



ROUND 1, 2005-06

SUMMARY REPORT - BALOCHISTAN

INTEGRATED BIOLOGICAL & BEHAVIORAL SURVEILLANCE

NATIONAL AIDS CONTROL PROGRAM
BALOCHISTAN AIDS CONTROL PROGRAM
CANADA – PAKISTAN HIV/AIDS SURVEILLANCE PROJECT

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ROUND 1 SUMMARY REPORT -BALOCHISTAN

QUETTA

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 Canada-Pakistan HIV/AIDS Surveillance project (HASP). The basic goal of this research is to estimate and map the various HIV high risk groups in Pakistan, including IDUs & Commercial sex workers; estimate prevalence of HIV infection and collect behavioral data for monitoring of the epidemic and its associated factors in the country.

Each surveillance round includes a mapping study .. to develop the sampling frame followed by indepth interviews with High Risk Groups (HRGs) to collect behavioural as well as biological data.

The city of Quetta, which is the provincial capital of Balochistan, is situated in west of the country near Afghan border. In addition to nomads who move every year from Afghanistan there is a further seasonal migration of nomadic population of warmer areas of the country like; Sibi and Sidh who travel towards the city and go back to their respective areas in winter season. A number of people also visit the city for tourism during the summer. The city comprises of a multi-lingual population and languages commonly spoken are; Urdu, Punjabi, Pushti, Sindi, Balochi, Brahui, Hindko, Siraiki and Persian. District Quetta spreads over 2,653 sq.km and has a population of approx 7.6 million. The city government of Quetta divides it into two towns of Chiltan & Zarghoon, which are then further separated into 67 Union Councils for administrative purposes.

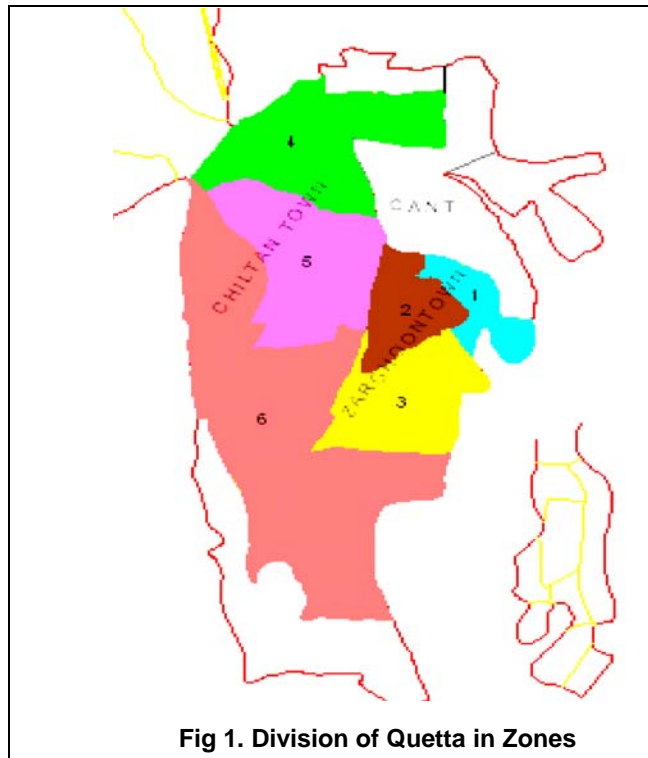


Fig 1. Division of Quetta in Zones

2 THE MAPPING STUDY

For the purposes of our study, the city of Quetta was divided into 06 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 12th of September, 2005. Data collection was conducted between the 12-09-05 to 05-10-05. Level-1 exercise was completed in 6 days and Level-2 in 11 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.

(Refer to The Mapping Methodology, HASP, 4 July 2005, for more detail on HASP's geographic mapping approach)

2.1 Mapping Results

2.1.1 Injection Drug users

- A total number of 130 to 179 IDUs at 26 spots were estimated.
- IDUs comprised of 10.27% of total High Risk Activities (HRAs) in Quetta.
- The group was further divided into Street Based (64%) and Other IDUs (36%) which included home based IDUs as well.
- Street based IDUs were mainly found in zone-1, with 8 spots in total comprising 45.96% of the total IDUs in the city. Other IDUs were mainly concentrated in zone-6 (71.43% of total) in two spots recognized during this mapping with a very few in zones 5, 3 & 4.

2.1.2 Female Sex Workers

- An average number of 752 Female sex workers were estimated (223 to 620) at 223 spots.
- The group was further divided into home based (HBFSWs) & street based (SBFSWs), while there were no organized brothels existing in the city as such.
- The largest concentrations of SBFSWs were seen in Zone 2, accounting for 34.81% of all SBFSWs in the city. Other zones where these FSWs are concentrated were zones 4, 3, 1 & 6 while a small number were also found in Zone-5 (7.22%).
- Maximum numbers of HBFSWs were also found in Zone 2 with 26 spots. The activity was mainly seen in and around the center of the city in zones 2, 1 and 3, accounting for 82.86% of all.
- While SBFSWs are usually full time FSWs and get their clients from various pick up points at the street, Home based FSWs are usually part time sex workers who operate whenever required. These SWs usually have families and are based at their own houses. The clients are acquired from mobile phones and other network members. Sex work takes place either in clients home or hotels.

2.1.3 Male Sex Workers (MSWs)

- MSWs comprised the second biggest group {397 MSWs (312 to 481)} among the HRG in Quetta city after FSWs.
- It was estimated to be 26.35% of all HRGs concentrated in 193 spots.
- The activity was seen in all the zones with more or less equal frequency.
- In contrast with other HRA which were more in either Zone 1 or 2, the highest fraction of 22.17% was found in Zone-6.
- No further subtypes among MSWs were seen.

2.1.4 Eunuch Sex Workers / Hijray

33 Dera's were located where an average number of 202 (171 to 232) ESWs were approximated.

- It was the lowest HRA activity amongst the sex work seen in the city.
- The group was active mainly in Zone-2 in 13 spots in five of the zones with 40.35% of all ESW activities in the city and rest of the fraction was mainly in Zones 1, 6 and 5 (59.94% altogether) with very small frequency seen in Zone-4 and none in Zone-3.

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

Table 1. Distribution of High Risk Groups in Quetta

High Risk Groups	No. of Spots	Total minimum	Total maximum	Average	%
IDUs	26	130	179	155	10
FSWs	223	620	884	752	50
MSWs	193	312	481	397	26
ESWs	33	171	232	202	13
TOTAL	475	1233	1776	1505	100

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.

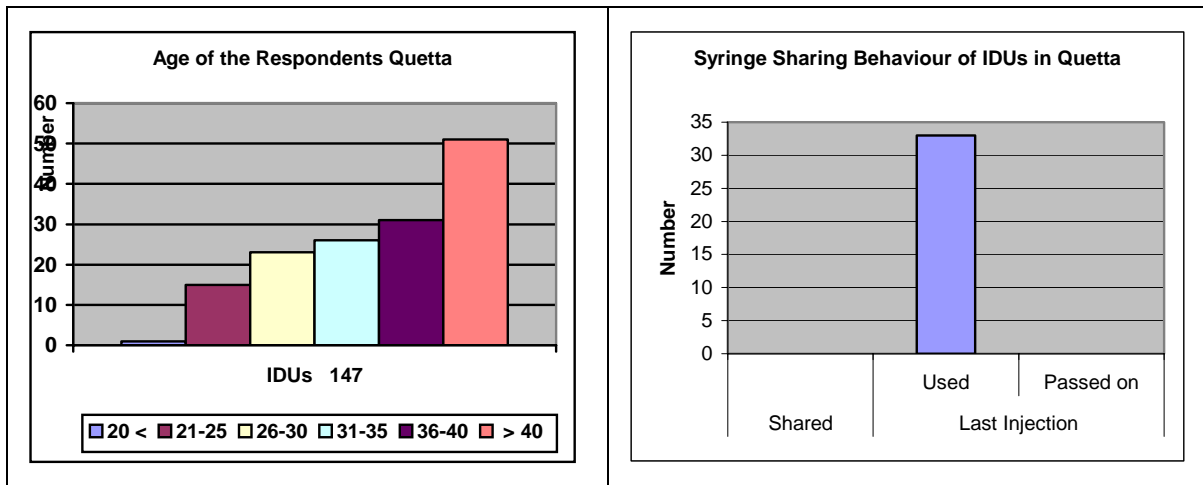
Table 2. Sample size and Sampling Technique used for each group

HRG	Sampling Technique	Sample Size
FSWs (street)	Cluster sampling	299
FSWs (home)	RDS	112
MSWs	RDS	209
ESWs	take all	187
IDUs	take all	147

3.1 Summary Findings of Behavioral Surveillance

3.1.1 Injection Drug Users:

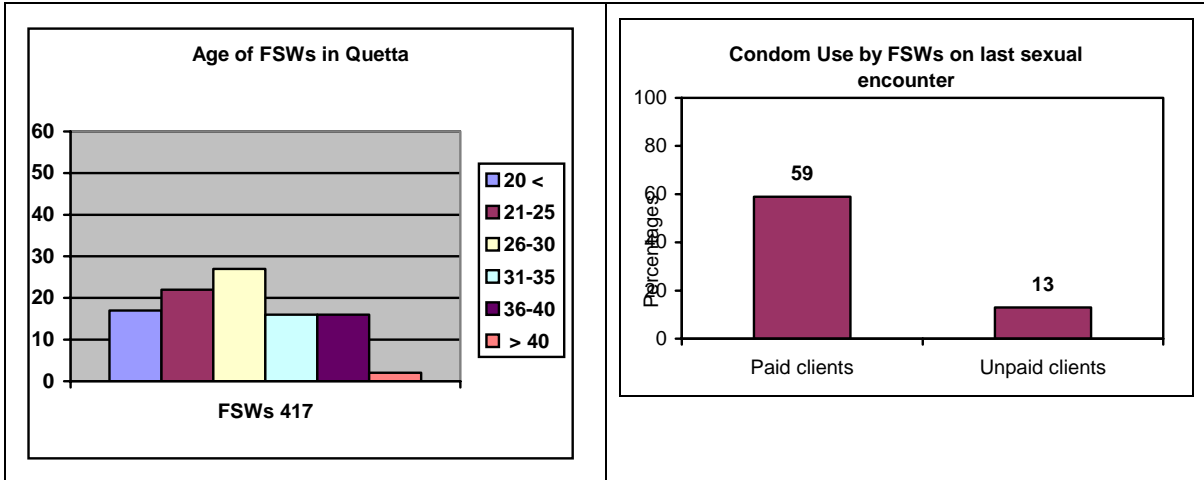
- Only one IDU was below the age of 20 years. 23.56% of IDUs were between 21 to 30 years of age, while 35% of them were above 40 years of age.
- Nearly 41% of them were currently married, more than half (55%) were Pashtoons and an overall 88% were locals. 78% were residing in homes.
- 50% had been injecting drugs from 1-5 years, 22% for 6-10 years, 15% for more than 10 years. Only 13% had been injecting drugs for less than a year.
- 76% reported using a new syringe for their last injection. The biggest source of getting a new syringe was a medical store (87%), 10% reported buying one from the drug seller
- 87% took the last injection in an open space i.e., street, park etc.,
- 94% reported to be sexually active and 45% reported sexual activity with wife or another non paid female partner during the past six months. Only 1/4th reported use of a condom.
- 39% reported sex with FSWs during the past six months while only 1/3rd used a condom
- Nearly 8% admitted paid sexual activity during the past six months with an MSW or ESW. 92% of the times the sexual activity was unsafe and without a condom.
- 12% were arrested during the past 6 months.
- Less than 5% of the respondents reported of selling blood for money during the past 6 months.



3.1.2 Female Sex Workers:

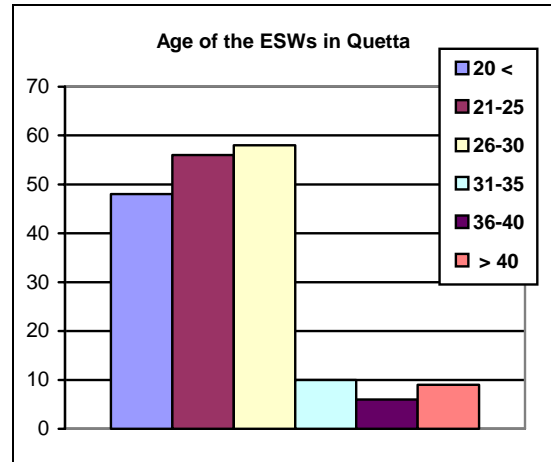
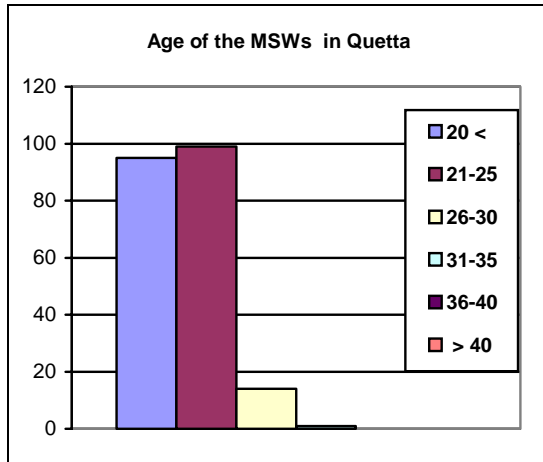
The sample comprised of 417 FSWs ; 73% street based and 27% home based FSWs.

- 22% of the participants were Afghan girls, which is much higher than the actual ratio of local & refugee settlements in the city of Quetta showing that the refugees are involved more in female sex work
- The FSWs population in Quetta is a very diverse ethnic group; 17% Pashtoon and Brahvi each, 16% Urdu speaking & Punjabi, 9% Sindhi, 6% Saraiki, 2% Hindko & 1.7% belong to other ethnic groups.
- 59% reported income of less than Rs. 5000/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.,
- 61% reported of having more than 20 paid clients during the past month. 22% of the study subjects provided no information. The number of clients were higher for SBFSWs (80% had >20 clients/month as compared to 20% of HBFSWs)
- 30% of the FSWs, reported to be involved in anal sex with paid clients. 14% of the interviewed informed that they performed oral sex with the clients.
- Condom use was substantially low. 38% reported use of a condom at last vaginal sex (43% HBFSWs ; 36% SBFSWs). Only 13% used a condom on last anal sex while 14% used it on last oral sex.
- Condoms were mainly reported to be sourced from medical stores (40%), brought by clients (30%), friends (16%), general stores (6%), clinic/dispensary (6%), pimps (6%) etc.,
- 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 45% knew about condoms as a protective measure.
- Only 10% knew about a screening test for HIV and less than 5% were ever tested.
- Less than half of the study subjects had no information on STIs, and only 28% knew that it can be prevented by using condoms.
- 1/4th of the subjects reported of having an STI in the past 6 months and a high proportion (25%) self treated the infection.
- 8% were arrested during the past six months (11% SBFSWs vs 1% HBFSWs). 5% reported of IDUs during the past six months, while another 14% reported of having sex with an IDU during the past six months.



3.1.3 Male Sex Workers:

- 209 subjects were interviewed, recruited through Respondent driven sampling technique.
- 93% of the study subjects were ≤ 25yrs of age. 90% were un-married, and 85% were living with their families. The sample comprised of 16% refugees.
- The MSW population represented all ethnic groups ; Pushtoon 18%, Brahvi & Balochi 16% each, 11% Hindko, 10% Sindhi, 8% Urdu, and 5% Saraiki. 53% had an income of ≤ Rs. 5000.
- 85% of the subjects reported of having >20 clients in the last one month. 44% reported using condom during the last anal sex.
- 36% reported oral sex during the last month and only 23% claimed using a condom.
- Condoms are reported to be sourced from clients (50%), medical stores (48%), general store (34%) and friends (34%).
- Knowledge regarding HIV/AIDS was much higher in this group in comparison to other HRGs. A substantial number had the knowledge of main routes of transmission (intercourse 84%, sharing needles 72% & blood 42%). Approx. 60% knew that condoms, while only 30% knew that using new syringes can protect from HIV.
- 63% knew about STIs, and 66% said it can prevented by using condoms.
- 6% suffered from a STI during the past six months, and 40% of those self treated themselves.
- 34% reported that they were arrested by police 5% of MSWs used an intravenous drug and 11% sold blood within the past six month.



3.1.4 Eunuch Sex Workers (Hijra)

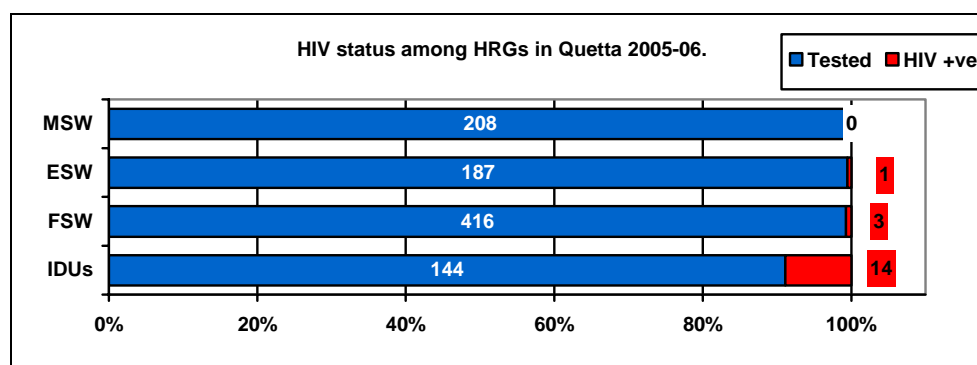
- More than half (56%) were below 25 years, while another 31% belonged to 26 – 30 years age group.
- Out of 124, for whom ethnic group was recorded 37% were Pashtoons, 32% Punjabis, 15% Urdu speaking, 11% Sindhis, 5 % each of Saraikis, Brahvis & Balochis. 81% of the sample comprised of locals while rest of 19% were refugees.
- The monthly income was less than Rs. 5000 for 77% of the subjects.
- 76% were residing in deras, alongwith Gurus and other ESWs.
- 59% said the main contact for their clients was through their own group of community/gurus, 16% of each said contacting them through mobile phone or by wandering on streets.
- 6% were selling sex for less than one year, 20% for 1–5 years, 28% for 6 – 10 years and 34% were involved in this activity for more than 10 years.
- Only 19% had more than 20 paid clients during the last month for more than 20, while 10.81% reported less than that
- 83.14% denied any oral sex partners during the past one month
- 52.73% reported using condom during the last anal sex
- 71% have heard of the disease and a substantial number of respondents knew about the routes of spread (84% sexual intercourse, 43 sharing of needles, 17% blood transfusion). 66% mentioned of condoms, and 24% clean syringes as a protective measure for HIV.
- 46% have heard about STIs, and only 6% had suffered from a STI during the past six months. 1/3rd used self medication
- 6.42% admitted an arrest during the past six months because of their sexual activities. Only 1.08% reported selling blood during past six months.

Table 3. A comparison of behaviors and practices among HRGs in Quetta

	FSWs	MSWs	ESWs
Age < 25 yrs	38%	93%	56%
Married	48%	10%	2%
Income < Rs 5000/month	59%	53%	77%
> 20 Clients/month	61%	85%	19%
Condom Use on last vaginal sex	38%	NA	NA
Condom Use on last anal sex	13%	44%	53%
Condom Use on last oral sex	14%	23%	37%
Top 03 sources of condom	Medical stores(40%) Clients (30%) Friends(16%)	Medical Store (48%) Clients (50%) General store (34%)	Medical Store (36%) General store(22%) Friends 19%)
Knowledge of Sex Intercourse as a route of HIV transmission	49%	84%	84%
Condoms protect against HIV	45%	60%	66%
Know about STIs	51%	63%	46%
Condoms protect against STIs	28%	66%	50%
Suffered from STIs (6 months)	25%	6%	6%
Arrest (last 6 months)	8%	34%	6%

3.2 Results of Biological Surveillance:

The results of Biological testing are provided in the Fig below. 9.72% of the total IDUs tested were HIV +ve (screened through ELISA and confirmed by Western Blot). Among other HRGs, HIV infection was seen in FSWs and ESWs. 0.7% of FSWs (3 out of 416) and 0.5% of ESW (01 out of 187) were found to be infected with HIV.



4. Comparison with previous studies/ last round:

The mapping of HRGs conducted by Arjumand and Associates in August 2003 in Quetta shows results which are fairly comparable with the results of our study. Thus while the previous research 700, 300, 85 FSWs, MSWs and IDUs respectively, our research has estimated 752 FSWs, 397 MSWs, 155 IDUs and 202 ESWs. The minor differences in these estimates could be due to difference in methodologies, seasonal variations and the time gap of two years. Moreover, while previous research focused on street based activities and individuals, our mapping included home based HRAs as well.

5. Recommendations:

Based on the results of this study, there is an urgent need to initiate Service delivery programs for HRGs. In addition to providing basic services these programs should create awareness on HIV/AIDS and should provide condoms and sterile syringes to the target groups.