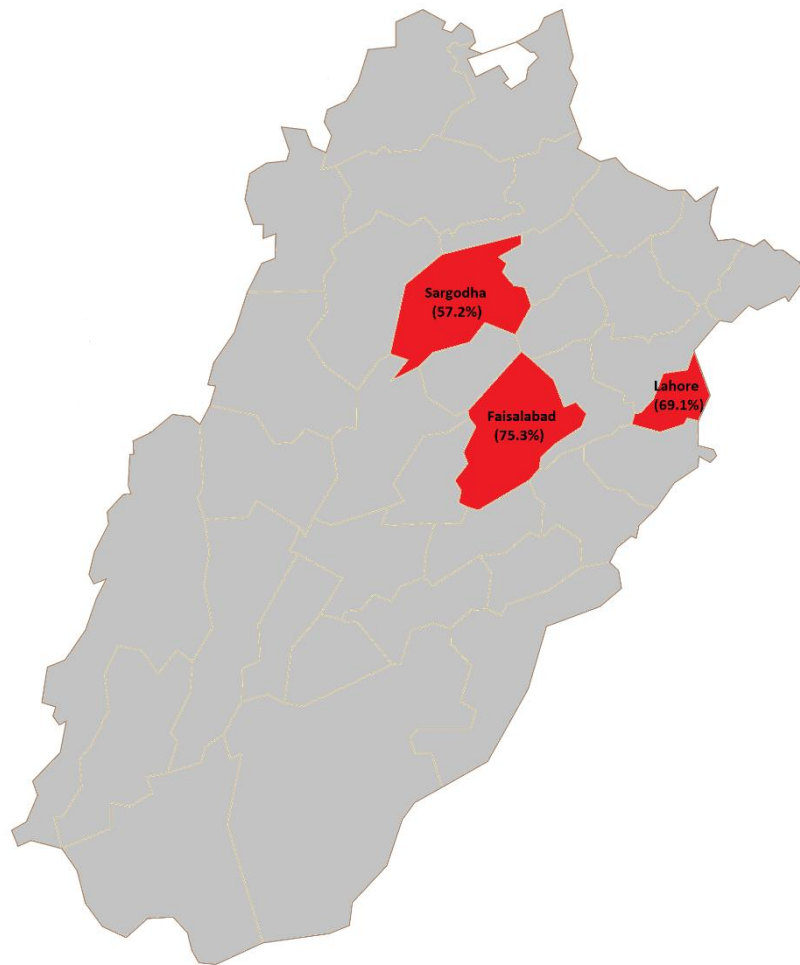


Nai Zindagi Trust

Rapid situation assessment (RSA) to assess HIV and  
**street based injecting drug use situation**  
in selected districts of Punjab - Pakistan



Lahore, Sargodha and Faisalabad – Punjab

December 2018 – January 2019

## Executive summary

A Rapid Situation Assessment (RSA) carried out by Nai Zindagi in three major urban centres of Punjab – Pakistan reveals alarmingly high prevalence of HIV and Hepatitis-C among street-based people who inject drugs (PWID). The assessment was carried out in collaboration with Mainline Foundation, Netherlands and Provincial AIDS Control Program, Government of Punjab.

The highest HIV prevalence among PWID was found in Faisalabad (75%) followed by Lahore (69%) and Sargodha (57%). Similarly, the highest HCV prevalence was recorded in Faisalabad (94%) followed by Lahore (87%) and Sargodha (72%). A mapping exercise estimated that there are between 3,461–4,391 street-based PWID in three cities who had no access to HIV prevention and harm reduction services. The high prevalence rates are directly attributable to risk behaviours reported by the study participants such as sharing of syringes and injecting paraphernalia. Lack of education, meagre resources at hand, and chaotic living conditions further compound the risk of acquiring HIV and other blood borne infection among this population. The risk of sexual transmission to spouses and intimate partners is also very high considering lack of knowledge about protective measures and very low condom use.

The findings of RSA played a pivotal role in sensitizing stakeholders about the need to increase coverage of HIV prevention and harm reduction services for PWID and their partners. Based on the evidence Nai Zindagi has been able to secure additional resources under its Global Fund supported program to increase coverage of services for PWID to 14 additional districts including Faisalabad, Lahore and Sargodha. By the end of 2019, the number of PWID regularly accessing continuum of prevention and care services under the Global Fund program will increase from 18,000 in 30 districts to 26,000 in 44 districts.

The increased coverage level is likely to result in reducing further transmission and reaching the desired impact to halt the rising trend of new infections in Pakistan.

# Introduction

Nai Zindagi (NZ) is the Principal Recipient of the Global Fund supported HIV and AIDS grant in Pakistan. Our primary objective is to prevent transmission of HIV among people who inject drugs (PWID) and their sexual partners based on a continuum of care across 30 districts. A range of services including needle syringe exchange and linkages to ART are provided to approximately 18,000 individuals regularly.

Pakistan continues to have a concentrated HIV epidemic with an estimated prevalence among the general population at less than 0.1%. Geographically it is estimated that 93% of people living with HIV (n = 133,299) are to be found in two provinces in the country; Punjab (50%) and Sindh (43%). The epidemic is concentrated among key populations chief among which is People Who Inject Drugs (PWID). PWID account for an estimated 43,554 of people living with HIV/AIDS (PLHA), and have an estimated prevalence rate of 38.4%.

Nai Zindagi is providing HIV prevention services to PWID in 14 districts of Punjab under the project, however, there are certain large cities in the province without such services despite large number of PWID with high HIV prevalence as suggested by the surveillance studies. These cities were supposed to be covered by the Provincial AIDS Control Program, but unfortunately, no preventive services could be installed and post June 2014 due to lack of domestic funding and resulting in no prevention, testing and treatment services for PWID. This has major public health consequences considering high HIV prevalence among PWID in and around these major cities. The following table shows percentage of HIV+ PWID identified under the Global Fund Program in seven of the fourteen districts, which are surrounding the key uncovered districts in Punjab. Even with existing services from the Global Fund programme, the prevalence rates are high and it is expected that in the cities/districts without services, outcomes could be disastrous.

**Global Fund Project Data (2012-2018)**

<b>Surrounding Districts</b>	<b>Percentage of HIV+ PWID</b>
Jhelum	45%
Jhang	49%
Kasur	56%
Okara	56%
Sahiwal	64%
Gujrat	65%
Toba Tek Singh	67%

Nai Zindagi believes that impact cannot be achieved without expanding the project coverage to these large urban centres and has been advocating for restoration of HIV services for PWID for the past three years.

In order to substantiate this argument with current evidence, Nai Zindagi planned to carry out a Rapid Situational Assessment (RSA) to know the current situation with regards to drug use and HIV as well as estimate the HIV prevalence among PWID in the three cities of Punjab i.e. Lahore, Sargodha and Faisalabad. The project was initiated in December 2018 and lasted until January 2019, and was carried out with the support from Mainline

Foundation, the Netherlands and in close collaboration with the Punjab AIDS Control Programme (PACP), Department of Primary and Secondary Health, Government of Punjab.

The field work - including data collection and mobilization of PWID for the assessment - was carried out by Nai Zindagi whereas PACP facilitated the testing for HIV, Hep-C, Hep-B and Syphilis to measure prevalence of blood borne infections among PWID in these three cities.

Following were the key expected outcomes of this exercise:

- To reach a realistic estimate of the current number of PWID in the three districts with geographical demarcation of hotspots through a mapping exercise.
- To collect and analyse key demographic data from PWID about age, marital status, income, living conditions etc. in the three districts.
- To identify prevalent behaviours and practices among PWID regarding drug use, injecting & sexual practices.
- To ascertain knowledge about HIV, modes of transmission and prevention.
- To identify prevalence of HIV, Hepatitis B&C and Syphilis among PWID in the three districts.

# Methodology

Detailed maps of all targeted cities were developed and each city was be divided into smaller data collection units referred to as zones. GIS imagery was used to develop zonal maps which were provided to field teams to help them to understand zonal boundaries and to mark spots identified during field work.

## Research methodology & Operational Plan

A team of ten newly hired and trained staff conducted this activity under direct supervision of Nai Zindagi's experienced team leaders.

### ○ Level-1 interviews of Key Informants

Information about Injecting drug use in locations within each zone was recorded in a pre-designed format (ANNEX – I). The format included information on the key geographic locations along with the estimated numbers (minimum and maximum) of the IDU population. This information was collected from key informants (KIs); persons who were likely to have information on the profiles of the locations and estimates of number of IDUs. Verbal consent was obtained from the secondary KIs during these interviews. KIs included a broad range of individuals, including rickshaw/taxi drivers, shopkeepers, telephone call operators, hawkers, police officers, labourer, students, and people belonging to various professions i.e., tailors, barbers, shopkeepers, and beggars. Level 1 key informant interviews produced lists of the names and locations of hot spot(s), encoded by zone, city and district. Tables generated from the lists indicated the estimated maximum, minimum and mean number of IDU mentioned at each spot. Once agreement made on the name, type and address of spots, master lists of all spots were assembled, to form the basis for selection of places to visit for Level 2 interviews.

### ○ Level-2 interviews of Primary Key Informants

'Level Two' consisted of validating information collected in Phase One, through visiting "hot spots", and interviewing members of key populations present at those spots. This process, called 'spot profiling' or L2 interviews, involved primary key informants (PWID), and focused on validating the information collected in the L1 exercise. L2 information was recorded in L2 forms. L2 was conducted for all spots identified. After spot lists were generated for each zone, field teams visited hot spots to verify the location, describe the type of spot, and collect specific information on the size of the key population associated with that spot. In spots where key population members could not be identified on multiple visits, two secondary KIs were interviewed to verify the L1 information and profile the spot. The focus in L2 was to collect more accurate information about the spot. Interviews with community members are expected to provide information such as:

- ✓ Overall timings of the spot.
- ✓ The typology and estimate of key population members at that spot.

- ✓ Peak timings and fluctuations in the numbers of participants at the hotspot.

A special web based software was developed and all the L1 and L2 data was daily entered by Data Entry Operators (DEOs) after validation by the team leaders and City Coordinators.

- **Sampling**

The sample size was determined based on the past prevalence recorded in these cities (IBBS, 2014) with a precision of 6.5 and 95% confidence level which gave a rounded up sample size of 200 in each city

- **Inclusion Criteria**

All people who inject drugs (PWID) irrespective of age and sex present on the hot spots and giving consent in the three cities were enrolled for this rapid situational assessment.

- **HIV Screening through Rapid Diagnostic Tests (RDTs)**

Based on the number of IDUs estimated in each district, the sample size was calculated for HIV screening. Informed consent was obtained and HIV testing was conducted based on three-test-algorithm using WHO approved rapid diagnostic kits. Clients were notified about their test results and all screening data was entered by Data Entry Operators into database after validation and verification by team leaders.

- **HIV, HCV, HBV and Syphilis Screening**

Based on the number of IDUs estimated in each district, the sample size was calculated for HIV screening. Punjab AIDS Control Program (PACP) provided technical support for HIV, HCV, HBV and Syphilis testing followed by biometric registration of PWIDs in the PACP database. Clients were notified about their test results and all screening data was entered by Data Entry Operators into PACP database after validation and biometric verification to ensure linkage to care of HIV positive PWID - post RSA.

- **Behavioral data collection**

The information of risk behaviors was collected through structured questionnaire from each participants comprising of the following areas:

- Demographic data
- Drug Use history
- Injecting behaviour
- Medical history
- Institutional history (drug treatment and jail)
- Sexual behaviours
- Knowledge about HIV/AIDS and Hepatitis

- **Internal and external communication**

A system of communication was put in place for coordination between the field teams and head office. Detailed progress reports were shared with health department KP at the end of activity.

- **Logistic support**

Rented bikes/vehicles were arranged for field and monitoring activities and boarding arrangements in hotels.

- **Data Management**

As per NZ SoPs the data was filed, arranged and stored for any validation and/or verification. All data was edited in the field by team leaders on a daily basis and corrected for names of zones, missing KI typology, and any missing information. A special software was designed and the data set was entered under supervision. In addition to this, all validated spots within each zone were marked on maps, and coordinates for these spots were acquired using Google Earth. The computerized data set was edited, cleaned and used for generating final estimates and lists of spots. To obtain the final figures, the estimated ranges for each site and location were rolled up for a zone and city to produce minimum and maximum estimates. To arrive at a single “best” estimate, the mid-point (“mean”) of the minimum and maximum estimates were used.

### **Internal Monitoring and Quality Assurance Plan**

A monitoring and quality assurance mechanism was put in place and adhered to for all the steps of the RSA. Monitoring was undertaken by the provincial coordinator and project officer in the field. Financial monitoring was also be done for transparent utilization of resources.

### **Ethical Considerations**

This survey was designed to meet international ethical guidelines, specifically addressing the following ethical issues:

- **Informed Consent & Voluntary Participation**

Recruitment of participants was be made only after describing the study procedures and obtaining informed consent. Verbal informed consent was obtained from KIs before conducting the interviews and prospective participants were clearly informed that participation is voluntary and that non-participation would have no negative consequences.

- **Confidentiality**

Considerable effort was taken to maintain the confidentiality of participants. This included non-disclosure of participants' identity and the use of a non-identifying

coding system to track and link study data. The electronic data was password protected and only authorized officials had access to the data files.

- **Staff Safety**

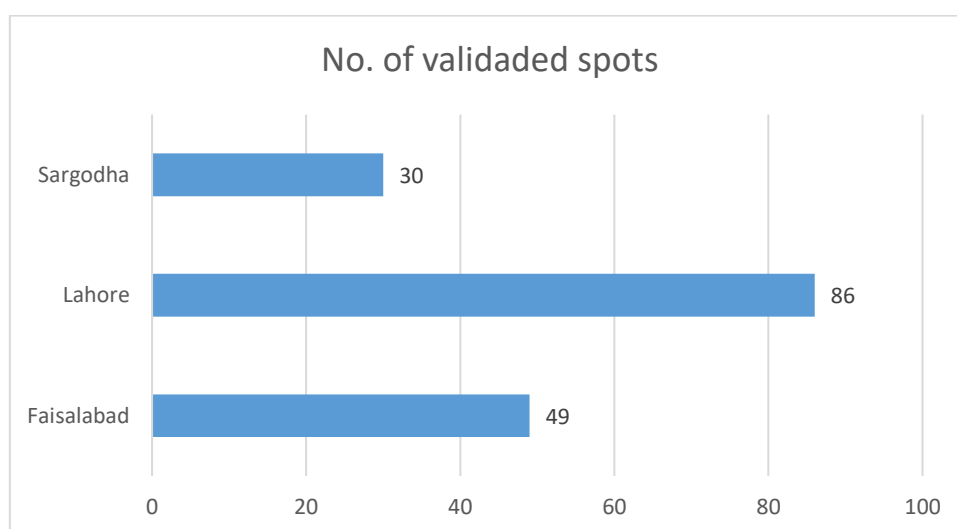
Meetings were held with the police and law enforcement agencies in each city before the project to inform them of the nature and the purpose of the survey, so that any queries from the local police during the project could be addressed. Municipal police officers were officially notified by the Health Department Punjab about the nature of the study, as well as given the names of the field teams.



# Results

## Size estimates of PWID

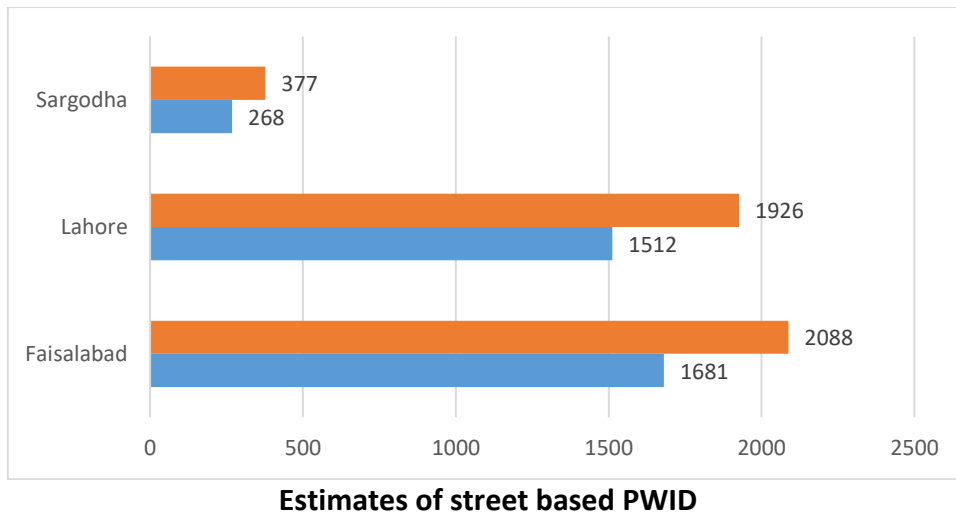
Information about Injecting drug use in locations within each zone (each mapping city was divided into different geographical zones) was recorded in a pre-designed format. The format include information on the key geographic locations along with the estimated numbers (minimum and maximum) of the IDU population. This information was collected from key informants (KIs); persons who were likely to have information on the profiles of the locations and estimates of number of PWID. The following graph shows number of validated hot spots in each city based on mapping data:



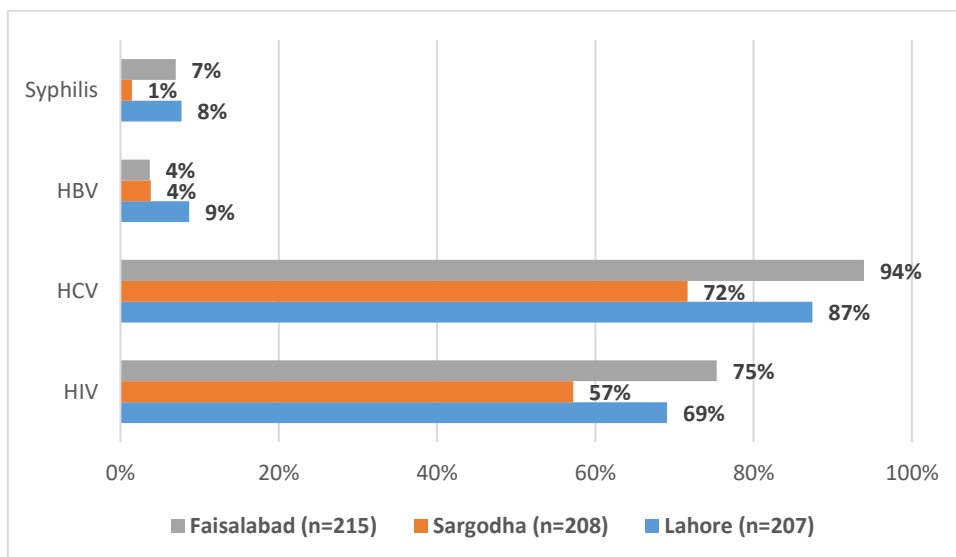
Direct interviews with primary, secondary and tertiary key informants were carried out for data collection in each city as per distribution of spots. Interviews with community members were expected to provide information such as:

- ✓ Overall timings of the spot.
- ✓ The typology and estimate of key population members at that spot.
- ✓ Peak timings and fluctuations in the numbers of participants at the hotspot by calculating average of minimum and maximum clients on validated spots.
- ✓ All the spots reported by community person were validated by field team for more accurate estimates

The following graph shows maximum and minimum estimated number of PWID in the three cities based on mapping data:

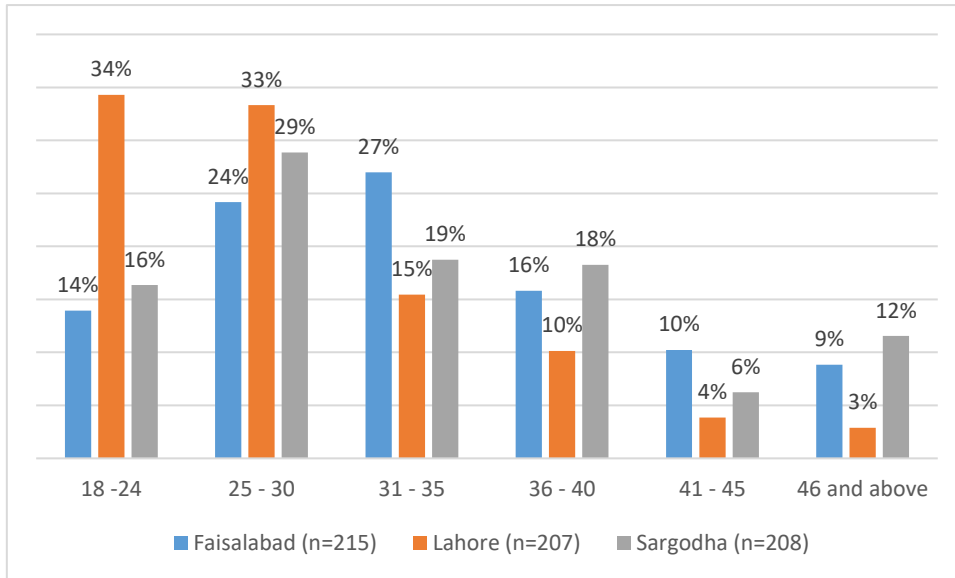


## HIV, HCV, HBV and Syphilis Prevalence



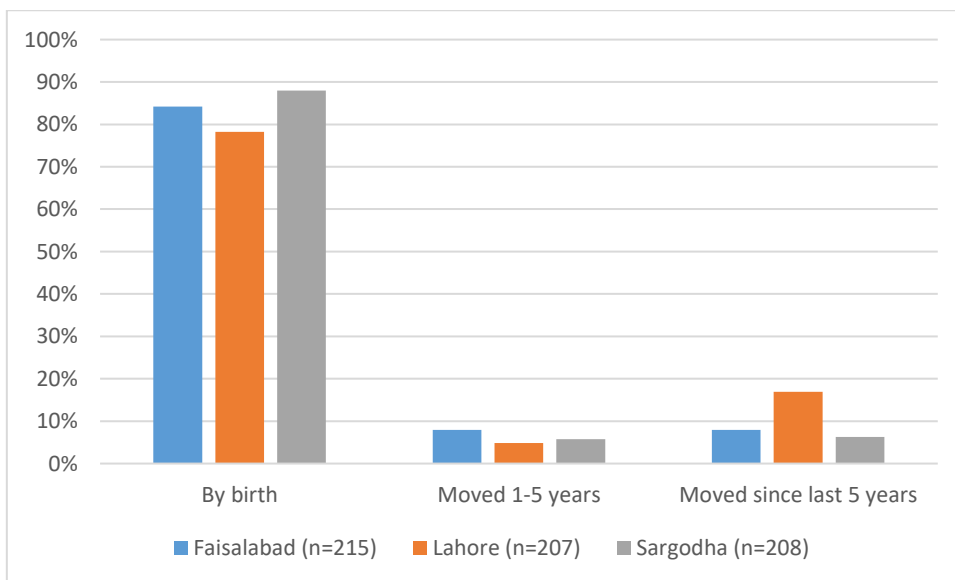
The above graph shows the city-wise breakdown of HIV, HCV, HBV and Syphilis prevalence among the PWID who were tested during the RSA. The highest prevalence for HIV was found to be in Faisalabad (75%), followed by Lahore (69%) and Sargodha (57%). HCV prevalence was found to be highest in Faisalabad (94%), followed by Lahore (87%) and Sargodha (72%). HBV was Highest in Lahore (9%), followed by Sargodha and Faisalabad both at 4%.

## Age



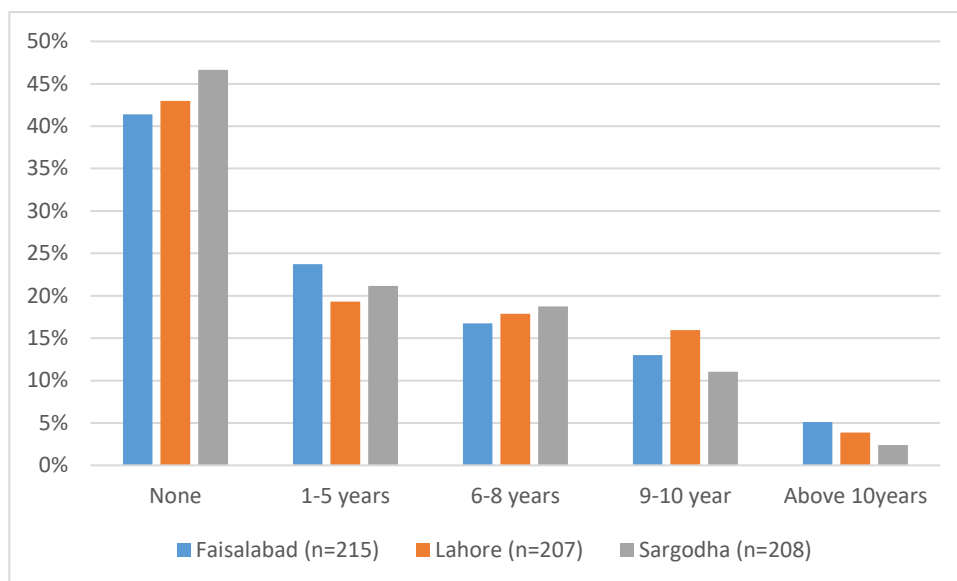
- Overall 29% of PWID were found to be between the ages of 25-30 years and this age group also had the highest prevalence of HIV (80%).

## CITY OF ORIGIN



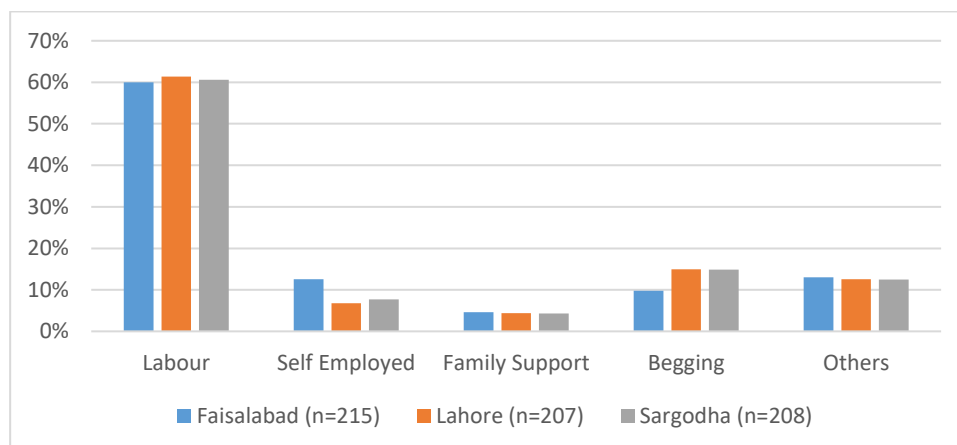
- Over all 83% of PWID were natives from the cities where RSA was carried out. The highest HIV prevalence among natives (77%) was recorded in Faisalabad

## EDUCATIONAL LEVEL



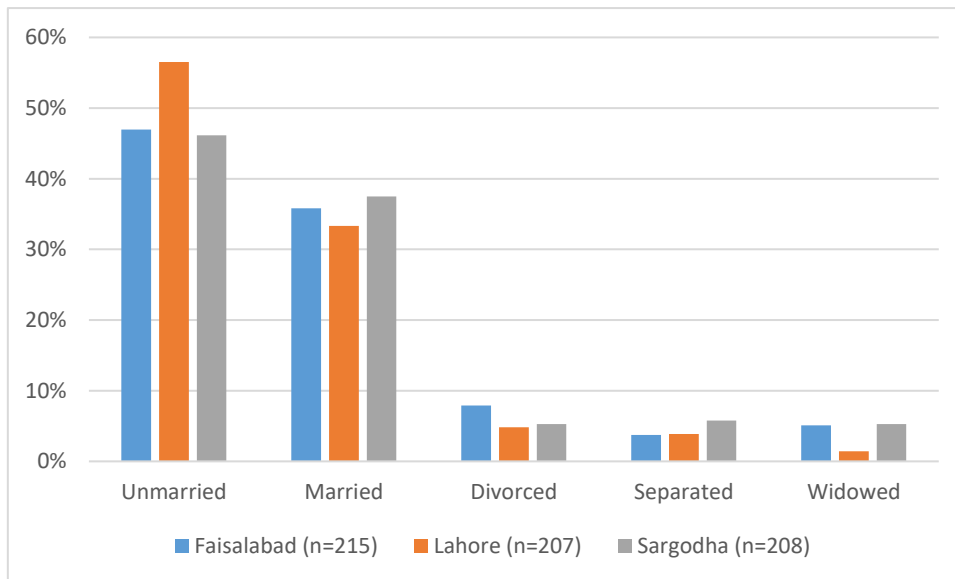
- 44% of PWID had no education and majority of the respondents in all three cities did not have any formal education followed by primary schooling (1-5 years). Of the 424 HIV positive PWID, 47% had no education.

## SOURCE OF INCOME

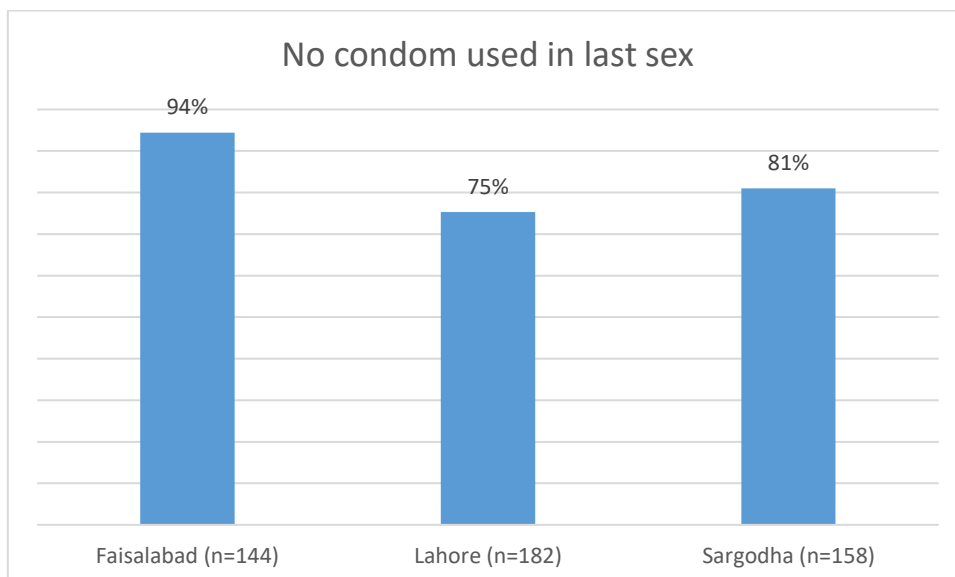


- A majority were earning through daily wage labour and some were self-employed. Begging was the source of income among 13% of the PWID.
- A majority (71%) in all the 3 cities were generating an income of between Rs.12,000 - 24,000 per month, sufficient to support their daily drug use, which costs averagely 200 to 300 rupees.

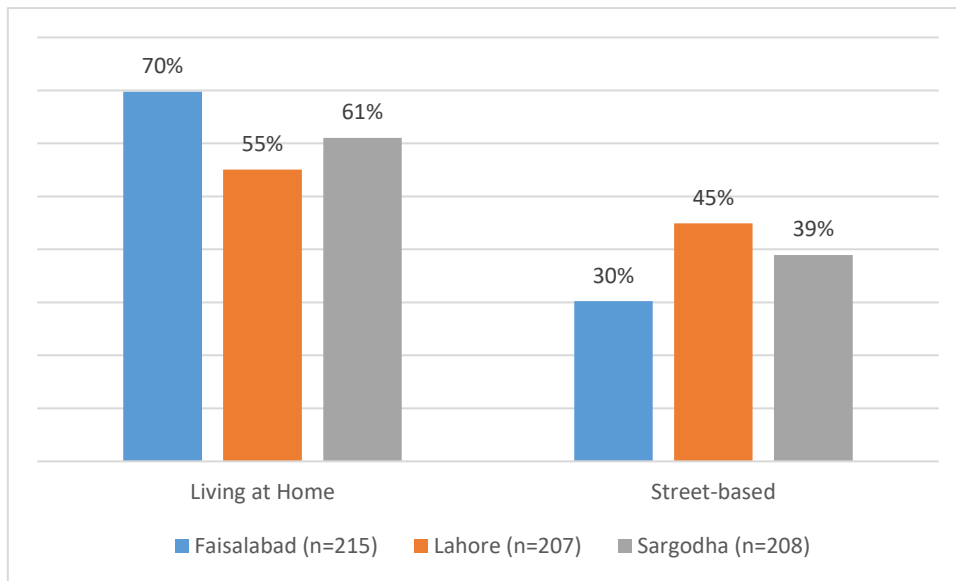
## Marital status



- The highest percentage (38%) of married PWID was found in Sargodha, whereas the highest percentage of unmarried PWID was found in Lahore.
- In Faisalabad of the 77 married PWID, 54 (70%) were HIV Positive.
- In Lahore of the 69 married PWID, 45 (65%) were HIV Positive.
- In Sargodha of the 78 married PWID, 41 (53%) were HIV Positive.
- Considering that regular use of condoms is negligible (see graph below), wives of HIV positive PWID are at extreme risk of contracting HIV from their husbands.

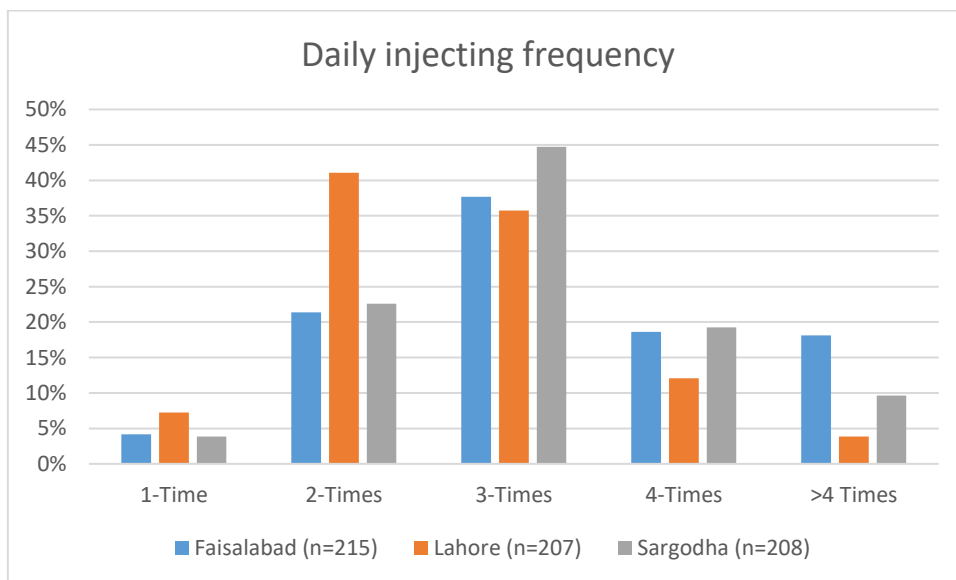


## Current living Status



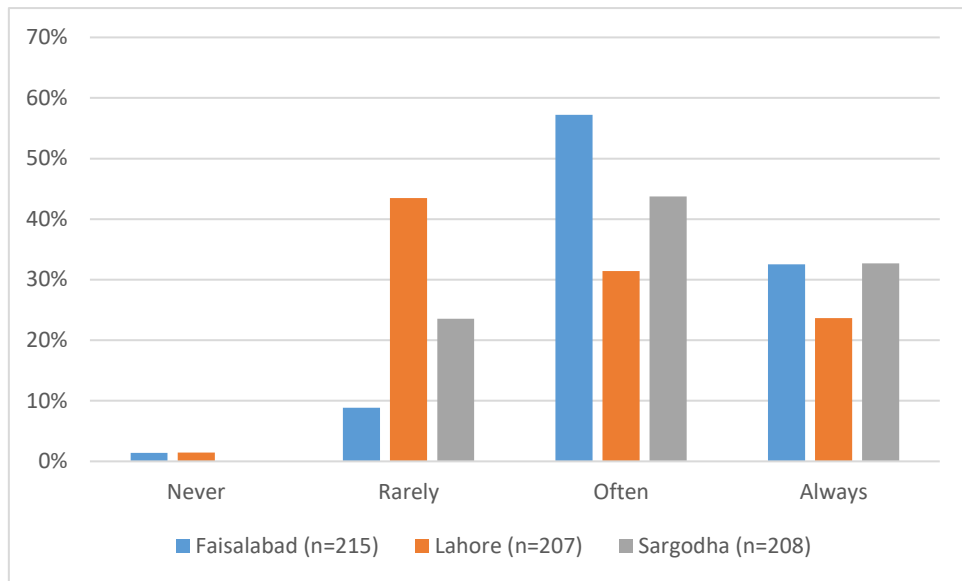
- Lahore being a metropolitan city had the maximum number (45%) of street-based PWID.
- Respondents “living at home” were living in homes owned by them, their parents (joint family living) or in rented accommodation. Street based living constitutes parks, grave yards, pavements, shrines and abandoned buildings.

## Injecting and sharing practices



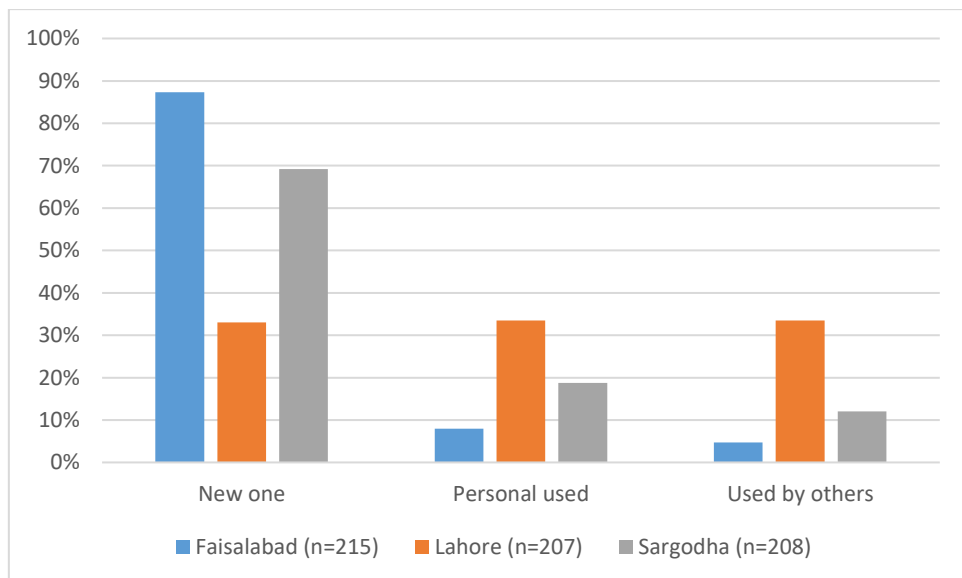
- Overall 84% of respondents were injecting 2-4 times in a day while 61% respondents were injecting 2-3 times which corresponds to national surveillance data and programmatic data of the GF supported project.
- Only 29% of respondents mentioned that they never shared a syringe with others nor used a syringe used by others during past six months

## Use of sterile syringe in last six months



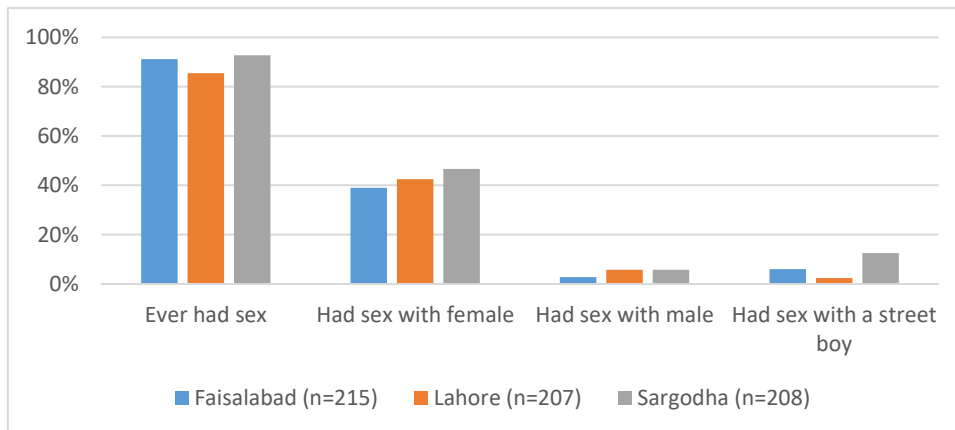
- Only 38% of 206 non-reactive respondents claimed that they always used a new sterile syringes during past six months. This speaks of a huge risk on contracting HIV and Hep-C because of a very high prevalence among their peers

## Last syringe used



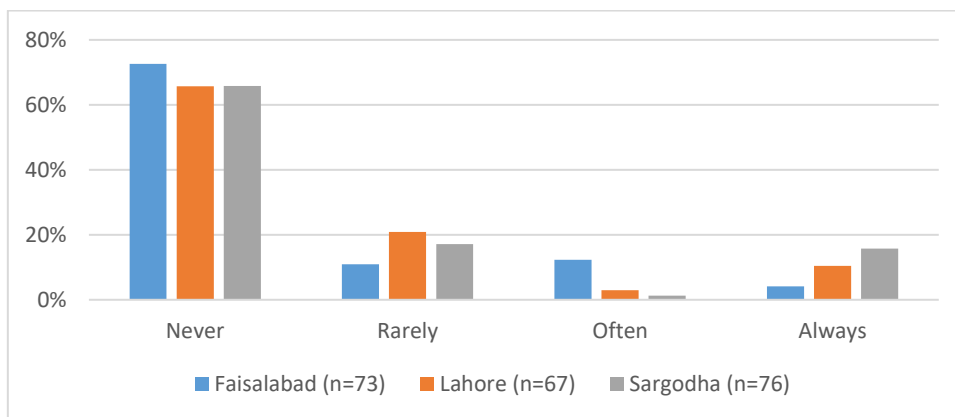
- 78% respondents claimed to purchase syringes from pharmacies and 17% received syringes from fellow PWID. The remaining 5% respondents availed the syringes from different means like from drug pushers, street doctor and picked from the road etc.
- 38% of HIV Positive respondents reported to have abscesses caused by injecting drugs in the past six months.

## Had sex in the past 6 months



- Approximately 90% of the respondents reported having ever had sex.
- 43% of the respondents had sex with a female in the last 6 months of which 168 (62%) of the 269 were HIV positive which speaks of huge transmission risks to sexual partners.
- 68% (146 out of 215) of the respondents never used condom with regular sexual partner including spouses. 65% (47 out of 72) of the respondents never used condom with casual sexual partners.
- 7% of the respondents reported having ever had sex with a street boy in the last 6 months. Of these were 11 respondents including 7 positive never used condom, only two reactive and a non-reactive respondent reported using condom rarely

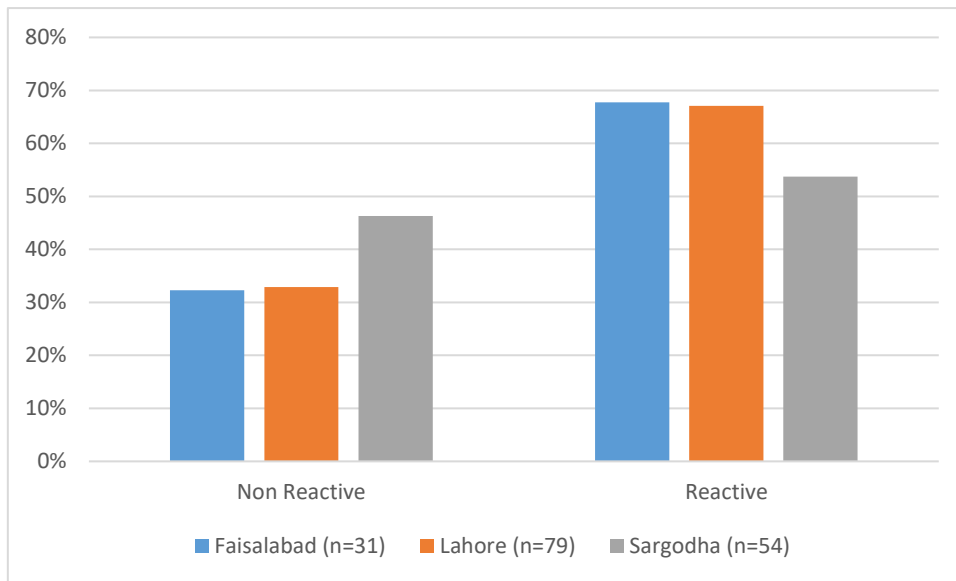
## Condom use



- Of the total 630 respondents 269 had sex in the last 6 months with a female partner.
- Eighty percent of the 269 respondents, who had sex in last 6 months had sex with a regular female partner wife/or a long term relationship
- Out of 215 respondents who had sex with a regular female partner wife/long-term relationship, 68% percent of them had never used condoms and 135 out of these 215 respondents were HIV+

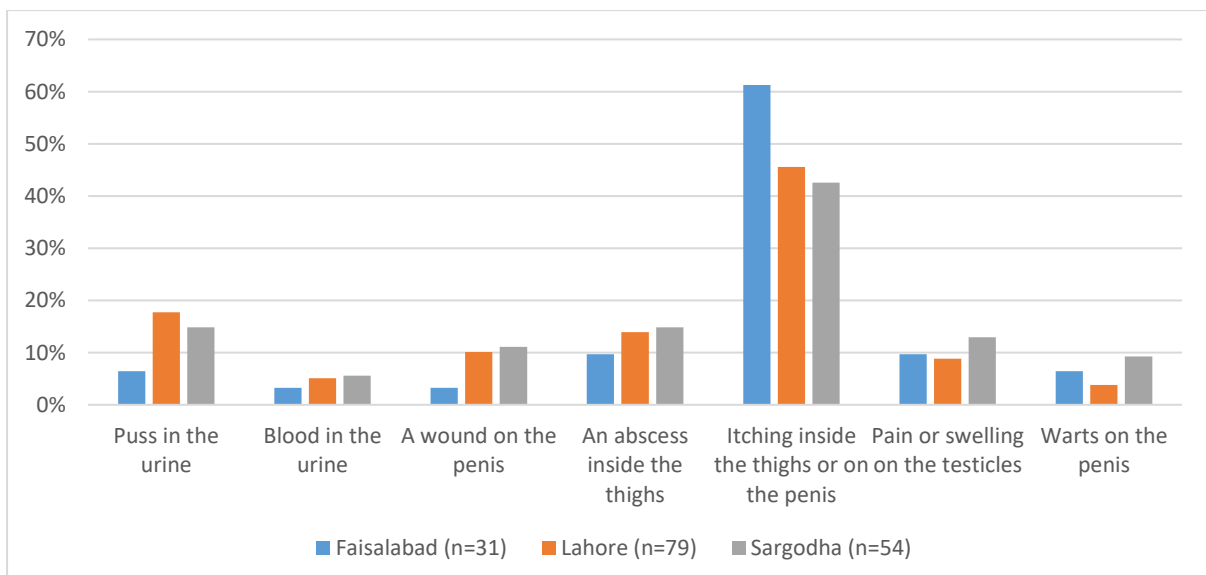


## STIs



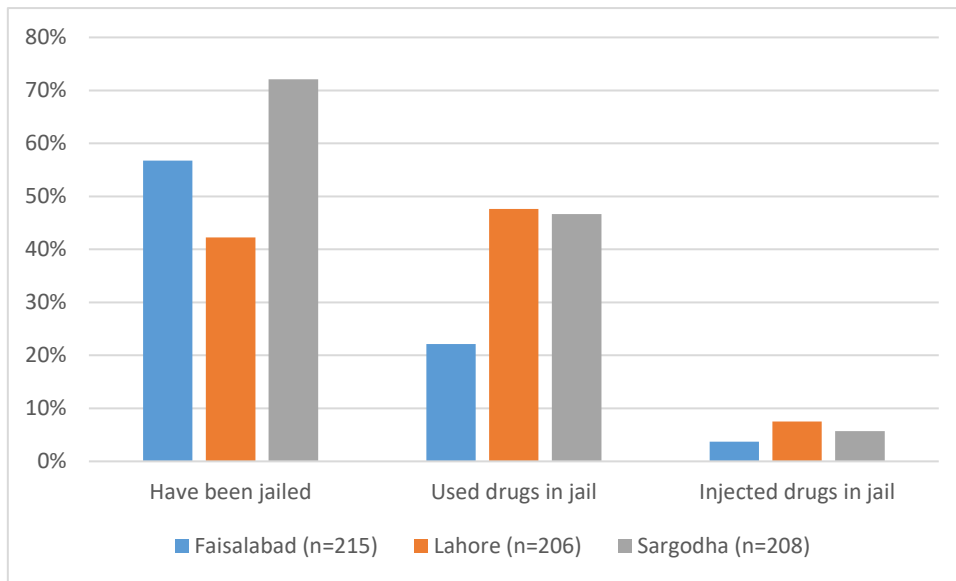
- Of the respondents who had suffered with STI in the last 6 months,
  - 87% were Hepatitis C positive
  - 9% were Hepatitis B Positive
  - 4% were Syphilis positive

## STIs Signs and Symptoms



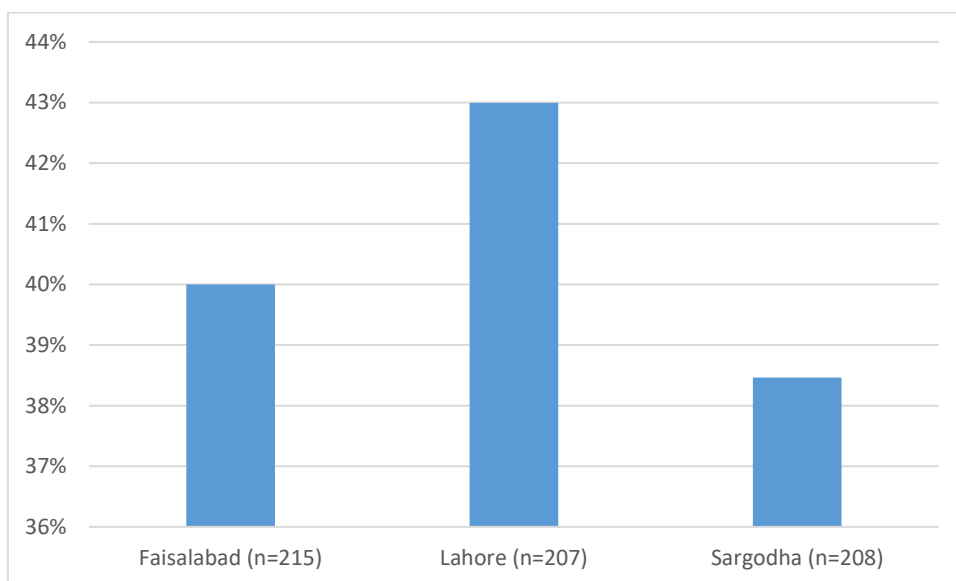
- 23% of the respondents had suffered with STI in the last 6 months had also a history of major surgery in the past

## Incarceration



- An alarmingly high percentage (57%) of the respondents had been to jail and highest percentage (72%) was in Sargodha district
- Among the 359 PWID who had been to jail, a majority (77%) had been for drug related crimes
- Among the 359 PWID who have been to jail 38% reported using drugs in jail and 6% reported injecting drug use while in jail

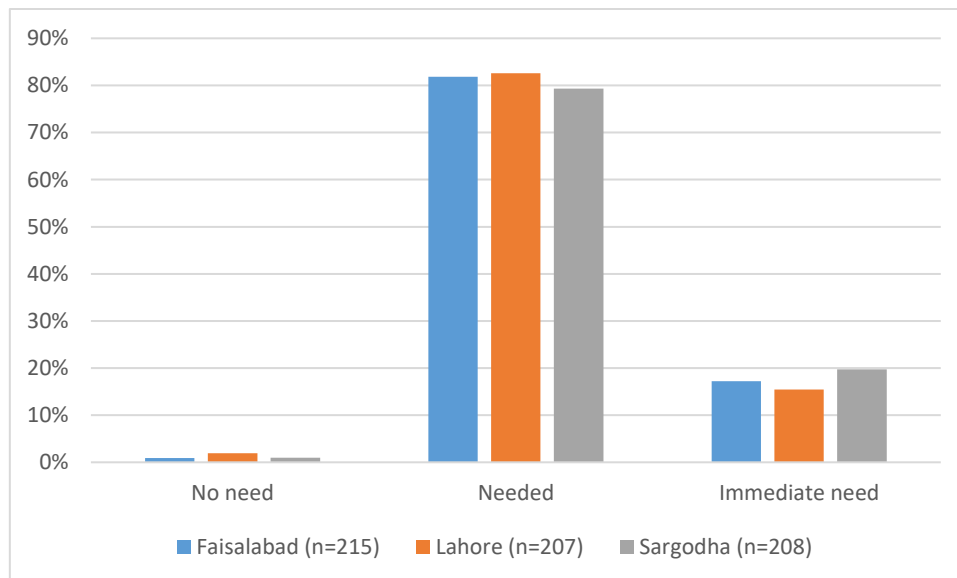
## Drug treatment sought by PWIDs



- Forty percent ever sought drug treatment. A majority (60%) have not had access to drug treatment.
- Of those who ever had drug treatment, 74% had paid for drug treatment.

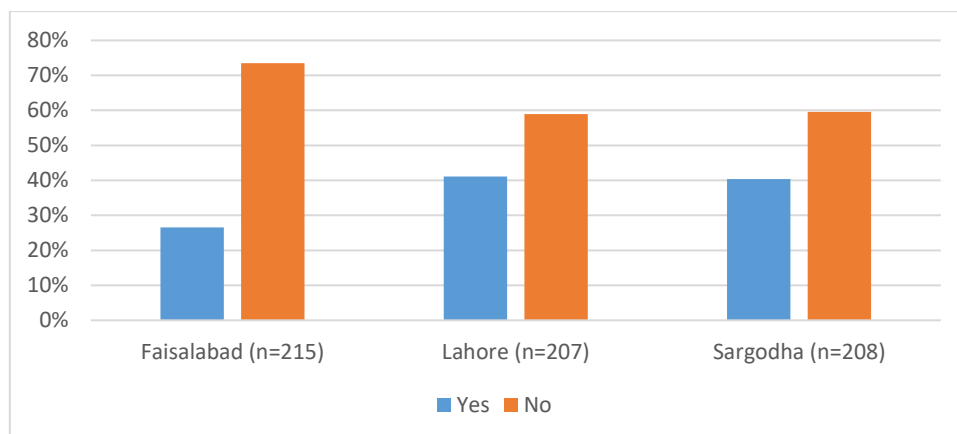
- The major reason for not being able to seek drug treatment was affordability
- Only 40% of those who had ever had drug treatment accessed drug treatment in the last 12 months.

## Drug Treatment Needs



- Eighty one percent of the respondents expressed a strong need for drug treatment services

## Heard about HIV and/or AIDS



- Sixty percent of the respondents had not heard of HIV. Those who knew of HIV had heard it from the existing health care services, friends and few from television.
- Among those who knew transmission modes, a majority stated that sharing of used syringes as the main transmission risk

# Conclusions

A summary of conclusions is presented below:

- HIV/AIDS prevalence in Pakistan among people injecting drugs has reached to an alarming proportion in the 3 cities of Faisalabad, Lahore and Sargodha with highest ever HIV prevalence recorded in each of three cities. 424 (67%) out of the total 630 respondents, tested positive for HIV indicating that HIV infection among people injecting drugs is on the peak.
- Based on the assessment, approximately 4,000 persons are currently injecting drugs in the three cities. The estimates are much lower as compared to previous surveys or projections for these cities, but more realistic given the population size estimates in the surrounding cities/districts where the Global Fund supported interventions are in place.
- The drug use is scattered all over the cities and is not concentrated in few major locations within the cities as had been reported or witnessed previously.
- A shift from traditional modes of drug use (chasing, sniffing) to injecting drugs is prevalent and is becoming increasingly popular.
- Overall 84% of respondents were injecting 2-4 times in a day while 61% respondents were injecting 2-3 times which corresponds to national surveillance data and programmatic data of the GF supported project.
- Only 29% of respondents mentioned that they never shared a syringe with others nor used a syringe used by others during past six months
- Taking this into account, there is a high risk of HIV and HCV contraction among PWID. The assessment showed that only 38% of 206 non-reactive respondents always used new syringes and 5 percent received syringes from another unreliable source. the use of unsafe needles and syringes to inject speaks of a huge risk on contracting HIV and Hep-C because of a very high prevalence among their peers. Additionally, the use of unsafe paraphernalia is reflected in PWID who had experienced abscess and wounds –
- A younger age group (18-24 years) is currently injecting drugs and represents a significant proportion (21%) of people injecting drugs. This indicates initiation of injecting drugs at an earlier age. Moreover, the highest HIV infection rates were found among PWID aged 25-30 years implying the early onset on injecting drug use and HIV.
- A majority belong to their city of origin and frequently interact with their spouses without knowing the sexual transmission risk. This is likely to result in secondary transmission of infections common on the streets - HIV, STIs and others.

Especially when 36% (224/630) of all the respondents were married and of the married respondents 63% (140/224) were found reactive.

- Low rates of condom use among them suggests that the risk of sexual transmission is much higher and this may lead to vertical transmission and contribute to generalized HIV epidemic.
- Overall, the assessment showed that there is a very high risk that HIV can be spread through the sexual network of PWID up to disastrous levels, this includes the spread of the HIV among partners/wives of PWID. From the assessment, 43% of the PWID sample has had sex, whereas 62% was diagnosed with HIV+. In combination with low condom use (68% of the ones who have a regular partner never used condom during sex) and their lack of knowledge on their HIV status (60% has never heard of HIV), chances of HIV transmission towards their spouses and even away from high-risk populations are extremely high. This was shown in the assessment; In Faisalabad, Sarghoda and Lahore, HIV prevalence among spouses was 70%, 65% and 53% respectively. Additionally, the HCV prevalence among the sample was extremely high (87%).
- A vast majority (44%) of the respondents were un-educated and cannot benefit from written information/materials.
- Most manage to support their drug habit by earning from labor, odd jobs and begging, etc. , hence crime related to drug use is not significantly severe.

# Recommendations

- There is an immediate need to initiate harm reduction services including Needles and Syringe program, counselling, basic medical care, HIV Testing and Counseling (HTC), nutritional support packages for families and access to ART for PWID in Lahore Faisalabad and Sargodha and other districts of Punjab which lack services for PWID.
- The comprehensive services should be initiated in line with the existing interventions being carried out under the Global Fund supported interventions for PWID and their partners in other parts of Pakistan.
- There is a huge risk of transmission to sexual partners, albeit regular partners or multiple partners. Sexual partners of HIV positive PWID are at risk and should be part of testing and treating approaches, including PPTCT and nutritional support packages.
- Spouses and casual partners in sex of people injecting drugs need to be reached out and provided information, education, Intermediate PrEP, and tools (condoms, STI treatment) in order to prevent secondary transmissions. These would be services specific to the needs of women.
- The treatment of drug dependence (detoxification) has emerged as the most important need of the drug users community and ideally quality drug treatment should be provided with a specific rehabilitative focus to support PWID to be retained on ART.
- The harm reduction services should be complemented with access to market oriented vocational skills training or jobs in order to shift focus from drugs to better choices in life, thus, maximizing the output of services for PWID
- The vulnerability of acquiring HIV and Viral Hepatitis was found equally high among PWID and the no much difference was found in the risk behaviours among those infected and those not infected. Prevention programs targeted at PWID are likely to help reduce such risks.
- To prevent people from switching from smoking to injecting we need to influence the drug scene through people that know what injecting means and have switched back to smoking. This is a sustainable approach that can bring effective results.
- 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.

- Opioid Substitution Therapy (OST) programs need to be set up on a pilot basis in the cities of Faisalabad and Lahore where sharing of syringes and prevalence of HIV is much higher. This will not only bring reduction in injecting behaviour but also would be helpful in retaining HIV positive PWID in ART.
- Programs and interventions aimed at preventing HIV/AIDS among people injecting drugs need to be mainstreamed within the Provincial Health care systems in partnership with Civil Society to ensure sustainability and coverage at the scale required. The availability of domestic resources to support programs for PWID is essential for sustainability.
- Advocacy should be an ongoing activity incorporated within the interventions and is necessary to create an environment that enables community ownership and participation as well as sustainability.
- 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 counterproductive and result in inaccessible hidden populations who cannot be reached.
- A younger age group of people is now injecting drugs. Programs need to address issues specific to youth and in particular service that address issues of homeless youth living on the streets and using/injecting drugs.
- A very high percentage (57%) of PWID 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.
- 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' counselling based on interpersonal communication is a more powerful and effective medium.
- Outreach programs need to encourage 'peer to peer' education as an important and effective tool for communication.