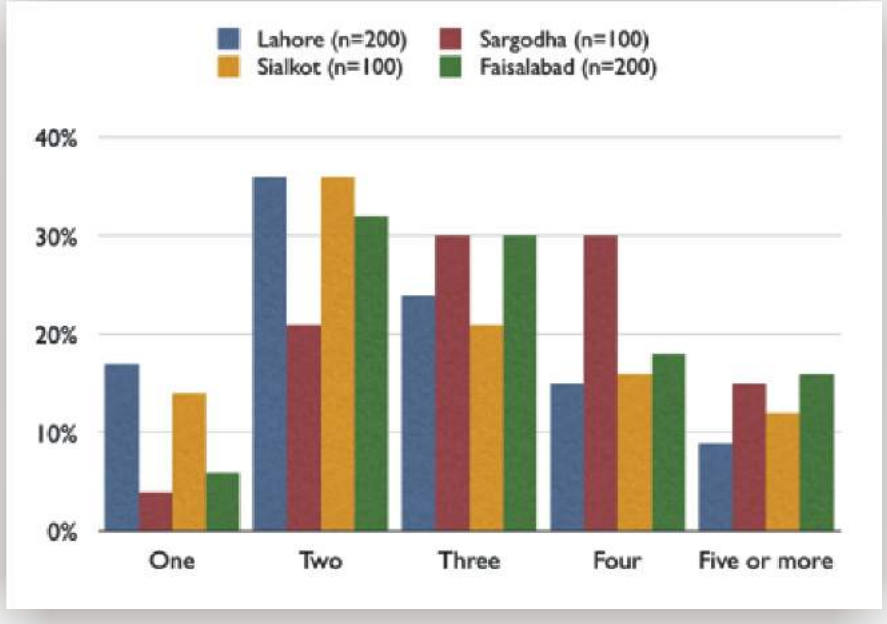
Respondents from Sargodha were spending more money on drugs compared to respondents from other cities. This is due to the fact that most inject heroin in Sargodha which costs more than pharmaceuticals, which are being used in other cities.

Between Rs. 51 to 100 is commonly the daily expenditure on drugs among people injecting drugs in all four cities which is proportionate to the amount of money they earn on a monthly basis.



Daily frequency of injecting

Most of the respondents were injecting drugs 2-3 times a day. The number of respondents injecting thrice a day was highest in Sargodha which also justifies higher expenditure on drugs.



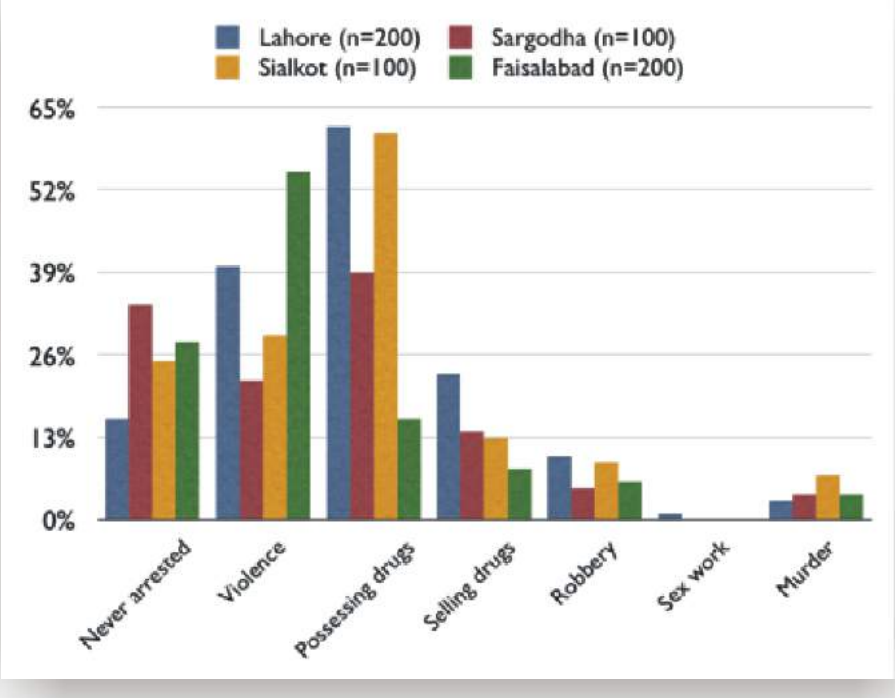
Exposure to blood

In response to the question that whether 'you have donated or sold blood during last six months', 11% in Sargodha, 9% in Lahore, 4.5% in Faisalabad and 1% in Sialkot gave an affirmative response. The lack of screening facilities at blood banks coupled with low knowledge among general public about transmission of HIV may result in a generalized epidemic if blood screening, collection and testing procedures are not improved.

Except for Sargodha where 3% of the respondents had received blood transfusion in their lifetime, 8% of the respondents each from Lahore, Faisalabad and Sialkot had received blood transfusion.

However, the HIV positive respondents had not donated or received blood with the exception of Faisalabad where 2 out of 19 HIV positive respondents had received blood transfusion.

Reviewing the response to other questions relating to exposure to blood through dental or general surgery, sharing razor blades, or tattooing, no significant association was found between these risk behaviors and HIV status of the respondents.



Arrest related information

The highest number of respondents were arrested in Lahore (84%). In other cities this varied between 66% - 75%. This represents a very high percentage of those arrested and indicates possible injecting in prison settings.

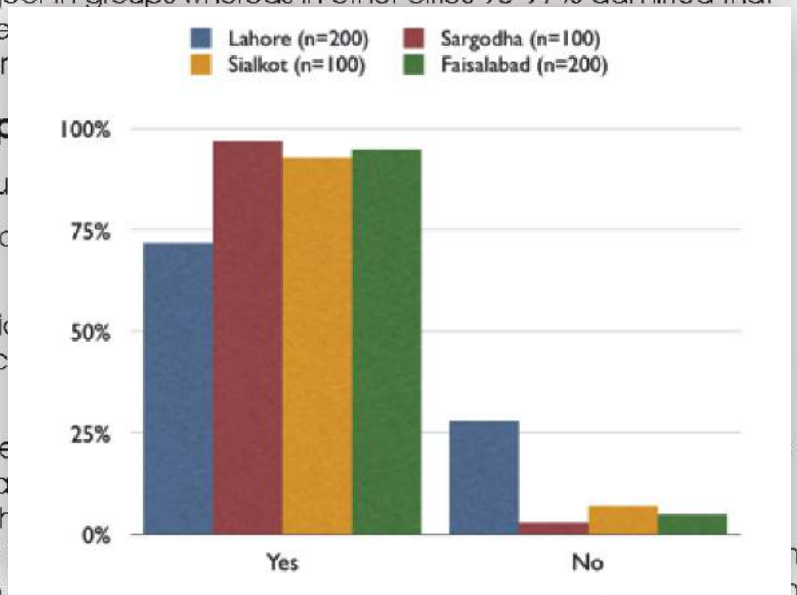
The reasons for arrests are primarily violence and possession of illicit drugs.

Injecting related risk behaviors

The data was collected from respondents on their injecting practices and responses are based on self-reporting. All possible risk behaviors were addressed while designing the questionnaire including syringe acquisition, use of syringes and other injecting equipment and disposal of used syringes etc.

Drug use in groups

In Lahore, 28% of the respondents said that they do not inject in groups whereas in other cities 93-97% admitted that they mostly inject drugs in groups. Injecting in groups make
injecting equipment which increases the risk of disease tran



Sharing of syringes and other injecting equip

Syringe sharing among people injecting drugs was measu

Receptive syringe sharing was determined from the questi
which had already been used by someone else ?Õ

Distributive syringe sharing was determined from the questi
syringe to someone else after usage? The variables were c
always.

Lahore has the highest number of respondents who reporte
reflects the fact that people injecting drugs are more awa
other cities. This can be attributed to the fact that compreh
programs, syringe exchange services, counseling on safer
injecting equipment have been in place in Lahore since 5
than receptive sharing. People injecting drugs were reluctant to use syringes someone had already used, but due to the cost factor and often non-availability of new syringes sharing is very high.

Respondents in Sargodha were at the highest risk of infection as only 13% said "never" to distributive sharing and 20% said "never" to receptive sharing. 24% said they had always given away syringes to someone else after using them and 17% had always used syringes already used by someone else.

This is also evident from the results of sero-prevalence as 12% of the respondents from Sargodha were HIV positive. This represents a direct connection between use of non-sterile injecting equipment and vulnerability to HIV/AIDS among people injecting drugs who don't have access to information and services.

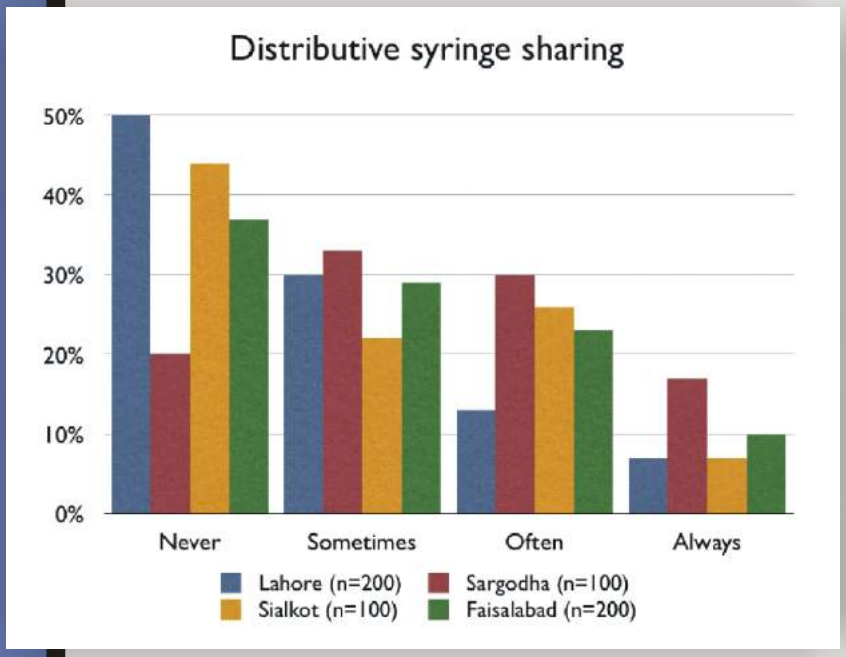
The situation in Lahore and Sialkot is less grim. However, the need to implement comprehensive street based programs to prevent HIV is immediate and necessary.

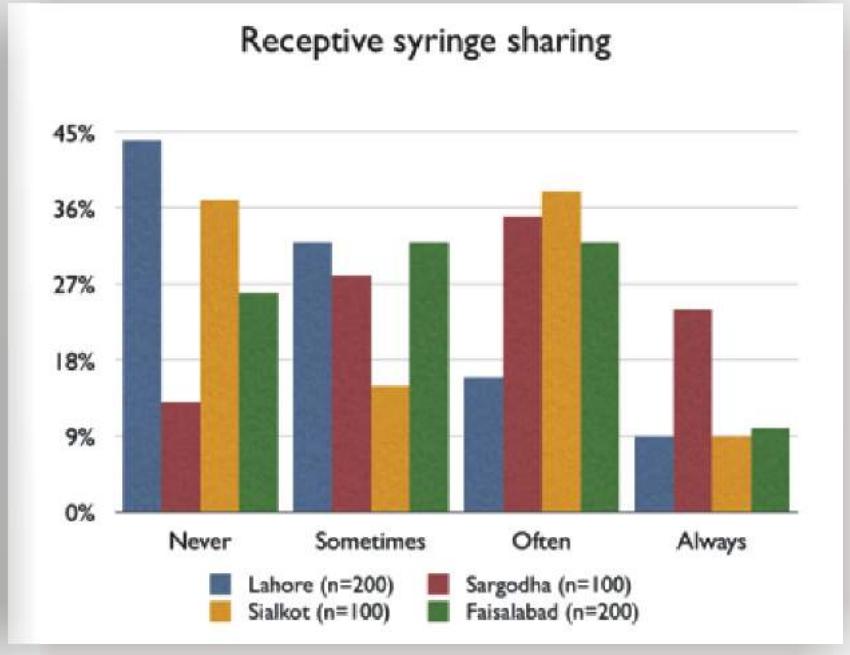
Other forms of sharing injecting equipment or the injectable drug were also studied and a similar risk behavior was reported by majority of the respondents.

Significantly, in Lahore 57% of the respondents denied using syringes that have been pre-loaded (filled) by someone else whereas in all other cities majority of the respondents had used pre-loaded syringes, which also increases the risk of infection.

Re-injecting blood once or more than once is a common practice among all respondents.

The term used for this is "pumping" (also known as "jerking") and is mostly done by chronic injectors who think that they will quickly get the maximum effect.





Moreover, respondents believe that injecting drugs with their own blood repeatedly does not expose them to infection.

However, particles of blood that remain in the syringe can be more harmful in terms of transmission of infection, if the contaminated syringe is used by someone else.

In Sargodha where injecting drug use is a relatively recent trend, 85% of the respondents were jerking as compared to other cities where it was also prevalent.

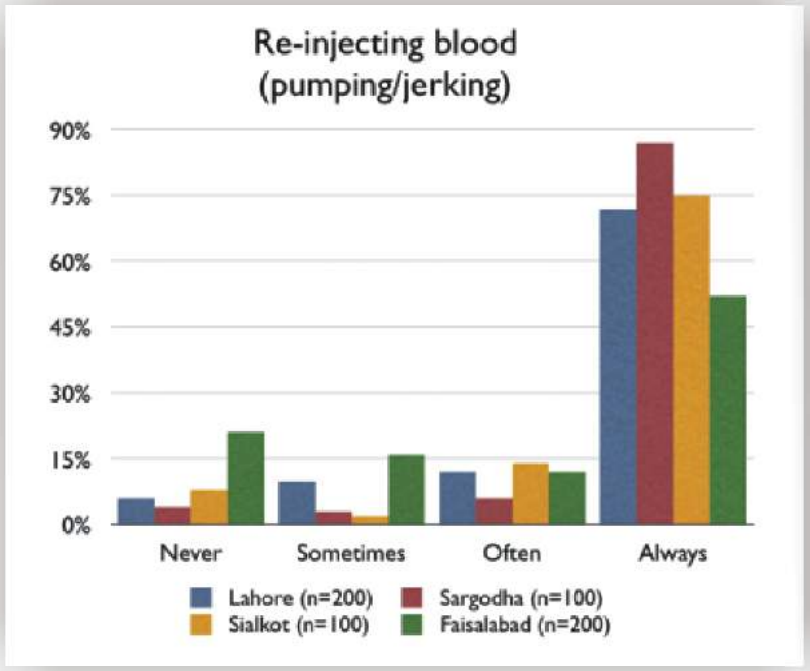
There were no significant difference in syringe sharing patterns between HIV positive and HIV negative respondents.

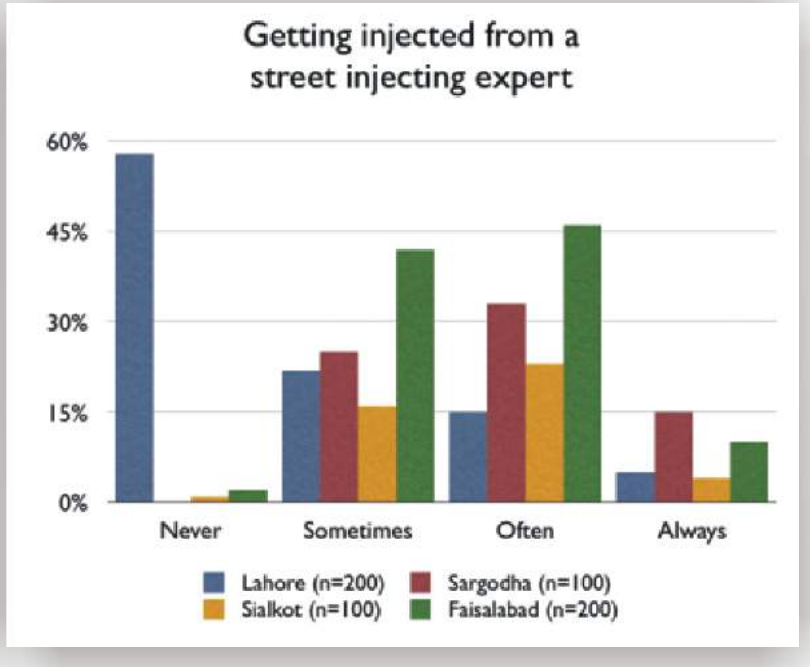
Getting injected by a street-based injecting experts (street doctors)

A street based injecting expert or a 'street doctor' is a person sought by people injecting drugs who find it difficult to inject themselves. The street doctor is often a person injecting drugs and who is experienced in locating veins and helping others inject.

This trend is quite high in cities where there is no education on safer injecting practices or where harm reduction services are not available.

In Lahore, 58% of the respondents have never sought services of an injecting expert, which is primarily due to availability of harm reduction services.





Cleaning and re-use of syringes

Re-using syringes is a very common practice among people injecting drugs. In Lahore 22% of the respondents said that they have not re-used their syringe during the last six months. This is primarily due to availability of free clean syringes from the syringe exchange program (SEP) established by NZ since 2000.

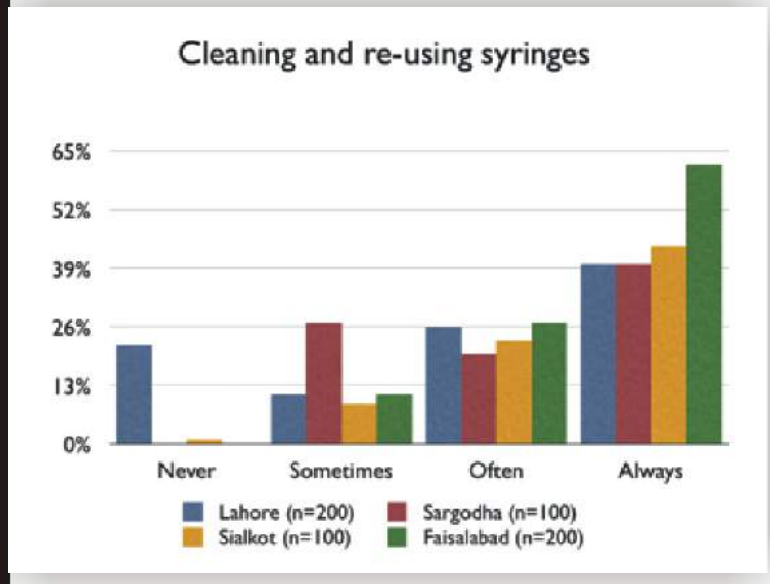
Majority clean their syringes by rinsing it with water, however, in Sargodha and Sialkot, a reasonable proportion of those who re-use their syringes use Avil (Antihistamine) as an agent for cleaning syringes.

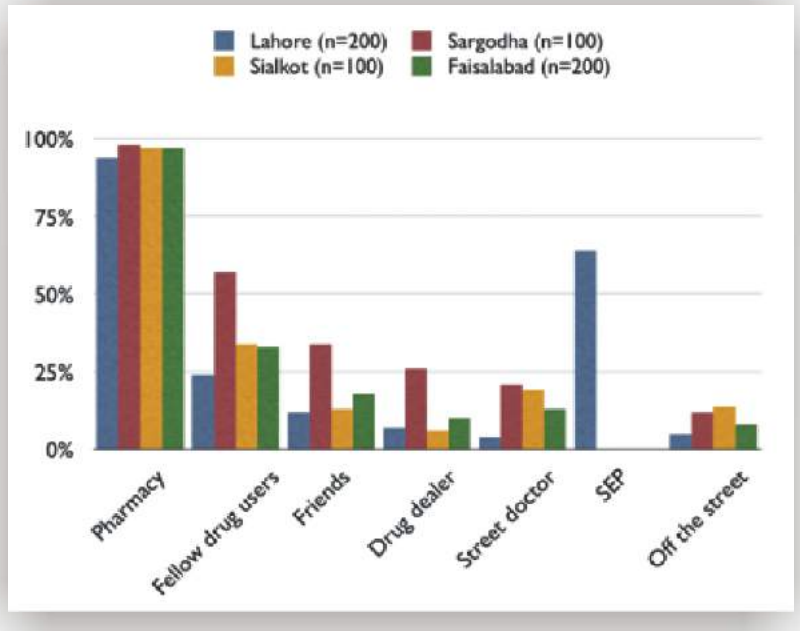
Syringe acquisition

Pharmacies are a primary source of acquiring syringes. A reasonable proportion, however, have obtained syringes from fellow drug injectors. In Sargodha 57% of the respondents have obtained syringes from fellow injectors whereas it ranges from 24-34% in other cities.

Friends, street experts, and drug dealers were also mentioned as some of the sources for syringe acquisition. A small proportion also reported using syringes that they found off the streets.

Lahore was the only city where 64% of the respondents reported to get syringes from the syringe exchange program. This establishes a need for similar programs in other cities, where they are currently non existent.





Health related information

The respondents were asked to provide information on health related issues. This area covers general health problems, history of STIs (sexually transmitted infections) and history of drug treatment sought.

General health issues

A high proportion of respondents had suffered from a range of illnesses. Jaundice and asthma were found most common.

The respondents from Sialkot were more likely to have TB and STIs as compared to respondents from other cities. Fits (like epilepsy) were found more common among respondents form Sargodha (36%) followed by Faisalabad (32%) and Lahore (27%).

In addition to general poor health, malnutrition - abscesses, wounds and injuries that need medical attention and care are quite common.

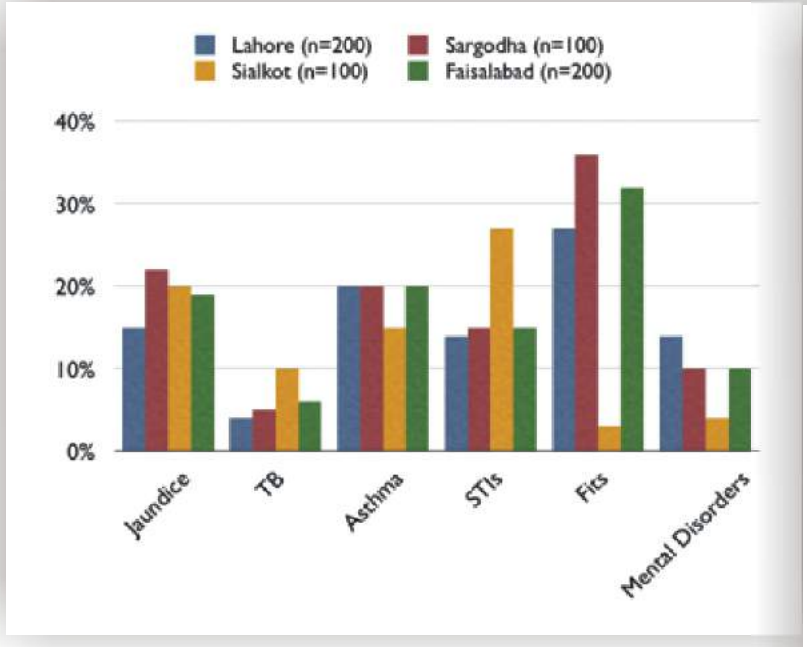
Symptoms of STIs

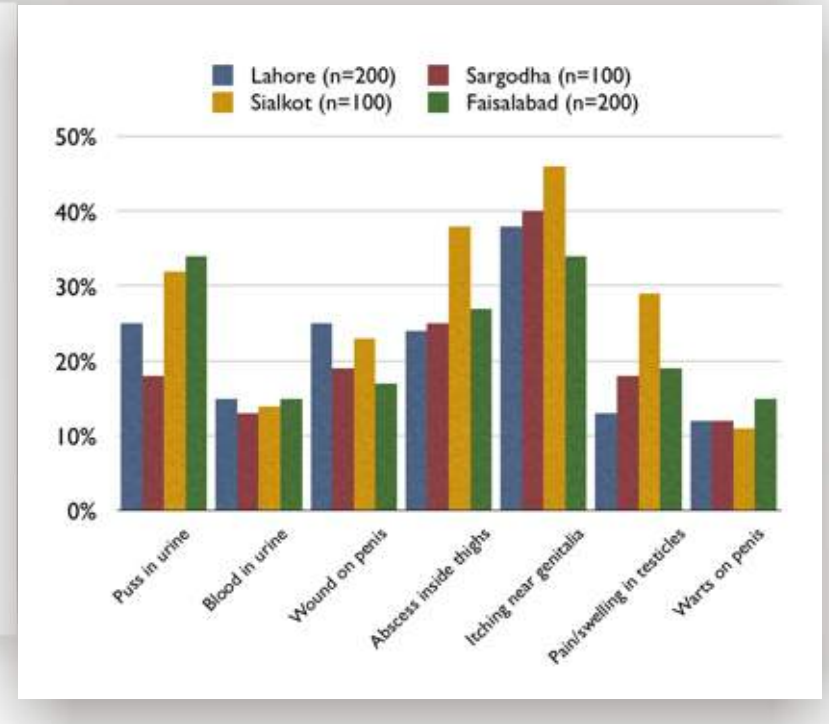
Between 18-34% of the respondents from the 4 cities reported having had STIs

Different symptoms of STIs as reported by the respondents can be seen in adjacent figure.

STIs increases the chances of HIV transmission and also chances of infecting spouses and sexual partners due to unprotected sex.

The program needs to focus on access to STI diagnosis and treatment, for people injecting drugs and their partners in sex.





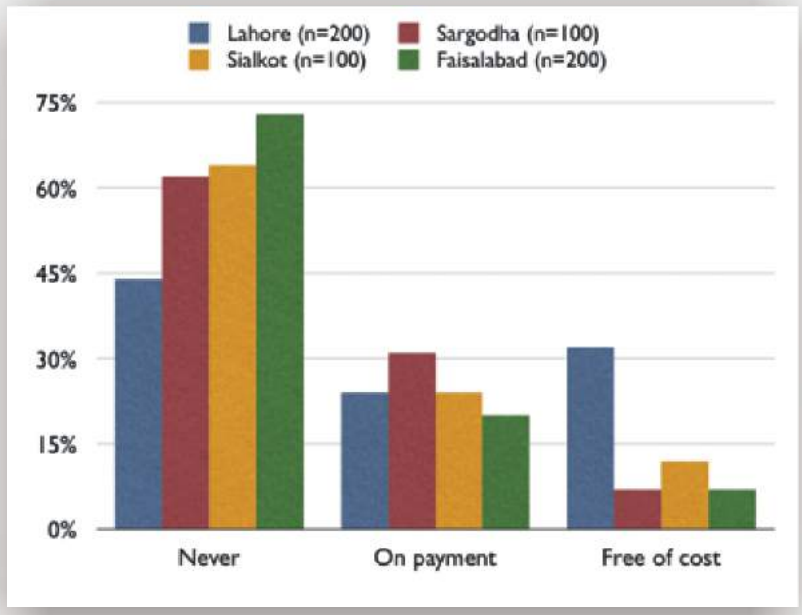
History of drug treatment

Drug treatment was most accessed by the respondents form Lahore (56%) followed by Sargodha (38%), Sialkot (36%) and least by respondents from Faisalabad (27%).

32% of the respondents accessed free drug treatment services, mainly provided by NZ in Lahore.

Non-availability of quality drug treatment services or higher costs involved in drug treatment were the major barriers in accessing drug treatment as reported by majority of the respondents.

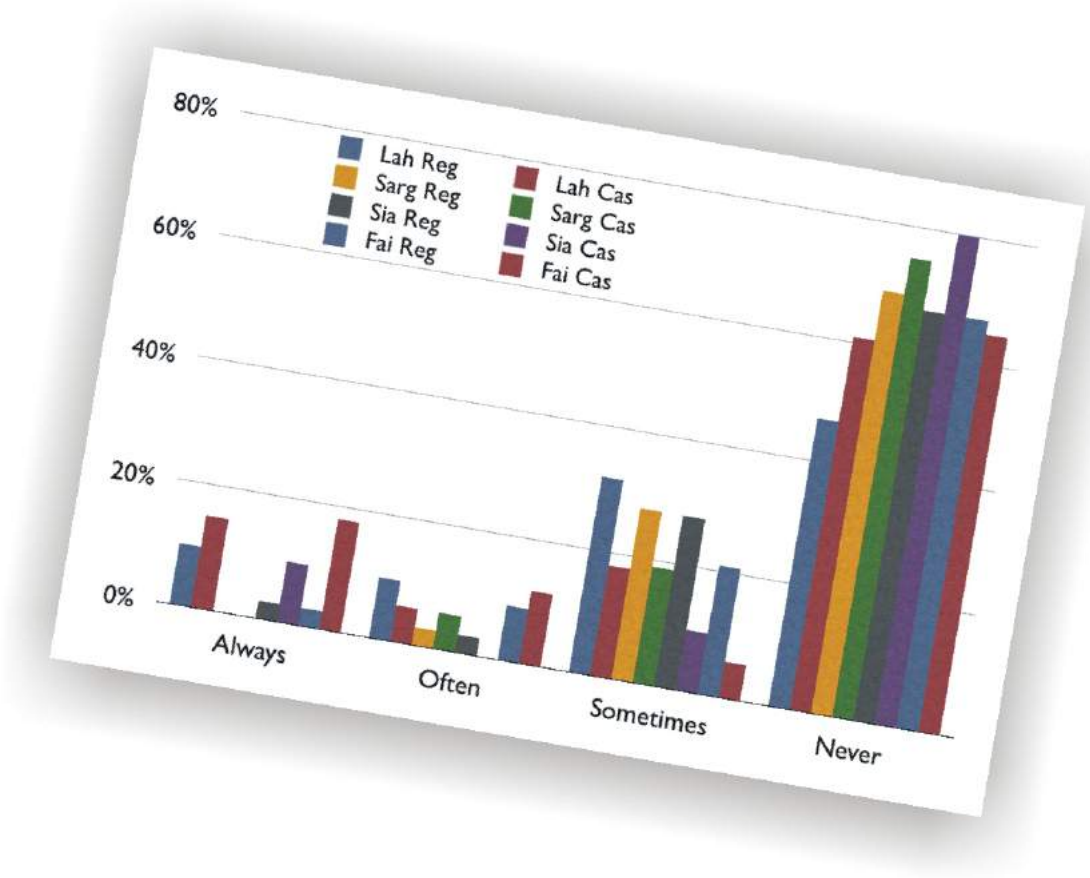
Access to free drug treatment needs to be drastically increased in order to reduce drug use.



Drug treatment is essential in helping people make better choices in order to improve their quality of life. It provides an opportunity to focus and understand issues related to injecting drug use, HIV and other related high risk behaviors.

Sexual behavior

Sexual risk behavior with regular and casual sex partners was measured separately. Data related to having sex with men, women and children below the age of 18 years and the use of condom in sex during the last six months were also recorded. Respondents were also asked whether they paid or received money or drugs for having sex.



Condom use

Between 79-91% of the respondents in the 4 cities knew of condoms.

The highest condom use was reported in Lahore. NZ's programs in Lahore provide free condoms and information/education to persons injecting drugs about condom use.

Sargodha reported 0% - 'always' use of condom with regular and casual sex partners. Considering that people injecting drugs in Sargodha have the highest HIV prevalence, the epidemic could very quickly move to their partners in sex.

Even in other cities condom use is very low and programs need to focus on an aggressive and extensive campaign on the distribution and use of condoms.

Another interesting aspect to note is that condom use in all the cities is often higher with regular sex partners (wives) than with casual sex partners (sex workers or others).

Sexual risks with female partners

A large proportion of the respondents (76-89%) reported having ever had sex with a female.

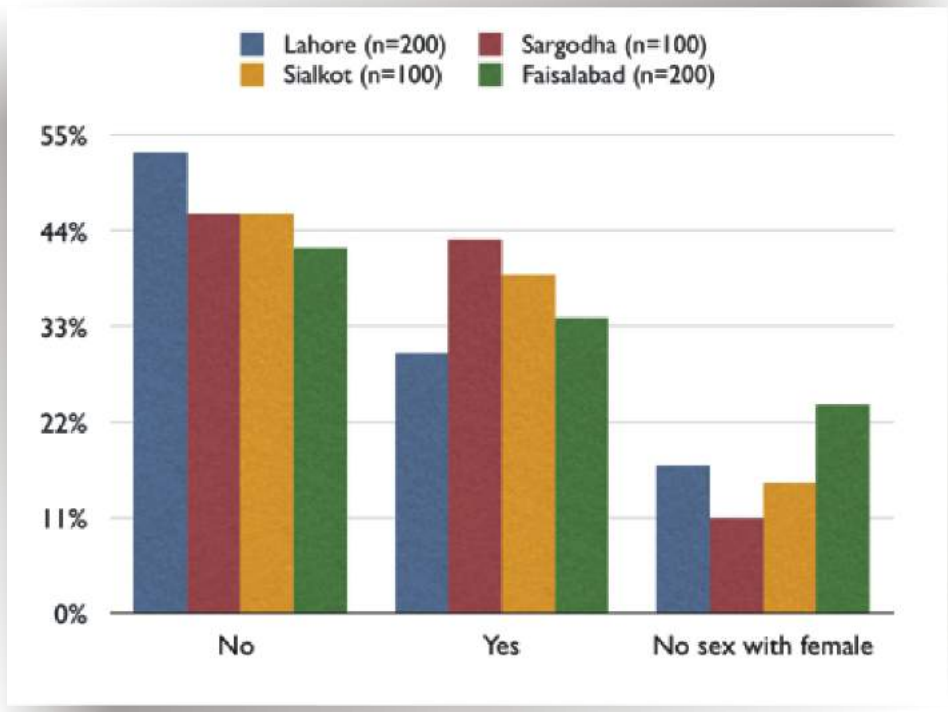
However, 30-43% had sex with female/s during the last six months. Number of regular female sex partners was higher than the number of casual female sex partners in almost all cities.

Regular partners in sex in most of the cases were wives.

As female sex workers (FSWs) are more likely to be partners in casual sex, unprotected sex places both people injecting drugs and FSWs at a higher risk of HIV infection.

Sexual risks with male partners

A small proportion of the respondents reported having had sex with male partners during the last six months, however, condom use with male sex partners was even lower than with female sex partners. Sex with street children (male) was also reported occasionally, however, it was difficult to further analyze the data due to very low numbers in proportion to the overall sample size of the study.



Knowledge about HIV/AIDS

The knowledge of HIV/AIDS among people injecting drugs was determined by asking if they had ever heard of HIV/AIDS.

A significant proportion (particularly in Faisalabad) of people injecting drugs had 'never' heard of HIV/AIDS.

Majority of those who knew of HIV/AIDS had heard of it from peers, TV and newspapers. In Lahore 49% had got information about HIV/AIDS from NZ's program staff.

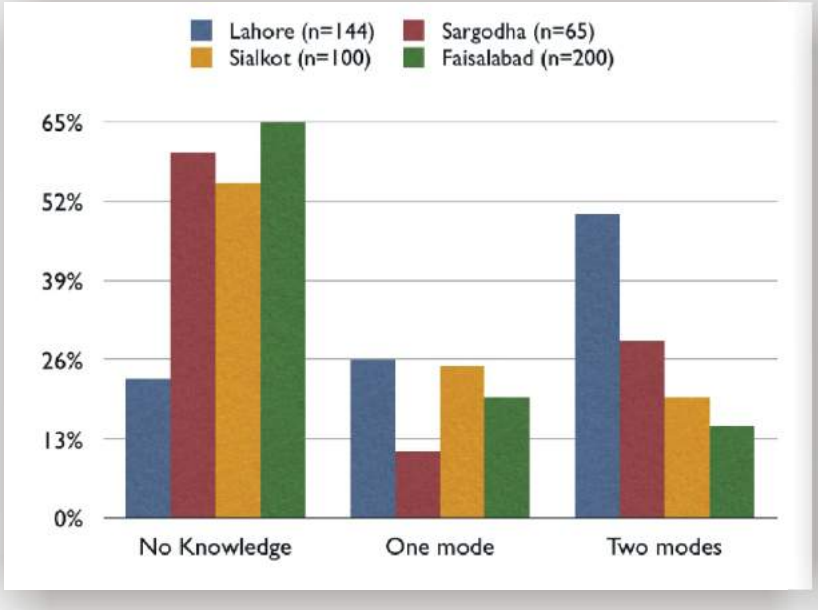
The knowledge of respondents about 'means of transmission' was measured through an open ended question on' how HIV is spread'. The interviewers were asked not to give an option for this particular question in order to avoid facilitating the response.

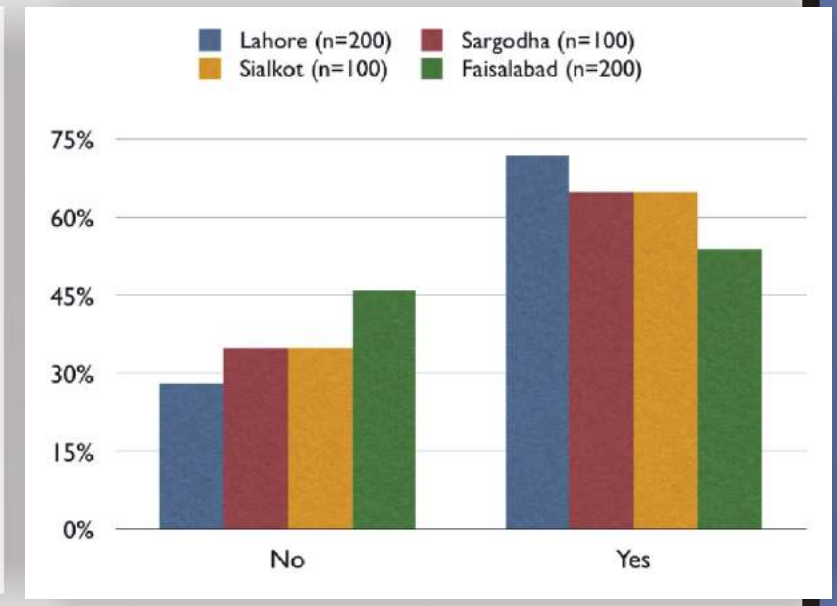
Respondents knew of two main ways of how HIV/AIDS is transmitted; unprotected sex and unsafe injecting.

Out of the total sample of 600 respondents, only
2 from Lahore also gave information about ' mother to child' transmission.

The adjacent figure shows that respondents from Lahore have better knowledge of HIV transmission. This indicates that harm reduction services in Lahore have contributed to increasing the knowledge of HIV among people injecting drugs.

However HIV positive respondents knew very little about HIV and modes of transmission. Programs need to build in components to raise awareness about HIV and modes of transmission among people injecting drugs.





Conclusions

The following has been concluded from this study:

- $ HIV/AIDS is primarily ignited by injecting drug use in Asia.
- $ HIV/AIDS prevalence in Pakistan among people injecting drugs has moved from 'low' to a 'generalized' status in the 4 cities of Faisalabad, Lahore, Sargodha and Sialkot.
- $ Rapid increase in HIV prevalence among people injecting drugs in other cities has also been reported.
- $ A shift from traditional modes of drug use (chasing, sniffing) to injecting drugs is prevalent and becoming increasingly popular.
- $ Injecting drug use is not limited to urban cities, but common in rural settings as well.
- $ Drug use is scattered in all the cities and is not concentrated in one or two major locations.
- $ Approximately 6560 persons are currently injecting drugs in the four cities . An additional 21000 persons using drugs (not yet injecting) could potentially shift to injecting drugs
- $ 37 (6.2%) out of the total 600 respondents, tested positive for HIV indicating that HIV infection among people injecting drugs is on the increase.
- $ Prevalence of HIV among people injecting drugs in Sargodha and Faisalabad was as high as 12% and 9.5% respectively and it represents the group highest at risk.
- $ A younger age group (18-24 years) is currently injecting drugs and represents a significant proportion (7-10%) of people injecting drugs. This indicates initiation of injecting drugs at an earlier age.
- $ A majority belong to their city of origin and frequently interact with their spouses/families. This is likely to result in secondary transmission of infections common on the streets - HIV, STIs and others.
- $ A vast majority are un-educated and cannot benefit from written information/materials.
- $ Most manage to support their drug habit by earning from odd jobs, like cleaning cars, labor, etc. , hence crime related to drug use is not significantly severe.
- $ Between 33-46% of all the respondents are currently married. Of the HIV positive respondents between 33-37% are married and live at home. Secondary transmission is possible considering 'no' or very 'low' use of condoms.
- $ With the exception of Sargodha where heroin is mostly injected, pharmaceuticals are the most common injectable of choice in the other cities. This has been reported as a general trend among people injecting drugs in most locations.

- $ Peer pressure to inject is the main reason for shifting to injecting drug use and not economic reasons.
- $ The mean age at initiating injecting in the 4 cities is between 25-28 years. In Sargodha respondents had been injecting since 4.4 years, whereas in other cities it was more. Highest HIV prevalence is in Sargodha which indicates that length of injecting is not proportional to prevalence of HIV alone.
- $ Between 66-75% of the respondents had been arrested in their life time, mainly due to possession of drugs and violence related offences. This indicates possibility of injecting in prison settings.
- $ Injecting is a group activity as 93-97% claim that they inject in groups. Sharing of syringes is high, which is the main reason for high prevalence of HIV among people injecting drugs.
- $ As compared to other cities people injecting drugs in Lahore show least at risk behaviors related to sharing, using pre loaded syringes and getting injected by a street-based injecting expert. This can be attributed to the existence of long term harm reduction programs in Lahore by NZ and other organizations.
- $ Between 18-24% of the respondents from the 4 cities reported having STIs. This increases chances of HIV infection and transmission.
- $ Syringe exchange programs play an important role in providing information, education and clean syringes to people injecting drugs.
- $ Majority do not have access to drug treatment.
- $ Condom use is very low particularly with regular partners in sex (wives) as compared to casual partners in sex (sex workers, others).
- $ 30-43% of the respondents have had sex with a female partner in the last 6 months. This indicates that people injecting drugs are sexually active and can play a significant role in secondary transmission of HIV.
- $ Majority of the respondents have heard of HIV/AIDS but due to lack of information they do not know about the various modes of transmission.

ecommendations

- $ Rapid situational assessments need to be carried out in other parts (rural and urban) of the country to assess the situation of injecting drug use and HIV prevalence in order to plan interventions and allocate resources based on ground reality and need.
- $ Voluntary counseling and testing services (VCT) needs to be an integral component of interventions in order to assess prevalence of HIV on an on-going basis to monitor the epidemic and impact of services.
- $ In the 4 cities programs need to cover at least 60% (3500-4000) of the persons injecting drugs with comprehensive and regular street based harm reduction services in order to impact the epidemic.
- $ Programs must also address the needs of the 21,000 non injecting drug users in the 4 cities in order to prevent them from shifting to injecting drugs.
- $ People injecting drugs and HIV positive need services that meet their specific needs of support and care in long term treatment settings that also provide access to relevant medical and social care.
- $ Comprehensive harm reduction services must include out reach, education and information related to HIV and risk reduction, basic health care, counseling, referral for advanced medical care, diagnosis and treatment of STIs, access to VCT, referral to drug treatment services and syringe exchange/distribution programs.
- $ To compliment harm reduction services and maximize the output of services, people injecting drugs should have access to market oriented vocational skills training or jobs in order to shift focus from drugs to better choices in life.
- $ Substitution programs need to be set up on a pilot basis in the two cities of Faisalabad and Sargodha where sharing of syringes and prevalence of HIV is higher in order to reduce injecting drug use.
- $ Programs and interventions aimed at preventing HIV/AIDS among people injecting drugs need to be mainstreamed within the Provincial Health care system in partnership with Civil Society to ensure sustainability and coverage at the scale required.
- $ Advocacy should be an on going activity incorporated within the interventions and is necessary to create an environment that enables community ownership and participation.
- $ Law enforcement agencies (Anti Narcotics Force and Police) need to fully support activities and assist service providers in gaining trust and confidence of people injecting drugs in order to intervene. Sporadic police and drug raids are often counter productive and result in inaccessible hidden populations who cannot be reached.

- $ Spouses and casual partners in sex of people injecting drugs need to be reached out and provided information, education and tools (condoms, STI treatment) in order to prevent secondary transmissions. These would be services specific to the needs of women.
- $ A younger age group of people are now injecting drugs. Programs need to address issues specific to youth and in particular services that address issues of homeless youth living on the streets and using/injecting drugs.
- $ A very high percentage of people injecting drugs have been to jail. Assessments need to be carried out in prison settings in order to assess the viability and need of harm reduction programs in prisons.
- $ Networking between media, civil society organizations and communities is essential to reduce stigma and marginalization of people injecting drugs and in particular those who are also HIV positive.
- $ Regional (Asian) networks need to be accessed for information, technical expertise and guidance when required.
- $ In developing materials for BCC and communication strategies we need to keep in mind that most of the persons injecting drugs cannot read or write, and 'one on one' counseling based on interpersonal communication is a more powerful and effective medium.
- $ Out reach programs need to encourage 'peer to peer' education as an important and effective tool for communication.
- $ A majority of persons injecting drugs want to access drug treatment. At least between 50-70% should have access to detoxification and short term rehabilitation services.

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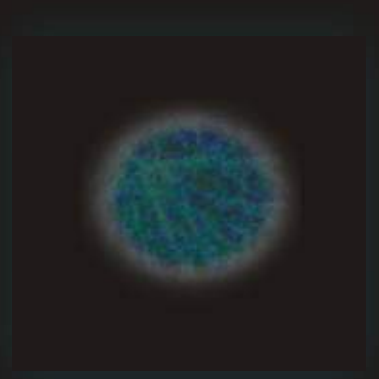
- Civil Society Organizations.
- Community stake holders.
- NZ's Associates - Roshan Raasta and Savior-faire.
- NZ Staff and field workers.



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