

HEPATITIS C AMONG YOUNG MALE OFFENDERS ADMITTED TO THE CENTRAL JAIL, LAHORE

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ABSTRACT

Objectives: This study was designed to observe intraprison incidence of hepatitis C virus (HCV) infection among young offenders admitted to the Central Jail, Lahore.

Methodology: The evaluation was made incidence among 728 young inmates (aged 16 – 30 years) at the Central Jail, Lahore, between June 2009 and November 2009. Screening for Anti-HCV antibodies was performed on immunochromatographic devices and all positive and borderline cases were retested with ELISA system.

Results: Among 728 participants, 129 demonstrated serologic evidence of HCV infection. Frequency was calculated 17.7%.

Conclusions: The study indicates that HCV infection is highly prevalent among young male offenders and highlights the need to deliver awareness, prevention, and medical management to make them a healthy and useful citizen.

Key Words: Hepatitis C, jail, youth.

INTRODUCTION

Hepatitis C (HCV) is already the most common disease of its sort in Pakistan and worldwide – a chronic, life – threatening, blood – borne infection. Across the world, above average rates of hepatitis C, hepatitis B and HIV are seen in prison populations. It is most commonly linked to infected needles used for drugs, through tattoos and body piercing with non-sterile equipment may also be responsible for infection.^{1,2}

HCV infection among inmates varies in prevalence from country to country, with rates among specific subpopulations of up to 54%. HCV is possibly the most prevalent blood – borne infection in prisons in the United States and between 15% and 40% had hepatitis C antibodies, mostly related to high rates of intravenous drug use.¹⁻² In Australia and Brazil, 20% and 41% blood samples of prisoners were positive for anti-HCV, respectively.^{3,4} Whereas in Canada (Ontario) the prevalence of HCV infection was 15.9% among men, 30.2% among women and 54.7% among injection drug users.⁵ Nearly 40% of Iranian prisoners were injection drug users (IDUs), and the prevalence of HCV infection among this population has been reported to be between 38 and 90%.^{6,7}

Unfortunately, there are only very limited data available on the prevalence and course of HCV infection in young offenders throughout the world.^{5,8} Eventually, when they are released, medical experts predict they will be a crushing burden on the health care sys-

tem, perhaps killing as many people as AIDS in years to come. At the same time, they will be carriers, spreading the disease.^{1,2,5,7}

We performed a study on hepatitis C markers in the Central Jail, Lahore to evaluate the incidence of the disease in the young adult inmates in the age group of 16 – 30 years.

SUBJECTS AND METHODS

Aims and Objectives

The purpose of this study was to determine the HCV seroprevalence among the young male offenders admitted to the Central Jail, Lahore.

Study Design: Cross sectional, observational study.

Study Population: Young male inmates in the age range of 16 – 30 years were included in the study admitted to the Central Jail between June 2009 and November 2009 and those who had not previously participated in the study were included.

Exclusion Criteria: Any inmate below 16 or above 30 years of age was excluded. No female was included in this study.

After all exclusions, data from 728 young male inmates were available for Anti-HCV testing.

Data Collection

Study participants were interviewed regarding demo-

graphic characteristics, medical history, injection drug use, sexual behavior, and history of being in jail. They were asked if they had ever been in jail, and the most recent dates of incarceration. After the interview and pre-test counseling, a blood sample was collected for serological testing of HCV.

Laboratory Testing Procedures

Antibody to HCV (anti-HCV) was detected using immunochromatographic (ICT) devices. All those repeatedly reactive and undetermined were confirmed by using a third generation EIA (Ortho Diagnostics Systems, Raritan, NJ, USA).

RESULTS

All the young offenders (728) in the age group of 16 – 30 years – under trial or imprisoned – were screened. Median age was 23 years. HCV marker (Anti-HCV antibodies) positive inmates were 129 accounting for proportion of seropositivity 17.7%.

DISCUSSION

In this study cohort, the evaluation of the incidence of HCV infection among young adult inmates during the period of their imprisonment was carried out. A considerably higher prevalence of HCV infection, higher than those in the young recruits and general youth population but lower than the injection drug users (IDUs) in Pakistan.⁹⁻¹⁴ However, it is lower than that reported from correctional facilities of some developed and neighboring countries.⁵⁻⁷

The true prevalence of HCV in the incarcerated population is difficult to obtain as no mandatory screening programs exist and the number of studies that investigated HCV prevalence in this population is limited.

Hepatitis C is prevalent worldwide but varies greatly in different regions. Countries with high rates of chronic infection are Egypt (22% of population), Pakistan (4.8% of population) and China (3.2% of population).¹⁵ The frequency of 4.8% in Pakistan is significantly higher than in the neighboring south Asian countries.¹⁶ The main mode of transmission in these countries is attributed to unsafe injection using contaminated syringes.^{15,16}

A high prevalence of HCV antibodies among prisoners has been reported from many countries and is a significant health problem. In Pakistan, overall, 12.8%-15.3% of inmates were positive for HCV antibodies.¹⁷⁻²⁰ However, HCV prevalence was much higher in injection drug users (IDUs) ranging from 49% to 88%.¹¹⁻¹⁴ Few studies have investigated hepatitis C in young inmates.⁵⁻⁸ As expected, in our study on prisoners in the 16 – 30 years age group, the 17.7% prevalence rate of HCV markers (Anti-HCV antibodies) was significant.

Our visit of the Central Jail, Lahore during this off-

icial screening program, painted a gloomy picture of our prison system. In developed countries, the jails and prisons are now considered as “correctional facilities” that aims to contribute to a just, peaceful and safe society by detaining inmates in safe custody, while maintaining their human dignity, developing their sense of social responsibility and promoting the general development of all inmates and persons subject to community corrections. Some correction facilities are used for the detention and discipline and training of young or first offenders.³²¹⁻²³ But in our part of the world, it is too far away to prove that “hatred is for the crime not for the person”.

All individuals under custodial supervision should be assessed by professional staff to determine their risks and needs. Included in the assessment process are addictions, health and mental health issues and life management issues. Our prison system should intend to reform or otherwise prepare offenders for a successful reintegration into society. Prison overcrowding continues to pose another challenge. Possible problems caused by prison overcrowding include stress among inmates and staff, increased risk of violence and spread of disease.

Incarcerated young offenders are potentially a high risk group for spread of blood borne and sexually transmitted diseases and other communicable diseases along with increased use of drugs. It is the age group that needs effective and integrated efforts to rehabilitate and make them a useful citizen.²¹⁻²³ They can be educated and trained to deliver their capabilities for the benefit of their families and the society. Prisoners and jail staff must be given urgently needed education on HCV and other communicable diseases. A real prevention strategy is long overdue. And we must provide medical care to those already infected.

Hepatitis C can be treated, but many prisons even do not test for it. Among the reasons: Budgets are tight, and treatment is expensive. So prison officials close their eyes to the gathering emergency and pass it along to the outside world. The opportunity of screening, testing, vaccination, treatment and education of high – risk individuals while they are in the controlled environment of the jail can be a good policy for both individuals and the community.

Our data support the argument that risk – based screening alone is not sufficient to accurately confront the magnitude of HCV infection in prisons. Screening, diagnosis, and prevention services must be incorporated into correctional health systems to reduce progression of clinical disease and stem the transmission of infection.

It is **concluded** that high incidence of HCV infection among young offenders observed in our study highlights a significant community health issue. They need to be educated and trained through educational

programs to deliver their capabilities for the benefit of their families and the society.

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