Infectious Diseases Section

# HIV Seroprevalence among Prison Inmates in Rajasthan, India

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Prisons are known to be high risk environments for the spread of blood borne and sexually transmitted infections. There is a growing evidence that these infections could have been transmitted to individuals during their prison stay, or that some of them already had these infections even before they were incarcerated [1]. These correctional centres cannot be seen as isolation from the community [2]. A vast majority of the prison inmates are incarcerated for only a few months before they return to the community. Also, a majority of the prisoners return to the cities and towns that they came from. The resumption of high risk behaviours among them such as unprotected sex and drug abuse shortly after their release from prison is very common. These are important factors that must be considered while studying the epidemiology of HIV in the community. In India, the data on the prevalence of the HIV infection in prison inmates is very scanty, more so from Rajasthan. There is a complete lack of the systematic surveillance of HIV in the incarcerated population. The present study was therefore conducted to give a truer picture of the HIV scenario in prisons. This would also provide a basis for action and changes in the public health policy and education.

Two hundred jail inmates who were confined for various crimes in a district jail in Jhalawar were screened for the presence of antibodies to HIV 1 and 2 by using HIV rapid test strips (Acon Laboratories, San Diego, California, USA), which is a third generation test which is based on immunochromatogenic techniques which are used to test for both HIV-1 and HIV-2. The procedures were followed in accordance with the manufacturer's instructions. Five milliliters of blood was collected aseptically from each inmate by following all universal precautions. Prior to the study, a written informed consent was obtained from each inmate. Only one inmate (0.5%) tested positive for the HIV antibody.

In many countries in eastern and western Europe, Africa, north and south America and Asia, the HIV infection rates among the inmates in prison and other detention centres are reported to be significantly higher than those in the general population [3]. This is because

certain populations that are highly vulnerable to the HIV infection also have an increased probability of incarceration because of their involvement in drug abuse and unprotected sex [4]. A meticulous review of the relevant published and unpublished reports, as was done by a contemporary Indian study, has found that 1.7% of the inmates were HIV positive [5]. Another survey of 249 inmates of the northern Indian prisons found 1.3% HIV reactivity [6]. The lower HIV seroprevalence in our study could probably be due to the almost nil intravenous drug usage in this community. Our conversation with the prison officers revealed that a drug habit which was common among the inmates in this part was that of using smack which is never injected. The low seroprevalence rate in this population is very heartening and encouraging. Although the seroprevalence rate of HIV as was found in our study was quite low, regular monitoring of the information on the HIV risk behaviours and the HIV prevalence in the Indian prisons is still strongly recommended. The public health policy must involve all the sections of the community, including the prison inmates, if it has to achieve the reduction of the transmission of HIV and other BBVs.

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