

Short Report

Prevalence of HIV/AIDS among jail inmates in Sindh

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Abstract

There is currently an ongoing epidemic of HIV/AIDS in Sindh Province. The Sindh Government has established a program for delivering HIV/AIDS prevention services to jail inmates. The objective of this study was to establish baseline HIV prevalence in Sindh jails. Anonymous unlinked volunteer testing was offered to 15000 jail inmates across nine jails in six cities of Sindh, of which 4987 (33%) agreed to be tested, using Abbot Determine® rapid testing kit for HIV. Final analysis was done on 4897 samples. Majority of HIV+ve cases were from Karachi (0.7%, n=32), followed by Sukkur (0.14%, n=7), Larkana (0.08%, n=4), Hyderabad (0.06%, n=3), Shikarpur (0.04%, n=2) and Khairpur (0.02%, n=1) jails. Among women prisoners, only three foreigners were found HIV+ve. The overall HIV prevalence was 1% (n=49) in the study sample. This study establishes the presence of HIV among jail inmates in Sindh and further necessitates detailed behavioural study for risk assessment in this sub-population.

Introduction

There is currently an ongoing epidemic of HIV/AIDS in Sindh Province. The government has started interventions in high-risk groups to contain the spread of the epidemic. These high risk groups include male and female commercial sex workers, Injecting drug users and jail inmates. The latest prevalence of HIV in these high-risk groups in Sindh as reported by HIV/AIDS Surveillance Project (HASP) estimates the prevalence among Male Sex Workers (including eunuchs) to be 1.4%, female sex workers 0.3% and 24% among Injecting drug users.¹

Access to these groups is always problematic in the community. All high-risk groups, due to their quasi-legal status or activities at one time or the other have problems with the law and end-up in jails. When incarcerated these individuals present an opportunity for HIV/AIDS prevention interventions through education, testing and care. But this scenario also presents a threat of HIV spread among jail inmates. Most individuals in these groups are unaware of their HIV status. Due to high reported prevalence of HIV in these groups it is likely that they may infect others through sexual intercourse, sharing of hygiene equipment, etc.² Similarly, the risk of TB-HIV co-infection

is high due to high prevalence of TB in Jails.^{3,4}

To address this issue Sindh Government has established a programme for delivering HIV/AIDS prevention services to jail inmates at Karachi, Hyderabad and Sukkur. In this programme inmates are informed of the threat of HIV infection and methods of prevention. They are provided access to confidential volunteer counseling and testing services for HIV/AIDS to help them know of their current HIV status. In addition inmates are also provided treatment and care for sexually transmitted infections (STIs).⁵

This study was conducted as the Sindh Government wanted to ascertain the prevalence of HIV in Sindh Jail to plan future interventions and possible expansion to other jails in the province.

Methods and Results

This study was conducted in six cities of Sindh Province, including Karachi, Hyderabad, Sukkur, Khairpur, Larkana and Shikarpur, between March and September 2006. Anonymous unlinked volunteer testing was offered to 15000 jail inmates, of which 4987 (33%) agreed to be tested. Testing was done using Abbot Determine® rapid testing kit for HIV. Testing was performed in the field by using aseptic technique for drawing blood samples. Demographic data was recorded on a structured questionnaire. The questionnaire included demographic data and history of STIs was collected as a proxy for unsafe sexual practices. Data was entered in EpiInfo 6.0 software for cleaning, validation and analysis. Ninety forms were excluded from the final analysis due to missing/incomplete data providing 4897 jail inmates for the final analysis. To maintain confidentiality of testing anonymous unlinked samples were collected. All prisoners were briefed on the objectives of the study and given assurance of confidentiality. Approximately 30% (4987/15000) of the prison population agreed to voluntarily participate in the study.

The overall prevalence of HIV in the sample population was 1%. Table-1 present's age-specific prevalence of HIV in the study population. The distribution of HIV is almost similar among the different age groups. Majority of HIV positive cases were from Landhi Jail, Karachi followed by Central (male) Jail Karachi. There is an ongoing epidemic of HIV among injecting drug users in

Table 1: HIV positive status according to age (n=4897).

Age (years)	N	HIV+	%
10 - 18	262	2	0.8%
19 - 28	1438	16	1.1%
29 - 38	1626	14	0.9%
39 - 48	1112	13	1.2%
49 - 58	415	4	1.0%
59+	44	0	0.0%
Overall	4897	49	1.0%

Karachi. Prisoners, who are drug users, including injecting drug users, are usually transferred from other jails to Landhi Jail. This may explain the high concentration of HIV prevalence at this location. All those who tested positive at Landhi Jail were between the ages of 18 and 50 years. Seven were married and only one was previously aware of his HIV status.

In Central (Male) Jail, Karachi, seven prisoners tested positive for HIV and only two were previously aware of their HIV status. Two were single, four of them also had history of STIs and all of them were between the ages of 22 and 32 years. At Sukkur, seven prisoners tested HIV positive and were between 35 and 50 years of age. Five of them were married and three were previously aware of their HIV status. In Hyderabad three prisoners tested positive and none of them were previously aware of their HIV status. Their ages were between 27 and 46 years and only one was married. The individual who tested positive for HIV was previously aware of his HIV status and was married. In Larkana four prisoners tested positive for HIV and all were previously aware of their HIV status. They were between 28 and 40 years of age. Three were reportedly married and only one had a history of STI in the past. In Shikarpur, two prisoners tested positive both were previously aware of their HIV status. They were 41 and 42 years of age. The 42 year old single also gave a history of STI in the past.

The data on female prisoners needs to be interpreted with caution. The three females found positive in Central (female) Jail Karachi were foreigners incarcerated in drug trafficking cases. None of the local women prisoners tested HIV positive.

Twenty-two percent gave a history of STIs in the past. Among those who reported previous history of STIs,

Table 2: HIV positive status according to Location (n=4987).

Jail	N	HIV+	%
Karachi Landhi Jail	750	21	2.8%
Karachi Central- Male	1017	7	0.7%
Karachi Central-Female	30	3	10.0%
Karachi Central-Juvenile	199	1	0.5%
Hyderabad	729	3	0.4%
Sukkur	1382	7	0.5%
Khairpur	298	1	0.3%
Larkana	192	4	2.1%
Shikarpur	300	2	0.7%
Overall	4897	49	1.0%

the prevalence of HIV was 2.6% compared to overall prevalence of 1%. There was significant difference between single and married respondents who reported STI infection in the past. The subjects who were single and had STI, had a higher prevalence of HIV (3.7%) compared to those who were married and reported STI history (i.e. 1.7%). In juvenile prison there was one HIV positive prisoner. This individual also had a history of STIs and had been in prison for the last six months and had never been tested for HIV status.

Conclusion

The overall prevalence of HIV in jail-inmates was one percent. The high figure of 2.8% of HIV in Karachi Landhi Jail is due to large number of drug users in this jail, which is reflective of the overall high prevalence in this risk group. Evidence of other STIs was also observed. There is a need to make STI and HIV preventive/curative care available to jail-inmates.

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