

HIV Surveillance in India: An Overview & Implications for Future

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Objective

To study and analyze the surveillance activities in HIV prevention and control in India.

Introduction

Surveillance of risky behaviors of HIV infection and its manifest diseases has provided a better understanding of the complex nature of the HIV epidemic in India. However, little attempt is made to analyze progress of these surveillance activities.

Methods

A review & analysis of surveillance activities undertaken in India were done. Pub-med, cochrane library and peer-reviewed journals were referred for relevant literature.

Results

Initially, medical officers from multiple types of government hospitals in India were expected to report AIDS cases, including deaths. However, this reporting mechanism was inadequate, complicated by many disparate types of reporting units with incomplete and delayed reports. Therefore AIDS case reporting has been replaced by HIV case reporting from the 4532 Integrated Counseling and Testing Centers. Newer surveillance strategies like Behavior sentinel surveillance measure behaviors that affect risk for acquiring HIV. However, behavioral and biological data are resource-intensive and time-consuming. Facility-based sero-surveillance (also called HIV Sentinel Surveillance or HSS) has emerged as the key surveillance strategy for HIV/AIDS in India. Starting with 55 urban sentinel sites HIV Sentinel Surveillance expanded to 1215 in 1994. Most of these pre-selected sites were antenatal clinics but also included sexually transmitted infection clinics and special facilities. Subsequent expansion of high-risk group sites has improved the representation of all sub-populations in HSS. While stigma against most high-risk populations and HIV-positive people continues, it has lessened as shown by the behavioral surveys. Also, accessibility to testing sites has increased with increased availability of care and treatment options for infected individuals.

Conclusions

While acknowledging the vastness and diversity of India, the key limitations remain suboptimal coverage and lack of representative surveillance data. Moreover, due to selection bias, the populations selected for HSS at targeted intervention sites may not represent everyone in that community. There is lack of national information system to collect HIV testing information from the private sector. Further efforts are needed to improve HIV surveillance data and usage of this data to predict the epidemic.

Keywords

Surveillance; HIV; India

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