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## **HIV /AIDS ; KNOWLEDGE, ATTITUDE, BEHAVIOR AND PRACTICES IN PRISONERS**

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### **ABSTRACT**

**Objectives:** This study aimed at document the knowledge, attitude, behavior and practices regarding HIV/AIDS among prison inmates in Balochistan. It also elicited risk factors of HIV/AIDS transmission in prisoners. **Design:** A cross sectional study. **Setting & Duration:** Three prisons at Mach, Quetta and Turbat were included in study which was conducted from January 1<sup>st</sup> to May 31<sup>st</sup> 2002. **Patients & Methods:** The study comprised of an interview session using a well structured questionnaire to seek information about their social data, their knowledge about HIV/AIDS including its transmission and preventive social data, their attitude, and their indulgence in HIV/AIDS risky behavior. Besides. HIV screening was also carried out in volunteer inmates. HIV screening was done by WHO recommended Strategy II. **Results:** Of a total of 1900 prison inmates in three prisons. 1437(75%) agreed to volunteer for the counsel. The majority 81% of the respondents were in the age group 30-50 years. About 1193 (83%) of the respondents had heard about AIDS although only 302(21%) had known or seen someone with AIDS in the past. About 575 (40%) knew the correct mode of transmission of AIDS. Only 115 (8%) had knowledge about preventive measures. Of 1437, 933 (65%) were tested for HIV voluntarily. Seven (0.75%) came out to be HIV positive. **Conclusion:** Almost all the prisoners studied, had heard of HIV/AIDS although only a few had seen or known a case of AIDS. In spite of the fact that many of them knew the correct modes of transmission, many indulged in high risk behaviors for HIV transmission. There is a considerable proportion of receptive jail inmates who stand the risk of being infected due to their high level of ignorance about HIV/AIDS. Communication programs on AIDS with such formidable support structures as the provision of harm reduction devices and risk reduction counseling are urgently recommended for the prisoners in Balouchistan to effectively combat the imminent HIV/AIDS epidemic among the prison inmates.

**Key words:** HIV/AIDS, Prisoners, Balochistan





## INTRODUCTION

AIDS and HIV infection in prisons present unprecedented problems. Among these problems are how to determine who is infected, how and where to incarcerate persons who test positive for HIV antibody or develop overt disease, who will pay for therapy, how to stem the spread of infection (tattooing and anal intercourse), and how to deal with questions of confidentiality and with less than optimal response by correctional officers and administrative staff. The difficulty of finding solutions to all of the problems appears to be exacerbated by a tangle of statutes, recommendations, and pending legislation that vary from state to state. Also, it seems that in many institutions, medical opinion and administrative fiat are often at odds.

Prisoners with HIV / AIDS do not have the same life expectancy rates as a person with HIV / AIDS living on the outside. Overcrowding, poor diet, poor medical treatment, stress, tuberculosis, difficulty in accessing family and community support, excessive and vindictive sentencing, lack of support programs, racism, prejudice, sexism, violence - all of these societal problems are magnified within the prison setting, and then magnified many times over in their impact on prisoners living with HIV / AIDS. All of these factors work towards shortening a prisoner's life span.

In Pakistan infection with Human Immunodeficiency Virus type I (HIV-I) was first reported in 1986 and until March 1998, 1308 HIV seropositive and 149 AIDS cases have been reported in the country<sup>1</sup>. At present, the estimated prevalence of HIV infection among prison inmates is low, but they are high risk individuals which could result in catastrophe anytime. Since most prisoners remain in prisons for relatively short periods and then become part of the general population<sup>2</sup>, they represent a population not only at significant risk of becoming HIV infected but also have the potential to become a reservoir of HIV in the general population<sup>3</sup>. The risk of acquisition of HIV infection in such an environment depends on the HIV prevalence, knowledge about HIV transmission as well as adapted risky practices of inmates<sup>3</sup>. A substantial proportion of prisoners engage in high risk sexual activities and intravenous drug use before their present incarceration<sup>4</sup> and while in prison<sup>5,6,7,8,9</sup>, thus remain vulnerable to HIV infection<sup>10</sup>. By assessing the knowledge, attitude, behavior and their relationship with high risk practices, it is possible to develop interventional programmes that may help in

prevention of the infection in the initial stages.

This study was conducted to determine the knowledge, attitude, behavior and practices regarding HIV / AIDS among prisoners in Balochistan. It also elicited risk factors of HIV / AIDS transmission in the prison inmates.

## PATIENTS & METHODS

A cross sectional study of prison inmates at Quetta, Mach and Turbat was undertaken between January 1<sup>st</sup> and May 31<sup>st</sup> 2000. A total of 1900 prison inmates were inducted in the study in all the three prisons. The whole project was completed in three phases. In the first phase, meetings with the prison authorities including the Inspector General Prisons, etc were arranged and they were convinced and taken into full confidence. In the second phase, a pre designed questionnaire was used to interview each selected inmate in complete privacy by a trained interviewer. A total of 1900 prison inmates were asked for their consent to participate in the study. The randomized sampling technique was used to induct the prison inmates for this study. This was accomplished by asking all inmates within a barrack to sit in rows, then according to a random number chosen between 1 and 5, the first prisoner was selected from each barrack followed by selection of every fifth inmate. Verbal consent of this inmate was sought to participate in this study. In case of refusal by the selected inmate, the next adjacent inmate was approached for his consent to participate in the study.

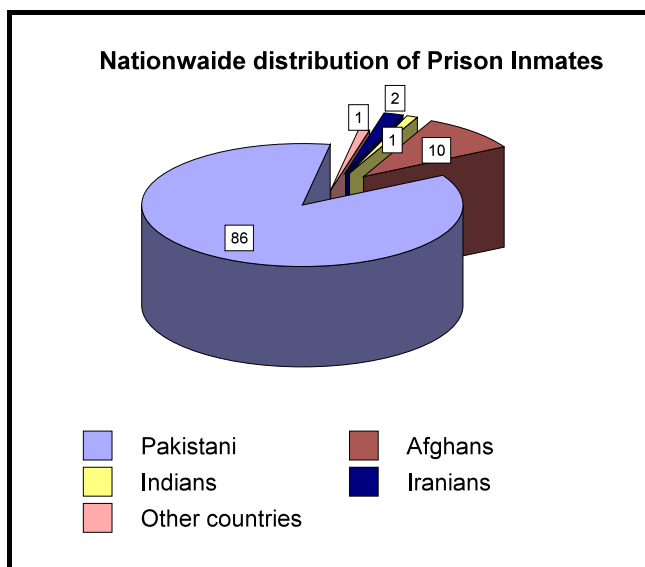
The questionnaire was structured to seek information regarding knowledge, attitudes, beliefs, behavior and practices and health information HIV/AIDS knowledge was measured by five questions. The interviewer entered the details after discussion with the prison inmate as 'correct knowledge', incorrect knowledge, or don't know'. The information regarding attitude, behavior and practices was measured by seven questions and the responses were entered as 'yes' or 'No' depending on the response of the inmate.

In the third phase, the pre-test counseling services were provided. The prisoners who agreed for voluntary testing were screened for HIV/AIDS by WHO recommended Strategy II (SERDIA HIV -1/2 FUJIREBIO JAPAN). All the positive cases were confirmed on WHO Strategy III (Lab System Elisa HIV 1/2 Finland and Vironostika Elisa HIV Ini-form Organon

Teknika).

**RESULTS**

Out of a total 1900 prison inmates, 1437 (75%) agreed to volunteer for the interview provided it would be kept confidential . The age range was 10-60 years as shown in table I. The prison inmates belonged to various nationalities as depicted in Fig-1



Age in years	No of patients	%Age
10-20	79	5.5%
20-30	136	9.5%
30-40	919	64.00%
40-50	244	17.00%
50-60	59	4.00%

Out of a total 1437 subjects, 1193 (83%) had the basic knowledge about HIV/AIDS. Only 302 (21%) had seen a patient diseased with AIDS before. About 258 (18%) subjects had knowledge about the signs and symptoms of the disease. It was further revealed that 575 (40%) of the subjects knew the correct mode of transmission of HIV/AIDS. The correct knowledge about preventive measures was found in only 115

(8%) of the subjects while 977 (68%) had no knowledge about these measures, as shown in Table-II.

	Correct knowledge	incorrect knowledge	Do not know
Knowledge about HIV/AIDS	1193 (83%)	187 (13%)	57 (4%)
Seen a case of AIDS	302 (21%)	-	1135 (79%)
Signs & symptoms	258 (18%)	676 (47%)	503 (35%)
Modes of transmission	575 (40%)	445 (31%)	417 (29%)
Knowledge about preventive measures	115 (8%)	345 (24%)	977 (68%)

Regarding the response of the subjects about their attitude, behavior and practices concerning HIV/AIDS. It was seen that only 316(22%) were afraid of acquiring the disease in future, 1121 (78%) were not None of the subjects were ever tested for HIV. About 459 (32%) had multiple sexual partners.

	Response	
	Yes	No
Afraid of acquiring AIDS in future	316 (22%)	1121 (78%)
Ever tested for HIV	-	1437 (100%)
Have multiple sexual partners	459 (32%)	978 (68%)
I/V drug abuser	388 (27%)	1049 (73%)
Sharing needles	618(43%)	819 (57%)
Homosexual practices	963(67%)	474 (33%)
Heterosexual practices	1193 (83%)	244 (17%)

As far as the intravenous drug abusing is concerned. 388(27%) of the subjects were involved in this practice, out of which 618(43%) were involved in needle sharing. About 963(83%) of the subject were practicing unprotected

heterosexuality, as shown in Table-III. Out of 1437, 933(65%) agreed for voluntary testing for the HIV/AIDS. There were 915 (65%) males and 18 (54%) females. A total of 7 (0.75%) subjects were found to be HIV positive of which there were 5 (0.55%) males and 2 (11.0%) females, as shown in Table-IV.

During the study it was revealed that the prisoners were involved in unprotected sexual practices within the prison. About 60% knew that homosexuality was the most prevalent practice in the prisons while 25% claimed there was no sexual practice and 15% feigned ignorance of any sexual practice in the prisons. Besides the intravenous drug users carry much greater risk of transmission fo HIV to young prison inmates.

Gender	sample size	Willing for voluntary testing	HIV positive
Male	1404	915 (65%)	5 (0.55%)
Female	33	18 (54%)	2 (11.0%)
Total	1437	933 (65%)	7 (0.75%)

## DISCUSSION

The study evaluated the relationship of knowledge, attitude, behavior and practices regarding HIV/AIDS as well as the risky practices of the prison inmates that may result in spread of infection. The HIV screening of the prison inmates showed a sero-positivity of <1% which, although, is quite low but they are high risk individuals which might prove to be a continuous source of infection during incarceration and outside as well.

The measures taken to detect and manage sero positive individuals in the prison environment vary considerably. If it is believed that certain limitations must be placed on seropositive prisoners e.g. , single cells, then routine screening would be justified. If on the other hand, no special measures are indicated, then routine testing is unnecessary. It is interesting to note that in some countries it is clearly stated that decisions about management of seropositive patients as based entirely on medical considerations.

In several countries the need to inform sero positive patients of the test result and of the implications for their way of life is emphasized. Individual responsibility of the prisoner in preventing transmission is emphasized e.g.. it is left up to the

prisoner to inform his fellow prisoners of his state.

The necessity to inform all prisoner about precautions necessary to control AIDS is emphasized by several countries. The leaflets are drawn up by or with the cooperation of national health authorities. Similar written material is also given to prison staff. In each case, the tone is reassuring about the risk of transmission of HIV in the prison environment, while warning about sexual contacts between prisoners and intravenous drug use. Instructions are also given about cleaning up blood and other body fluids. The principle of availability of condoms for prisoners has been established by the Swiss Public Health Authorities. In the Geneva prison, condoms are distributed without charge by the medical service to prisoners on demand. The Swiss recommendations also raise the issue of distributing sterile material for injections (syringes and needles) to drug dependent persons in prisons, since it is know that some drug abuse occurs and that dirty syringes are often used. Nevertheless, this measure was considered to be impossible to apply in the prison environment for both practical and legal reasons.

In prisons considerable number of intravenous drug users can be expected to have occasional homosexual contacts. The frequency and type of homosexual contacts in prison are not known, but anecdotal accounts by prisoners suggest that anal intercourse and mouth/genital sex are frequent, even between prisoners who have heterosexual orientation outside prison, induced homosexual behavior provides a "bridge" between a known high risk group (intravenous drug abusers) and individuals who may later become a source of infection through heterosexual contacts. Thus prisons may well occupy a key position for the control of AIDS in the community.

The fact that it is possible to impose much stricter controls in the prison than in the general community has led to suggestions that strict controls should be imposed to limit HIV spread. Such a policy would imply compulsory testing of all prisoners for HIV antibodies. This paternalistic approach can be defended by arguing that prison authorities have a direct responsibility to protect prisoners from the consequences of promiscuity; the possibility of homosexual rape in prisons is real. Nevertheless there is a clear impression that those who advocate routine, compulsory screening of prisoners are seeking a scapegoat group for political reasons. If there is a risk of homosexual rape in prisons, this is an argument for

improving conditions for prisoners and staff/prisoner ratios, decreasing overcrowding, and providing activities rather than for imposing compulsory screening with no safeguards on confidentiality.

For both practical and ethical reasons, measures for the control of AIDS in the prison environment should follow closely the strategy for the community in general. This policy implies an approach based on individual responsibility, in which each prisoner is treated as being autonomous and personally responsible for his own health and for the consequences of his behavior. Prisoners should be informed about AIDS risk and given the opportunity to take prophylactic measures. All prisoners are potentially at risk and should receive counseling, which is valid not only for the duration of their imprisonment but also following their release.

## CONCLUSIONS

The following concrete measures are needed to control HIV infection in prisons and to prevent unnecessary alarm and inappropriate measures by staff of prisoners.

1. Information should be provided to all prison staff about HIV/AIDS and other communicable diseases. There should be regular updates of this information.
  2. Active steps should be taken to prevent the illicit introduction and use of syringes and needles into prison. Intravenous drug abusers should receive detailed information about avoidance of contamination through use of dirty infection material before their discharge. If prison administrations are unable to prevent syringes and needles being introduced illicitly into prisons together with drugs, serious consideration should be given to the distribution of clean, disposable needles and syringes to prisoners.
  3. Anti-HIV tests should be made available on request to all prisoners. Pre-test counseling is essential to prepare prisoners for receiving the results in an environment where normal social support are lacking.
  4. Isolation and segregation of seropositive prisoners is not justified and may be counterproductive.
- Seropositive prisoners can work in all settings, including prison kitchens.
5. Satisfactory hygienic standards and good nutrition should be available to all prisoners since these factors may have a prophylactic effect on the development of AIDS in seropositives.
- Prisons are not created to promote health. Nevertheless, the HIV/AIDS epidemic demonstrates forcibly how important prison health policy is for the community as a whole. Are health administrations ready to grasp the nettle?

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## CORRECTION

The amendment of The Professional Vol: 10, No.3 (PROF-723) Page 201 is as under.

### INCORRECT

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## RELATIONSHIP OF CORONARY ARTERY DISEASE (CAD) WITH TOTAL CHOLESTEROL & LDL – CHOLESTEROL/HDL-CHOLESTEROL RATIO

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