ROUND 1, 2005-06

SUMMARY REPORT - NWFP

INTEGRATED BIOLOGICAL & BEHAVIORAL SURVEILLANCE

NATIONAL AIDS CONTROL PROGRAM

NWFP AIDS CONTROL PROGRAM

CANADA – PAKISTAN HIV/AIDS SURVEILLANCE PROJECT

May 2006
1. INTRODUCTION

The findings presented here are part of the round one surveillance activities carried out in 08 cities of Pakistan by the National AIDS Control Program through its HIV/AIDS Surveillance Project. The basic goal of this research is to estimate and map the various HIV high risk groups in Pakistan, including Intravenous Drug Users & Commercial sex workers (female sex workers, male sex workers & eunuch sex workers); estimate prevalence of HIV infection and collect behavioral data for monitoring of the epidemic and its associated factors in the country.

The city of Peshawar, which is the provincial capital of NWFP, is situated in North West of the country. The city comprises of a multi-lingual population and languages commonly spoken are; Pushto, Urdu, Hindko, Siraiki and Persian. According to 1998 census of Pakistan, its population is approximately 2 million. The entire city comprises of an administrative unit known as City District Government Peshawar and cantonment area. The City District Government is divided into 4 towns. In totality District Peshawar is comprised of 92 union councils 45 UCs were included for the study. Almost 65-70% of district Peshawar population resides in the urban areas and it is therefore expected that majority of the high risk activities also take place in the areas covering the urban population of Peshawar. The approximate population addressed under the selected UCs is 1.4 million.

Fig 1. Peshawar district map showing the regions included in the study.

2. THE MAPPING STUDY

For the purposes of this study, the city of Peshawar was divided into 20 zones. Unlike conventional mapping for the purpose of this study a geographical mapping approach was followed to gather data and understand the risk situation in a given vulnerable population to be quantified in terms of number of settings and/or size of the population. Pre-mapping exercise began on the 11th of September, 2005. Data collection was conducted from the 15th September to 6th October 2005. Level-1 exercise was completed in 6 days and Level-2 in 12 days. Data were collected from Secondary and Tertiary Key Informants at Level 01, the
information was compiled and latter validated in level 2 and through a process of triangulation.

2.1 Mapping Results

2.1.1 Injection Drug users
- An average of 283 IDUs (240 to 326) were estimated at 30 spots in Peshawar.
- IDUs comprised 11% of the total HRAs in Peshawar.
- A large number of IDUs were found in zone–17 (Hyatabad and Industrial area), with 5 spots in total comprising 26.3% of the total IDUs in the Peshawar.

2.1.2 Female Sex Workers
- An average number of 963 Female sex workers were estimated (793 to 1133) at 79 spots (39% of all HRG).
- The group was further divided into home based (HBFSWs) & street based (SBFSWs), while there exist no organized brothels in the city as such.
- The largest concentrations of Street based FSWs were seen in Zone 17 (Hayatabad and Industrial area), accounting for 20% (in 5 spots) of all street based FSWs in the city. Other zones where these FSWs are concentrated were zones 2, 5, 10 & 15 (which constitute of areas like: Dalazak road, afghan colony, Gulbahar, Bhanamari, ramdas and Defence colony) while a small number (3.2%) were also found in Zone–19 (Tehkal Bala and Payan).
- Maximum numbers of home based FSWs were found in Zone 5 (Gulbahar) with 15 spots.
- While street based FSWs are usually full time sex workers and get their clients from various pick up points from the street, home based FSWs are usually part time sex workers who operate whenever required. These sex workers usually have families and are based in their own houses. The clients are contacted through cell phones and other network members. Sex work takes place either in clients home or hotels.

2.1.3 Male Sex Workers (MSWs)
- MSWs formed the second biggest group (estimated on average to be 1153 ) among the HRGs in Peshawar.
- It was estimated to be 46% of all HRGs concentrated in 77 spots.
- The activity was seen in all the zones with more or less equal distribution.
- No further subtypes among MSWs were seen.

2.1.4 Eunuch Sex Workers / Hijray
- 13 Dera’s were located where an average number of 98 (80 to 115) ESWs were estimated.
- It was the smallest group of all the sex work seen in the city.
- The group was active mainly in Zone-5 with 54% of all ESW activities in the city and rest was mainly in Zones 1(Khalisa I), 2 (Dalazak road & Afghan Colony) and 7 (Kohati and Gunj) (46% altogether).

A summary of the mapping results are shown in Table 1.

**Table 1: Distribution of HRG's in Peshawar**

<table>
<thead>
<tr>
<th>High Risk Groups</th>
<th>No. of Spots</th>
<th>Total minimum</th>
<th>Total maximum</th>
<th>Average</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDU</td>
<td>30</td>
<td>240</td>
<td>326</td>
<td>283</td>
<td>11%</td>
</tr>
<tr>
<td>ESW</td>
<td>13</td>
<td>80</td>
<td>115</td>
<td>98</td>
<td>4%</td>
</tr>
<tr>
<td>MSW</td>
<td>77</td>
<td>1000</td>
<td>1305</td>
<td>1153</td>
<td>46%</td>
</tr>
<tr>
<td>FSW</td>
<td>79</td>
<td>793</td>
<td>1133</td>
<td>963</td>
<td>39%</td>
</tr>
<tr>
<td>Total</td>
<td>199</td>
<td>2113</td>
<td>2879</td>
<td>2497</td>
<td>100%</td>
</tr>
</tbody>
</table>

### 3. INTEGRATED BIOLOGICAL & BEHAVIORAL SURVEILLANCE

The main objectives of the study were biological testing for HIV and to analyze the behavior of the four high-risk groups (FSWs, MSWs, ESWs and ID users) toward their sexual life and knowledge about the sexually transmitted diseases and HIV/AIDS. Pre-designed, ethically approved questionnaire was administered after taking informed consent for the behavior study and dried blood technique was used for taking blood.

**Table 2: Sample size and Sampling Technique used for each group**

<table>
<thead>
<tr>
<th>HRG</th>
<th>Sampling Technique</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSWs</td>
<td>Take all</td>
<td>342</td>
</tr>
<tr>
<td>MSWs</td>
<td>RDS</td>
<td>200</td>
</tr>
<tr>
<td>ESWs</td>
<td>take all</td>
<td>099</td>
</tr>
<tr>
<td>IDUs</td>
<td>take all</td>
<td>284</td>
</tr>
</tbody>
</table>

### 3.1 Summary Findings of Behavioral Surveillance

#### 3.1.1 Injection Drug Users:
- 10% of IDUs were below 20 years of age, 43% were between 21 to 30 years of age, while 29% of them were of 30 to 40 years and only 18% were above 40 years of age.
- Nearly half (47.2%) of them were currently married. More than three quarters (84.8%) were Pashtoons.
- 68.8% were residing in their own homes with families and more than half of them (58.8%) were illiterate.
- 46.2% had been injecting drugs from last 1-5 years, 8% for 6-10 years, 4% for more than 10 years and 41% started injecting drugs during past one year.
• 54.5% reported used unshared needle/syringe in past month. The biggest source of getting a new syringe was a medical store/pharmacy (91.9%).
• 79% took the last injection in an open space i.e., street, park etc.,
• 45% reported sexual activity with wife or another non paid female partner during the past six months. Less than 1/4th reported using condom.
• 23.2% reported sex with FSWs during the past six months while less than 1/4th used a condom with FSWs
• 20.6% males have sex with males/hijras during past 6 months. 31.1% had anal sex with one male/hijra during last one month.
• 33.1% were arrested during the past 6 months.
• Less than 1% of the respondents reported of selling blood for money during the past 6 months.
• 52.1% of IDUs have alcohol/charas during the course of a sexual act in the past 6 months.

3.1.2 Female Sex Workers:

• Out of the total sample of 359 FSWs; 59.6% home based and 40.4% were street based FSWs.
• The FSWs population in Peshawar is a very diverse ethnic group; 11.6% Urdu, 37.1% Punjabi speaking, 44.2% Pushtoo and 6.8% were Hindko.
• A large majority (86.7%) reported income equal to or less than Rs. 3000/month
• Median age of initiation of sexual activity was reported to be 20 yrs.
• The main source of contacting clients was either through telephone or through pick up points on the street. Other source were referrals from previous clients or through pimps/aunties etc.,
• 27% reported of having more than 20 paid clients during the past month.
• 21% of the FSWs, reported to be involved in anal sex with paid clients. 6% of the interviewed informed that they performed oral sex with the clients.
Condom use was reported to be substantially low only 23.1% reported use of a condom at last vaginal sex, while 16.5% used a condom on last anal sex and 15.4% used a condom on last oral sex.

Condoms were mainly reported to be bought from medical stores (14%) or brought by clients (22.2%).

The knowledge regarding HIV/AIDS was scanty, and less than half of the subjects knew sexual intercourse as a route of transmission. Likewise knowledge of preventive measures was inadequate only 11.7% knew about condoms as a protective measure.

Only 7.8% knew about a screening test for HIV and less than 1% were ever tested.

57.6% didn't know that they are at risk of contracting HIV.

Nearly half of the study subjects had no information on STIs, and only 22% knew that it can be prevented by using condoms.

1.4% were arrested during the past six months. 17% reported of having sex with an IDU during the past six months.

### Male Sex Workers:

- 200 subjects were interviewed, recruited through Respondent driven sampling technique.
- 76.5% of the study subjects were ≤ 25yrs of age. 80.5% were un-married and 47% were illiterate.
- The MSW population represented all ethnic groups; Pushtoon 83.7%, 3.1% Urdu, 12.8% Punjabi, and 0.1% Balochi.
- 87% had monthly income of ≤ Rs. 3000.
- 72.2% male sex workers were below 15 years of age when they had their first sexual intercourse.
- 24.2% of the subjects reported of having >20 clients in the last one month. 17.1% reported using condom during the last anal sex.
- 39.4% reported oral sex during the last month and only 14.4% claimed using a condom.
- Condoms are reported to be sourced from clients (2.3%), medical stores (2.3%) and general store (29.1%) mostly.
- 68.5% knew about STIs, and 10.6% said it can be prevented by using condoms.
21.4% suffered from a STI during the past six months, and 50% of them opted for self treatment.

17.5% reported that they were arrested by police 6.5% of MSWs used an intravenous drug and 02% sold blood within the past six months.

9.7% had sex with the intravenous drug users during last six months.

3.1.4 Eunuch Sex Workers (Hijra)

- More than half (50%) were below 25 years. 84.4% have their first sexual intercourse less than 15 years of age.
- Out of 99, for whom ethnic group was recorded 94.8% were Pashtoons, 3.1% Punjabis, 1% Urdu speaking.
- The monthly income was less than Rs. 5000 for 86.9% of the subjects.
- 83.5% were residing in dera’s, along with Gurus and other ESWs.
- 6% were selling sex for less than one year, 28.3% for 1-5 years, 25% for 6-10 years and 38% were involved in this activity for more than 10 years.
- 50% had more than 20 paid clients during the last month, while 50% reported less than 20 clients in last month.
- 72% never used condoms during last one month.
- 96% have heard of the disease and a substantial number of respondents knew about the routes of spread (57.6% sexual intercourse, 16.2 sharing of needles, 100% blood transfusion). 22% mentioned of condoms, and 9% clean syringes as a protective measure for HIV.
- 76.8% have heard about STIs, and only 2% had suffered from a STI during the past six months. More than half used self medication
- 28.6% admitted an arrest during the past six months because of their sexual activities. None reported selling blood during past six months.
Table 3: A comparison of behaviors and practices among HRGs in Peshawar

<table>
<thead>
<tr>
<th></th>
<th>FSWs</th>
<th>MSWs</th>
<th>ESWs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &lt; 25 yrs</td>
<td>36%</td>
<td>76%</td>
<td>50%</td>
</tr>
<tr>
<td>Married</td>
<td>91%</td>
<td>19%</td>
<td>39%</td>
</tr>
<tr>
<td>Income &lt; Rs 5000/month</td>
<td>86%</td>
<td>98%</td>
<td>80%</td>
</tr>
<tr>
<td>&gt; 20 Clients/month</td>
<td>78%</td>
<td>74%</td>
<td>50%</td>
</tr>
<tr>
<td>Condom Use on last vaginal sex</td>
<td>23%</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Condom Use on last anal sex</td>
<td>16%</td>
<td>17%</td>
<td>11%</td>
</tr>
<tr>
<td>Condom Use on last oral sex</td>
<td>15%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Knowledge of Sex intercourse as a route of HIV transmission</td>
<td>47%</td>
<td>-</td>
<td>58%</td>
</tr>
<tr>
<td>Condoms protect against HIV</td>
<td>12%</td>
<td>41%</td>
<td>22%</td>
</tr>
<tr>
<td>Know about STIs</td>
<td>43%</td>
<td>68%</td>
<td>77%</td>
</tr>
<tr>
<td>Condoms protect against STIs</td>
<td>24%</td>
<td>11%</td>
<td>24%</td>
</tr>
<tr>
<td>Suffered from STIs (6 months)</td>
<td>41%</td>
<td>21%</td>
<td>6%</td>
</tr>
<tr>
<td>Arrest (last 6 months)</td>
<td>1%</td>
<td>17%</td>
<td>6%</td>
</tr>
</tbody>
</table>

3.2 Results of Biological Surveillance:

The results of Biological testing are provided in the Fig below, 2 (0.7%) of the total IDUs tested were HIV +ve (screened through ELISA and confirmed by Western Blot). Among other HRGs, HIV infection was seen in ESWs. Only one case of ESW (out of 99) was found to be infected with HIV.
4. **Comparison with previous studies/last round:**

Previous data from Peshawar which was collected in 2003 reported similar number of HRGs. The slightly low number of FSW estimated through this research was mainly due to the present political situation in the province. Due to the present circumstances, the majority of FSW have moved away from Peshawar to the nearby districts, which was highlighted and confirmed during data triangulation done by HASP team with different police personnel, network operators and NGOs who work with these HRGs.

Since the HASP methodology is more extensive and vigorous it was able to penetrate the MSW groups more and provide important information of this high risk group. The fairly low number of IDUs in the previous research has shown that IDUs has slightly increased in Peshawar which is in accordance with National data.

5. **Recommendations:**

- Advocacy with policy makers
- Involvement of HRGs during policy making
- Establishment of STI centres for Commercial Sex Workers (CSW) (these centres will provide management and awareness regarding STI’s)
- Interventions for both CSW and their clients to provide education and condoms
- For better understanding of social network of CSW more in-depth studies shall be conducted.