

# Study of Regional Variances of HIV/AIDS in India

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## Abstract

This study was conducted in order to study the patterns and spread of HIV/AIDS in India in order to analyze regional variances and affected populations, as well as potential solutions and caveats to successful prevention of the spread. A literature review was conducted utilizing peer reviewed publications and textbooks. From this review, data of the number of infected persons from different regions in India was compiled. Studies were examined for the most susceptible populations and the causes behind the epidemic. A regional focus was done on female sex workers in Andhra Pradesh. This study highlights the time frame of 2001 to the present. The findings indicate that the population of affected people in India is mainly focused within Southern India. The demographics that are most affected are female sex workers and men who have sex with men. The most effective interventions were those that were community based and addressed the problem on a micro scale.

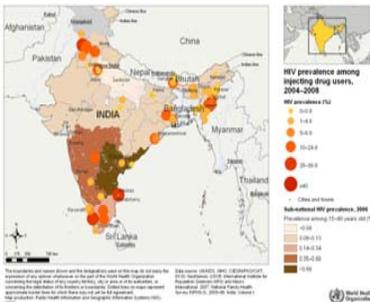
## Approach

For this research study, I did a survey of 38 peer reviewed scholarly journal articles, as well as two textbooks. I began by evaluating the disease as a whole in India, reviewing data on the different social and economic demographics. I pinpointed where the disease was most prevalent, specifically the southern states, and conducted a case study on AIDS and prostitution in Andhra Pradesh using peer reviewed scholarly journals and books written on the subject.

## Purpose

Through my survey of literature on the HIV/AIDS pandemic in India I looked to answer the questions:

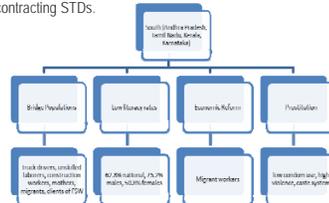
- Who are the main demographics affected by HIV/AIDS?
- Where are the geographical trends of HIV/AIDS focused?
- What has been done to contain and prevent further spread of HIV/AIDS in India?



## Findings and Analysis

As a result of my research, I found that there are approximately 2 million cases of HIV/AIDS in India. Regionally, the pandemic is focused in the southern states. The populations most affected are transgender, injected drug users, men who have sex with men (MSM), and female sex workers (FSW). In addition, populations that spread the disease from a high risk to a low risk person, bridge populations, pose a threat.

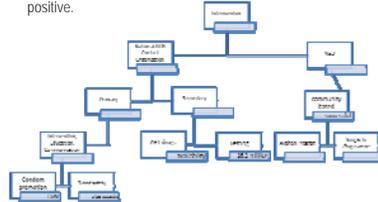
Factors that have contribute to the AIDS pandemic in India include low literacy rates, economic reform, and prostitution. India has a national literacy rate of 62.8 percent, a male literacy rate of 75.2 percent, and female literacy rate of 50.8 percent (CIA World Fact book). Subsequently, many HIV/AIDS positive patients cannot afford testing or antiretroviral drugs and with high illiteracy rates it is difficult to educate the population on risks and prevention methods. Economic reform in states in Southern India has caused an influx of migrants. This increase of bridge populations has caused an increase in the spread within Southern India. Prostitution has presented itself as an issue because of low condom use, relations with bridge populations, and low education of ways to avoid contracting STDs.



There has been intervention from both the Indian government and Non-Governmental Organizations. The most success has been seen from NGOs working on a local level. These interventions were most successful because they were organized with members of a community actively working to promote testing, availability of condoms, and knowledge of safe sex practices.

Government organizations such as the National AIDS Control Programme and the National AIDS Control Organisation have seen success in providing free testing, clinics, and antiretroviral therapy (ARV).

There are still many barriers to intervention that are mainly focused around social prejudices. Many who have the disease are too afraid to get treatment for fear of public knowledge of their condition. FSWs have reported a fear of loss of clientele and therefore a loss in income. Violence and social persecution are also common fears of being HIV positive.



## Case Study: Andhra Pradesh

As of December 2012 the adult AIDS prevalence rate in Andhra Pradesh was 4.52 percent, the highest of all the states. Female Sex Workers (FSWs) within Andhra Pradesh have shown to be one of the root causes of the problem stemming from environment of sex work, marital status, age of sexual debut, and income.



FSWs who worked out of brothels had more successful interventions as the volunteers were able to locate and target a specific group of women with relative ease. The women also had a support group already established and typically a leader who they could look to for encouragement. Condoms could be distributed at a central location and the repetition of mantras ("I deserve to protect myself") were more facily adopted. Women working from home and from a public place were much more difficult for outreach programs to find, because they were less publicized and had a network of clients that was cautious of discovery by authorities.

Environment	Percent
Home	26.4
Brothel	17.9
Public Place	50.7
Other	5

In regards to marital status, FSWs were less likely to use condoms when participating in sex work, less likely to work out of brothels and more likely to work from public places. It is more common for them to breastfeed their children, making their children more susceptible to HIV.

FSWs in Andhra Pradesh were shown to have the lowest age of sexual debut, with most FSWs entering into sex work between the ages of 15-18. FSWs who being at an earlier age have a higher dependency on FSW for financial support as low caste families often put their daughters into sex work as a profession. FSW who have an early debut have also demonstrated tendencies to be less educated on prevention measures, as they often are illiterate and do not have access to mass media. Furthermore, FSWs with more income from sex work tend to be less likely to practice safe sex, often citing STDs as an occupational health hazard. This mindset puts FSW at a higher risk.

## Case Study: Andhra Pradesh

The most successful intervention methods for HIV/AIDS prevention amongst FSW in Andhra Pradesh were those led by peer educators. Peer educators were more able to connect to and empower high risk workers. Within Andhra Pradesh there has been a slow, but steady decline in the prevalence rate of HIV/AIDS.

Year	Rate
2002	1.16
2003	1.13
2004	1.1
2005	1.08
2006	1.05

Despite the decline there are still barriers against FSW from getting treatment and aid. The underlying lack of respect for women in the state has lead to factors that have helped further the spread of AIDS, such as violence, illiteracy, lack of exposure to mass media, and poverty.



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