

# EC PULMONOLOGY AND RESPIRATORY MEDICINE Research Article

## TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia

## Mandeep Kaur<sup>1\*</sup>, Monika<sup>2</sup>, Rohit Handa<sup>3</sup>, Harmandeep Arora<sup>4</sup>, Sohan Singh<sup>5</sup> and Gulshan Kumar<sup>6</sup>

<sup>1</sup>District TB Officer/District Aids Officer, Civil Hospital Faridkot, Punjab, India

Received: August 28, 2019; Published: November 05, 2019

#### **Abstract**

Punjab is currently facing the problem of addiction on an epidemic scale which poses a formidable risk to HIV. This study was planned with a motive to understand some behavioural pattern of HIV positive prison inmates, who pose significant risk to fellow inmates and are themselves vulnerable to various illnesses like TB due to their HIV status. Total of 4016 prisoners were tested for HIV and out of these 382 were found HIV reactive and they agreed to participate in the innovation giving an informed consent, were assessed to know the demographic profile along with knowledge, attitude and practices, with regards to HIV risky behaviour. The project was conducted after having approval from ethical committee and from the jail authorities. Among the 4016 jail inmates who were tested for HIV, 382 subjects took part in the study. All subjects were male. Out of these 382, majority of subjects were married, under matriculate, came from urban background and were convicts. The age range of the project group was 20 to 53 years. As per the present scenario, the predominant risk factor for HIV came out to be intravenous drug abuse. In a project 93.4% were regularly using intravenous route for drug delivery and 68.7% of inmates started using this method after coming to prison. The median time after which a subject usually shifts to IDU usage after getting imprisoned came out to be 18 months. High prevalence of intravenous drugs abuse in Indian prisons is an alarming situation. The adequate management of such persons in prisons with minimizing associated risk for blood-borne infections and other opportunity infections like TB (Tuberculosis) has come up as an important issue, in the wake of rising number of arrest for illegal possession of drugs in this part of the country.

Keywords: Prisoners; Addiction; HIV; IV Drug Usage; Blood-Borne Infections; Opportunistic Infections; TB (Tuberculosis)

## Abbreviations

HIV: Human Immuno Deficiency Virus; TB: Tuberculosis; IDU: Intravenous Drug User; ART: Anti Retro Viral Therapy; CPT: Co-Trimoxazole Prophylaxis Therapy; DOTS: Directly Observed Treatment Short Course Therapy

*Citation:* Mandeep Kaur., *et al.* "TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia". *EC Pulmonology and Respiratory Medicine* 8.12 (2019): 01-06.

<sup>&</sup>lt;sup>2</sup>Counsellor, ICTC, Civil Hospital Faridkot, Punjab, India

<sup>&</sup>lt;sup>3</sup>Laboratory Technician, ICTC, Civil Hospital Faridkot, Punjab, India

<sup>&</sup>lt;sup>4</sup>Senior Dots Plus and TB-HIV Supervisor, District TB Clinic Faridkot, Punjab, India

<sup>&</sup>lt;sup>5</sup>Data Entry Operator, District TB Clinic, Civil Hospital Faridkot, Punjab, India

<sup>&</sup>lt;sup>6</sup>Senior Treatment Supervisor, District TB Clinic Faridkot, Punjab, India

<sup>\*</sup>Corresponding Author: Mandeep Kaur, District TB Officer/District Aids Officer, Civil Hospital Faridkot, Punjab, India.

02

### **Background**

Punjab is currently facing the problem of addiction on an epidemic scale which poses a formidable risk to HIV. This study was planned with a motive to understand some behavioural pattern of HIV positive prison inmates, who pose significant risk to fellow inmates and are themselves vulnerable to various illnesses due to their HIV status.

## Introduction

The menace of drug addiction is currently one of the major causes of high HIV prevalence in India. The North Western part of India, boarding Pakistan is among the worst effected due to its geo-political conditions. The consumption of opiates in the state in three times the national averages reported [1]. Among the 0.2 million IDU (Intravenous Drug Users) in India [2], there is high HIV prevalence among people who inject drugs in Punjab (26.1%), which is three times as compared to the national average (9.2%) [3].

Globally an estimated 3 million people who inject drugs are living with HIV [4], representing one in ten infections world-wide. There are 16 million people who inject drugs world-wide [5] and there are an estimated 165000 IDU in India [4] and it is common for people who use illicit drugs to experience periods in custody [4].

Prison conditions are hard on mental health in general because of over crowding, violence, lack of privacy, lack meaningful activities, isolation from family and friends, uncertainty of life after prison and inadequate health services [6]. The factors associated with the prison setting combine with the life history and sub cultural practices of people who inject drugs, to provide a greatly heightened environment for health related risk [7]. Drugs have become established at the heart of prison life throughout the world and are often now 'the central medium and currency in prison subcultures [8].

But it is now fast being recognized that persons who have mental illnesses and/or abuse substances are more likely to be detained in prisoners than in treatment facilities, especially in countries that lack adequate mental health services [9]. One glaring example of the increasing recognition by the governments as prisons being places for treatment and rehabilitation has come up recently when, the state of California Department of Corrections (CDC) adopted "Rehabilitation" as a part of its official title, becoming the "California Department of Corrections and Rehabilitation" (CDCR) [10].

People who inject drugs are vastly over-represented, often accounting for 50% of prison inmates, but only 1 - 3 of the broader community [11]. Globally progress has been made in implementing HIV programmes in the community [12], however HIV prevention, care and treatment have largely been neglected in prisons [13]. But despite all these advances, drug users still have extremely poor access to life-saving HIV prevention and treatment services, such as harm reduction programs or antiretroviral therapy [14,17]. The adequate management of HIV is emerging as a major health challenge for prison authorities [16] because substances use disorders [17] and injecting drug use [18] are common among incarcerated populations. The prevalence of HIV in prison varies and in some prisons it upto 100 times higher than in the community [19]. Prisons are not only hot spots for risk behaviours, such as injecting drug use, which can lead to infection from blood-borne diseases, but also blind spots in our societies, when it comes to treating drug using prisoners with a dignity they deserve. As 10% of the HIV infections occur through injectable drug use [20], so its proper management has emerged as one of the major human rights and public health issues that prison system encounter today [21]. Outbreaks of HIV infection in prison associated with shared injecting equipment have been reported in several countries [22,23]. In Thailand, the first epidemic outbreak of HIV in the country probably began among injecting drug users in the Bangkok prison system in 1988 [24]. European study on health problems arising in prison highlighted three main issues: substance abuse, mental health problems and communicable diseases and these three problem areas are closely interrelated [25-27].

*Citation:* Mandeep Kaur., *et al.* "TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia". *EC Pulmonology and Respiratory Medicine* 8.12 (2019): 01-06.

TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia

03

Over 4016 jail inmates were tested for HIV and 382 inmates were found HIV reactive. Out of these HIV positive jail inmates, 40 jail inmates were detected suffering from pulmonary TB and they are taking both Anti Retroviral Therapy and TB treatment by admitting him TB ward of Central Jail Hospital Faridkot.

Around 250 chest symptomatic patients were examined and investigated. Out of these 15 Pulmonary TB cases and 5 Extra Pulmonary TB cases were diagnosed and treated till end of the treatment, in Central Jail Hospital Faridkot. During that duration they were provided 1/2 Kg milk, 4 eggs, 4 bananas and Dalia by Jail Authorities and there was no relapse/failure/default found in these patients.

Because of increasing incidence of HIV and TB in Jail separate TB ward, HIV ward and De-addiction centre were established with intervention of DTO and DACO Dr. Mandeep Kaur and with support of Jail Authorities.

## **Objective of the Study**

To study the demographic profile along with knowledge attitude and practices, with regards to HIV risky behaviour of HIV positive prisoners and high incidence and prevalence of TB due to drug addiction in jail inmates.

## Methodology

#### Area

Central Jail in Faridkot, Punjab (India), South East Asia.

#### **Population**

Total 4016 Jail Inmates were covered from August 2015 till 31st July 2016.

### **Problem statement**

It was seen in 2015-2016 after taking charge of District Aids Control Programme in District Faridkot, Punjab (India), South East Asia that jail inmates have high incidence of HIV followed by TB and other opportunistic infections due to high HIV risky behaviour of prisoners due to menace of IV drug addiction, in the wake of rising number of arrest for illegal possession of drugs in this part of country.

**Duration of implementation:** August 2015 to 31st July 2016.

**Methodology adopted:** Total of 4016 prisoners were tested for HIV and out of these 382 were found HIV reactive and they agreed to participate in the innovation giving an informed consent, were assessed to know the demographic profile along with knowledge, attitude and practices, with regards to HIV risky behaviour. The project was conducted after having approval from ethical committee and from the jail authorities.

**Unique features/approach/methodology of innovative project:** This innovative project was carried out in Central Jail Faridkot, Punjab. It has about 2500 inmates, both convict and under trials. Among the 2500 inmates there are 100 females. On an average 60 - 70 come and go daily in the prison.

This project included subjects who tested positive for three serial HIV testing during August 2015 to July 2016. During that time 4016 inmates were tested for HIV and 382 inmates were found HIV reactive (prevalence 9.5%). No female tested reactive HIV during this duration. The project was conducted only after a prior permission from the jail authorities. The inclusion criteria include those in tested positive for HIV and agreed to participate in the innovation through a written consent.

*Citation:* Mandeep Kaur, *et al.* "TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia". *EC Pulmonology and Respiratory Medicine* 8.12 (2019): 01-06.

04

All information regarding the socio-demographic data, knowledge, attitude and practices with regards to HIV risk behaviour was assessed.

#### **Evaluation Results**

A total of 382 subjects took part in the study. All subjects were male. Out of these 382 majority were under trial. Majority of subjects were married, under matriculate, Sikhs by religion and were convicts. The age range of the project group was 20 to 53 years. As per the present scenario, the predominant risk factor for HIV came out to be intravenous drug abuse. In a project 93.4% were regularly using intravenous route for drug delivery and 68.7% of inmates started using this method after coming to prison. The median time after which a subject usually shifts to IDU usage after getting imprisoned came out to be 18 months.

#### **Discussion and Conclusion**

The present study shows IDU as a predominant risk factor for HIV among HIV positive prison inmates. These result are quite in accordance to the other studies in prison setting world-wide. Over representation of males in this study is in accordance with the pattern of prevalence of addiction in the society at large in the region. This disproportionate representation is indicative of the role of social factors in the epidemiology of substance dependence. Results show that high percentage of people started ID usage after getting imprisoned, turning prisons in to breeding place for communicable diseases. So there is a need to understand the importance of harm reduction techniques in the prison settings. Illiteracy and lack of awareness of HIV risk behaviors has also come out as an important factor contributing to the high prevalence of sero positivity for HIV in the prison. The results show that high percentage of subjects were not knowing their HIV positive status till recently and after knowing this, this information has acted as an important factor in modifying their behavior on long term basis for better health outcomes. Moreover, combination of ID usage and lack of information about HIV positive status can prove dangerous for other fellow inmates in the prison setting. So, arrangement of HIV testing in prisons and motivating prisoners who are ID users for voluntarily HIV testing can play important role in controlling this epidemic. High frequency of ID usage necessitates the need to make prisoners aware about safe practices with paraphernalia.

## **Lessons Learnt**

Like most countries around the world, people at high risk of HIV infection are also over represented in Indian prisons. The importance of implementing HIV intervention in prisons was recognized early in the epidemic [28]. There is an emerging need to understand the changing requirements of Indian prisons for the management of such prisoners with substance used disorders and all prisons should have functioning treatment programme for opiod dependence [29]. Prisons have been recognized has places where there are frequent switching to IDU usage. Adequate management of such cases provide and excellent opportunity to handle the high risk behaviour of this young population and saving their precious lives from dragnet of dreadful blood-borne diseases. At the same time, it is also important to recognized that there is excess of health problems in the prison population, which exceeds level found outside the prison. Given the scope and urgency of the issues involved, governments have a legal and ethical obligation to provide a standard of health care even greater than the availability in the community [30]. Proper redressal of such issue will reduce recidivism rate and improve the quality of life of these prisoners. It is high time to give due importance the management of drug dependence in prisons which is intricately linked with HIV epidemic at large.

## **Potential for Upscale**

In jail more awareness regarding TB and HIV can be provided to the inmates by conducting awareness sessions, which includes nukkar nataks on TB and HIV, by conducting magic shows, intervention of NGOs on regular basis and conducting awareness and medical camps regarding TB, HIV and other deadly diseases related to drug abuse.

Citation: Mandeep Kaur., et al. "TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia". EC Pulmonology and Respiratory Medicine 8.12 (2019): 01-06.

## **Financial Investments for Implementation**

With the help of RNTCP and District Aids Control Society.

## **Bibliography**

- 1. Singh A. "Region drug abuse statistics way ahead of national average". *International Journal of Sociology and Anthropology* 2.8 (2010): 162-170.
- 2. Ministry of Youth Affairs and Sports. "Awareness and Education for Prevention of Drug Abuse and Alcoholism in Punjab". New Delhi: Nehru Yuva Kendra Sangathan (2011): 3.
- 3. Kamal Neel. "Moga is Punjab's Drug Capital". The Times of India (2013).
- 4. Mathers BM., et al. "Global epidemiology of infecting drug use and HIV among people who inject drugs: a systematic review". *Lancet* 372.9651 (2008): 1733-1745.
- 5. Yardley J. "Indian State Finds Itself in Tight Grip of Addiction". The New York Times (2012).
- 6. WHO Information sheet: Mental Health and prisons.
- 7. WHO/Europe. Consensus statement from mental health promotion in prisons (1998).
- 8. World Health Organisation. Effectiveness of interventions to address HIV in prisons (Geneva: WHO) (2007).
- 9. WHO/Europe. Trencin statement on prisons and mental health (2007).
- 10. Office of the Governor, Governor Schwarzenegger Signs Legislation to Transform California's Prison System, press release (2005).
- 11. Dolan K., et al. "Becklay Report 12-Prisons and drugs: a global review of incarceration, drug use and drug services". (Oxford: The Beckley Foundation) (2007).
- 12. UNAIDS. Epidemiological fact sheet on HIV and AIDS: India (2008).
- 13. Larney S., et al. "HIV prevention, treatment and care in prisons in South-East Asia". Sydney: National Drug and Alcohol Research Centre (2007).
- 14. Dutta A., et al. "Key harm reduction interventions and their impact on the reduction of risky behavior and HIV incidence among people who inject drugs in low-income and middle-income countries". *Current Opinion in HIV and AIDS* 7.4 (2012): 362-368.
- 15. Mathers BM., et al. "HIV prevention, treatment, and care services for people who inject drugs: a systematic review of global, regional and national coverage". Lancet 375.9719 (2010): 1014-1028.
- 16. UNODC/WHO/UNAIDS. HIV/AIDS Prevention, care, treatment and support in prison settings. Vienna: United Nations Office on Drugs and Crime (2006).
- 17. Fazel S., et al. "Substance abuse and dependence in prisoners: A systematic review". Addiction 101.2 (2006): 181-191.
- 18. Dolan K., et al. "HIV in prison in low-income and middle-income countries". Lancet Infectious Diseases 7 (2007): 32-41.
- 19. United Nations Office on Drugs and crime, World Health Organisation and joint United Nations Programme on HIV/AIDS. HIV and AIDS in places of detention a toolkit for policy makers, programme managers, prison officers and health care providers in prison settings (New York: United Nations) (2008).

Citation: Mandeep Kaur., et al. "TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia". EC Pulmonology and Respiratory Medicine 8.12 (2019): 01-06.

05

TB-HIV Intensified Activity along with Demographic Profile with Knowledge, Attitude and Practices with Regards of HIV Risky Behavior of Prisoners who have been Tested Positive for HIV at a Central Jail in Faridkot, Punjab (India), South East Asia

06

- 20. Aceijas, C., et al. "Global overview of injecting drug use and HIV infection among injecting drug users". AIDS 18.17 (2004): 2295-2303.
- 21. Robert Teltzrow "Drug use in Prisons Risks, Public Health and Human Rights, Blind spots and hot spots". Mental Health and Addiction in Prisons.
- 22. Bobrik A., et al. "Prison health in Russia: the larger picture". Journal of Public Health Policy 26.1 (2005): 30-59.
- 23. Taylor A., et al. "Outbreak of HIV infection in a Scottish prison". British Medical Journal 310 .6975(1995): 289-292.
- 24. Wright NH., *et al.* "Was the 1988 HIV epidemic among Bangkok's injecting drug-users a common source outbreak?" *AIDS* 8.4 (1994): 529-532.
- 25. Tomasevski K. "Prison health: international standards and national practices in Europe". Helsinki, Helsinki Institute for Crime Prevention and Control (1992).
- 26. WHO. "Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among injecting drug users [Evidence for Action Technical Paper]". Geneva: WHO (2004).
- 27. Hall HI., et al. "Epidemiology of HIV in the United States and Canada: Current Status and Ongoing Challenges". Journal of Acquired Immune Deficiency Syndromes 51.1 (2009): S13-S20.
- 28. Harding TW. "AIDS in prison". Lancet 330.8570 (1987): 1260-1263.
- 29. World Health Organisation. "Ensuring balance in national policies on controlled substances: guidance for availability and accessibility of controlled medicines" (Geneva: World Health Organisation) (2011).
- 30. Lines R. "From equivalence of standards to equivalence of objectives: the entitlement of prisoners to health care standards higher than those outside prisons". *International Journal of Prisoner Health* 2.4 (2006): 269-280.

Volume 8 Issue 12 December 2019 ©All rights reserved by Mandeep Kaur., et al.