# Knowledge, Perceptions and Attitudes of Youths in India Regarding HIV/AIDS: A Review of Current Literature

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## Abstract

***English:***

*The HIV/AIDS pandemic is steadily increasing in severity throughout the developing world. Recently, Southeast Asia has become a rising concern for health care professionals in the field of infectious disease (UNAIDS, 2004). Most of Southeast Asia is experiencing surging prevalence and incidence rates of HIV infection. One particular country of interest is India. India's population has surpassed one billion, making it the world's second most populated country. India's large population exacerbates the problematic scenario of HIV sero-prevalence rates that are increasing throughout the country and region (De Cock & Weiss, 2000; Rao, et al, 2004; UNAIDS, 2004). Youths in India lack knowledge about HIV and also have misconceptions about modalities of transmission, and many harbor negative attitudes towards those who test positive for HIV. In order to decrease transmission rates among youth, quality HIV/AIDS education must be implemented in a culturally relevant manner. The aim of this review of literature is to provide a synoptic view of the HIV/AIDS problem in India, focusing on the knowledge, perceptions and attitudes of the country's youth.*

***Spanish:***

*El HIV/AIDS pandemic es constantemente aumentando de severidad a través del mundo que se convierte.Recientemente, Asia suroriental se ha convertido en una preocupación de levantamiento por profesionales del cuidado médico en el campo de enfermedad infecciosa (UNAIDS, 2004). La mayoría de Asia suroriental está experimentando índices del predominio que se aflojan y de la incidencia de la infección del VIH.Un detalle el país del interés es la India.La población de la India ha sobrepasado un mil millones, haciéndole el país poblado del mundo segundo.La población grande de la India exacerba el panorama problemático de las tarifas del sero-predominio del VIH que son aumentando a través del país y de la región (De Cock y Weiss, 2000; Rao, et al, 2004; UNAIDS, 2004). Las juventudes en la India carecen conocimiento sobre el VIH y también tenga ideas falsas sobre modalidades de la transmisión, y muchas negativa del puerto actitudes hacia los que prueban el positivo para el VIH.Para disminuir la transmisión clasifica entre la juventud, educación de la calidad HIV/AIDS debe ser puesta en ejecucio'n de una manera cultural relevante.La puntería de esta revisión de la literatura está a proporcione una vista sinóptica del problema de HIV/AIDS en la India, centrándose en el conocimiento, opiniones y actitudes de la juventud del país.*

***Keywords: Knowledge, attitudes and perceptions of HIV/AIDS in India, youth.***

## Introduction

The Joint United Nations Program on HIV/AIDS (UNAIDS) estimates that currently, there are 39.4 million people living with HIV worldwide, with 4.9 million new cases of HIV infection in the year and 3.1 million deaths due to AIDS. Of the approximately 40 million people afflicted with HIV/AIDS worldwide, the top three locations are in nations of sub-Saharan Africa, with 25.4 million cases, followed by 9.6 million combined cases in nations of Asia and Eastern Europe, and 1 million cases in North America (UNAIDS, 2004). A joint report on the AIDS pandemic by UNAIDS and the WHO stated that AIDS is affecting women and girls in increasing numbers such that globally, almost 50% of all people living with HIV are female and 76% of young people (aged 15–24 years) living with HIV in sub-Saharan Africa are female. The report also pointed to steep increases in HIV infections in East Asia, Eastern Europe and Central Asia between 2002 –2004 (UNAIDS/WHO, 2004). In India, women account for 21.3% of all AIDS cases (Sharma, Gupta & Aggarwal, 2001).

Although the most heavily affected countries in Asia are Cambodia, Thailand and Myanmar, and

increasingly Indonesia, Vietnam and China, the spread of HIV in countries like India and China whose combined populations make up for more than a third of the all the world's citizens, will determine the future of the pandemic (UNAIDS, 2004; De Cock & Weiss, 2000).

## HIV trends in India

***Classifications of HIV epidemic in India by location***

There are many classifications of the HIV/AIDS epidemic in India. Typically, these classifications are determined by location or modality of transmission. Location is one way that the AIDS epidemic is classified in India, due to the fact that various regions harbor large differences in sero-positive status. India is known for being a very diverse country and the nature of HIV prevalence is no exception. The nation is clearly divided into low risk states in the north, and high risk states in the south (NACO, 2004). High risk states are those states where the sero-prevalence rate is above 1%. Low risk states are states in which the sero-prevalence rate is below 1%. The National AIDS Control Organization (NACO) recognizes that the southern states of India are considered to be of highest risk and areas of lowest risk are states in the northern half of the country.

In 2003, there were 5.1 million people in India living with HIV, thereby making the adult prevalence rate 0.9%, according to UNAIDS (2003). Since 1986, when the first case of HIV in India was detected, there have been 68,809 AIDS cases reported to India's National AIDS Control Organization (NACO) (UNAIDS, 2004). Two primary modes of transmission in India have been identified as being through paid sex, with both female and male/transgender commercial sex workers (CSWs), and intravenous drug use. In the city of Mumbai, it is estimated that approximately 70% of all CSWs are HIV positive. Historically, transmission of HIV from CSWs to male truck drivers played a major role in the spread of the disease in India. In 1996 studies reported that 14% of truck drivers surveyed participated in recent unprotected sex with CSWs, but by the year 2002, after prevention programs were introduced, the percentage of truck drivers reporting unprotected sex with CSW had fallen to 2% (AIDS Prevention and Control Project, 2003). The National AIDS Control Organization (NACO) estimates that the 73.5% of the AIDS cases in India are males and females are 26.5%, the ratio being 3::1. Overall, it is estimated that 85.7% of all HIV infections in India are through heterosexual contact, 2.2% are attributed to injection drug use, 2.6% of all cases occur through to blood transfusions, perinatal transmission accounts for 2.7% of the cases and the remaining 6.8% are classified as "other" routes (NACO, 2004; Ananth & Koopman, 2003). In the southern state of Tamil Nadu, HIV prevalence was 50% among CSWs, while in the states of Andhra Pradesh, Karnataka, Maharashtra and Nagaland, HIV prevalence among pregnant women has crossed the 1% mark per state. In Manipur, transmission through injecting drug is more prevalent than paid sex and accounts for most of the HIV infections of the region (UNAIDS/WHO, 2004). New studies and surveillance reveal that a high proportion of men in India who reported having sex with men, also report having sex with women and 57% of such men were married. There is also an indication that injecting drug use is playing a bigger role in India's AIDS epidemic than previously estimated. In the southern city of Chennai by 2003, 64% of injecting drug users were infected with the HIV at the sentinel site. In most cities where injecting drug users have been surveyed, at least 25%, in Chennai, 46% reported living with a wife or a regular sex partner, contributing to a growing trend in HIV-prevalence rates among pregnant women in the country (Go, 2004; NACO, 2002, 2003, 2004; UNAIDS/WHO, 2004). According to Newmann, et al. (2000), this is a cause for concern because the rate of vertical transmission of HIV in developing nations is 50%, compared to 25% in industrial nations due to limited access to health care, higher rates of breast-feeding and weak maternal health indicators in the poorer nations. NACO (2004) estimates that 87.7% of HIV infections are among youth, in 15-44 year age group. This also reflects a global trend of increasing infections among younger people (Morris, 2003). Further, the Human Rights Watch (2004) estimates that in the year 2002 alone, of the total number of people living with HIV/AIDS in India, 200,000 were children under the age of fifteen. Among young children, HIV transmission is primarily perinatal, however, young teenage children are acquiring the disease through "sexual contact, sexual abuse, blood transfusions; and unsterilized syringes, including injection drug use. Girls, when subjected to sexual abuse, or early marriage or when denied an education, are especially vulnerable" (Human Rights Watch, 2004, para. 3).

Information regarding the incidence and prevalence of HIV/AIDS among young people ages 15 – 25 and children in India is, at best, sketchy due to various reasons such as the fact that resources for testing are scarce and concentrated in urban areas, resulting in incomplete surveillance. Diagnosing HIV in newborns infected perinatally is further difficult due to the increasing costs of diagnostic tests, errors and delays in diagnosis because of the reliance on serum samples that have to be shipped long distances to laboratories for analysis and in general, difficulty

in accessibility of testing services (Hilman & Mascolini, 2004; Ananth & Koopman, 2003; Kaul & Patel, 2001; Balk & Lahiri, 1997; Lalvani & Shashtri, 1996). Dr. N. Matthew Samuel, president of the AIDS Society of India suggests that the methods used to identify HIV prevalence in India have tended to underestimate the true numbers, but other experts argue that overestimations of numbers may lead to misappropriation of funds that are scarce to begin with (as cited in Hilman & Mascolini, 2004). Needless to say, inadequate surveillance and incomplete epidemiologic data has implications on all aspects of disease curtailment, including education efforts.

In addition to the problems created by inadequate surveillance, barriers to the containment of the spread of HIV in India are plentiful, ranging from the obvious financial/economic to deeply rooted socio-cultural factors. Chronic poverty, drug abuse, gender inequality and low levels of literacy have been cited as key factors to rising levels of HIV in India. Sex is considered taboo and a high value is placed on monogamous marital sex, premarital chastity, and marital fidelity, especially for women. Male to male sexual (MSM) activity, though present through ancient India is not openly discussed or well tolerated. According to NACO (1996), in India, STDs such as gonorrhea and herpes are often endemic in certain groups and due to the taboo associated with STDs, go untreated, creating an environment further conducive to the spread of diseases such as HIV (Hilman & Mascolini, 2004; Chatterjee, 2003; Ghosh, 2002; Hawkes & Santhya, 2002 ).

***HIV knowledge among youth on a global level***

Globally, it is known that there is a lack of HIV knowledge among youth between the ages of 15-24. The World Health Organization (WHO) states that youths are at the epicenter of preventing the progression of the HIV/AIDS pandemic. The WHO estimates that youths ages 15 to 24 comprise 50% of all new HIV infections and consequently must be targeted for education in decreasing transmission and reducing the stigmatization of an HIV diagnosis (WHO, 2004). In order for youths to help slow this pandemic, they need to first be educated and have knowledge about HIV/AIDS. The research literature on the subject points to a situation where most youth in the world are uninformed or have serious misconceptions regarding pathways of HIV transmission, and also harbor negative attitudes towards the sero-positive population. A United Nations report (2002) stated that most youth do not know the modes of HIV transmission and they also do not know any methods in which they can protect themselves from contracting the virus (Joint Press Release WHO, UNICEF, UNAIDS, 2002). The same study revealed that half of all youth in the countries surveyed, had mistaken beliefs about the transmission of the virus. The same report concluded by revealing two major goals: 1) reduce the number of youth infected with HIV and 2) provide information, education and services to youths across the globe. It is evident that in order to reduce the number of youth who are infected with HIV, misconceptions first need to be evaluated and the proper information taught to this high risk population.

***HIV awareness in India- an overview***

India's National Youth Policy, Draft II, defines "youth" to include those in the 13-30 year age group (Drynan, 2001). Most of India's youth harbor misconceptions about HIV and lack education regarding various aspects of the disease. The Joint United Nations Program on HIV/AIDS (2004) states that the only 17% of Indian males, and only 21% of Indian females could correctly identify two ways one could prevent the transmission of HIV sexually, and were also able to reject three misconceptions about the transmission of HIV. The same report states that only 59% of young Indian males used a condom during their last occurrence of sexual intercourse with a non-regular partner.

Study after study reveals that Indian youth are significantly less educated regarding HIV when compared to the youth of other nations. A study by Peltzer, Nzewi, and Mohan (2004) compared HIV knowledge and attitudes of university students across three countries, namely the United States, South Africa and India. Participants in the study from the three countries were given a questionnaire that explored current HIV knowledge, attitudes towards HIV antibody testing, and attitudes towards people with AIDS (PWA). The results of the study indicated that compared to South African or American youths, Indian youths were less likely to engage in pre-marital sexual intercourse, and were least aware of the HIV modes of transmission. The study found that only 10% of Indian youths reported being sexually active with an average of 2.6 sexual partners. Similar results were found across all three cultures regarding condom usage at last sexual intercourse. Approximately half of all the students reported using a condom during their last sexual encounter across the three cultures surveyed. The study also found that Indian youths were found to less sensitive towards people with AIDS (PWA) compared to youths in the other two cultures. A study of the level of knowledge and attitudes towards HIV/AIDS among 82 people with AIDS (PWA), revealed a general lack of knowledge of HIV/AIDS and a correlation between illiteracy and the level of

knowledge (Sangole, Tandale, Badge & Thorat, 2003)

Another study completed by Agrawal, Rao, Chandrashekar, and Coulter (1999) examined the knowledge and attitudes of secondary school pupils in India. A survey was used to first identify attitudes and knowledge of the participants at the beginning of the study. The pupils were then given an educational handout about HIV and their knowledge and attitudes were then reassessed and analyzed. The results of this study identified many misconceptions about HIV transmission. For example, 10.9 % of participants thought that HIV was airborne, and 33% thought that HIV could be transmitted via mosquitoes. The study also revealed that 94.6% of pupils knew that HIV could be transmitted through infected syringes, and 90.9% knew that it could be passed vertically from mother to child. The results of study indicated that 84% of pupils were aware that a virus (HIV) causes AIDS. The study found that 27% of pupils thought that there was a vaccine available for HIV, this percentage dropped after the educational unit and reassessment. In one particular school studied, 47% of students thought that there was a cure for the disease; however, after the educational unit this number dramatically dropped to only 6.5%. Puri, Gulati, Pall and Madan (2003) studied the AIDS specific attitudes, beliefs, sexual relationship patterns and preferences of 200 medical students ages 18-23 years to discover that only 10% of those sexually active reported to consistently using condoms, and only 17% believed that they were vulnerable to contracting the disease in spite of practicing unsafe sex because in general, AIDS was a threat to what they considered "risk groups" (undefined), other than them. In other words, HIV/AIDS is viewed as an affliction of those who are marginalized. Such a low level of perceived susceptibility is common among upper to middle class youth [ National Institute of Health and Family Welfare (NIHFW), (2001); Drynan, 2001]

Bhatia, Swami, and Kaur (2003) examined the efficacy of educational intervention programs in India. The study attempted to find a link between the establishment of National Family Health Awareness Campaigns (FHAC) and increased HIV/AIDS awareness among underprivileged youth in India. Overall, HIV/AIDS awareness was increased from 58.2% to 70% after the implementation of the FHAC. Among young males studied, awareness regarding using condoms for prevention increased from 47.7% at pre-intervention to 79.8% at post-intervention. Similarly, among females studied, awareness regarding having one sexual partner as a means of reducing risk increased from 51.8% at pre-intervention to 79.2% at post-intervention.

## Stigma and Discrimination Associated With HIV/AIDS

Stigma has been defined as a 'significantly discrediting attribute' and is a common human reaction to disease (Goffman, 1963). Historically, people with diseases like leprosy, tuberculosis, cancer, mental illness and sexually transmitted diseases have been discriminated against and stigmatized but in the latter part of the 20th century, people living with HIV/AIDS have been subjected to the cruelest of discrimination and stigma. The nature of discrimination associated with HIV/AIDS is closely related to sexual stigma, particularly homosexuality, promiscuity and culturally defined sexual "deviance" (Raizada, Somasundaram, & Mehta, 2004; Parker, et al, 2003). This stigma tends to be more immediate in developing nations such as India. People who are sero-positive in India experience a great deal of discrimination. Experts also agree that AIDS stigma prevents many people in India from seeking testing and health care. Further, sexually active Indian youth ages 15-24 report to engaging in unprotected sex because they lack the skills and/or knowledge to obtain condoms and fear recrimination from parents who disapprove of premarital sex. Others cite the lack of privacy in stores that sell condoms, stigma associated with condom purchase as significant "social costs" and barriers to safe sex (Biswas, 2004; Parker, et al, 2003; Roth, Krishnan & Bunch, 2001). In India, many HIV positive people are evicted from their homes, fired from their jobs, denied health care, and some may be disowned by their families. The problem is perpetuated by the fact that sex is a forbidden subject in India and those who are associated with HIV are also seen are "dirty" or "immoral." People living with HIV/AIDS are uniquely targeted in health care settings such that they are often treated as criminals, denied treatment and care, subjected to breaches in confidentiality, etc. Fifty percent of 153 English-speaking (high level of literacy) adults surveyed in Calcutta believed that all AIDS patients should be quarantined (Parker, et al, 2003, " AIDS stigma," 2002, AIDS Bhedbhav Virodhi Andolan, 1993; Porter, 1993). Chandra, Deepthivarma and Manjula (2003) reported that many of the sero-positive individuals in India do not even disclose their diagnosis for fear of what may happen to themselves or their families. In the study, only 65% of the participants voluntarily disclosed their HIV positive status. The stigma associated with HIV/AIDS is a formidable barrier to education efforts and promotes a culture of ignorance regarding HIV among Indian youth.

## HIV/AIDS Knowledge Among Young Women In India

The Human Rights Watch (HRW) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) estimate that in India, only 47-59% of students enrolled in state-run primary (grades 1-7) schools make it to grade 5, in addition, fewer girls attend school than boys, and those that do, drop out at significantly higher rates than boys. It is estimated that in 1999, almost 40% of girls had little or no education, compared to <17% of all boys, and only 38.6% of girls achieved secondary or higher education, compared to 57.1% of boys, resulting in a disproportionately large group of illiterate women. A 2001 census report indicated that illiteracy is declining among both males and females in most Indian states, but remains a critical issue in economically "backward" states such as Bihar, Rajasthan, Jammu and Kashmir (Human Rights Watch, 2004; UNESCO, 2004, Gupta, 2003). India is a land of extremes and culturally insurmountable dichotomies – boasting of the very best in education at all levels, as well as the very worst at the other end of the continuum. As is the case anywhere in the world, very few (20%) have access to the very best of resources and services including education in India (Hawkes & Santhya, 2002). The research supports the hypothesis that there is a positive correlation between levels of education and HIV/AIDS knowledge and awareness. Such trends are particularly evident among women in India.

Age-specific fertility rate in India is high (.107) due to the cultural practice of early marriage or child marriage (10-19 years for females), and is higher among rural women (.12) than urban women. In other words, Indian girls are sexually active at younger ages than their male counterparts and consequently are exposed to a wide range of reproductive health problems such as pregnancy related complications, menstrual irregularities and reproductive tract infections. Sexually transmitted infections in India rank third among communicable diseases, but often go undetected among young women (15-19) who either deny the problem or are embarrassed by the stigma associated with their disease and do not seek medical attention (Gupta, 2003). In India alone, up to 25% of all HIV infections occur in women, particularly young women (15-25 years), such that the potential for pediatric HIV is increased, opening the door to a host of new problems (Chatterjee, 2004).

In 2003, a study conducted by Ananth and Koopman demonstrated a lack of knowledge of HIV among women of child-bearing age (15-45) in India. Various topics were explored including knowledge, health beliefs, HIV/AIDS and pregnancy, and sexual behavior. The results of the study indicated that 72% of the respondents reported that their partners never or rarely ever used condoms during sexual intercourse. The study also found 11% of those women, did not use condoms during intercourse because their partner did not like to use them. The majority (76%) of participants knew that HIV could be passed vertically from mother to child during delivery, and 54% were aware that breastfeeding was a viable mode of transmission of HIV. The study found an overwhelming consensus (84%) among the women surveyed that women should be tested for HIV prior to becoming pregnant. In 1996, a study of 8453 school going adolescents ages 10-19 years, of which 43.2% were girls revealed that only 35% of the girls were aware of the existence of AIDS, only 17.1% were aware of at least one method of contraception and 21.5% of girls in their later teens (15-19 years) were aware of any sexually transmitted infections (Gupta, Mathur, Singh & Saxena, 2004). Another study assessing the knowledge of HIV/AIDS among 400 college going students ages 17-19 revealed that 62% of the female students knew the correct etiology of AIDS and only 13% of them believed HIV was a bacterial infection. Fifty five percent of the female students surveyed were aware that HIV could be transmitted through heterosexual contact, when compared to 4.89% of the males, 6.48% of the females believed that HIV could be transmitted through casual contact such as a handshake. Only 32.25% of the respondents had any prior exposure to sex education in their high schools and even fewer had any exposure to HIV awareness programs. However, the study also concluded that even though the awareness of HIV/AIDS is low even in urban areas, there is an increase in the levels of awareness regarding HIV etiology from 1992 where studies revealed only 55% of those surveyed accurately reported knowledge of the causative agent of AIDS, as many as 20.4% believed that casual contact could lead to the spread of the disease and 93% had no knowledge about safe sex practices such as the use of a condom, practicing monogamous sex, etc. (Kore, et al, 2004). Yet another study conducted in 2001, in the metropolis of New Delhi, surveyed 89 women, ages 20- 42 years, who were residents of hostels. Approximately twenty five percent of the participants were professionals, 28% held post-graduate degrees and 5.6 % were undergraduate students – this was unique study in that the respondents could be considered highly educated and economically independent. Ninety two percent of the respondents were aware of AIDS, and 72% were aware of sexual modes of transmission, but only 21.3% believed they could be at risk for getting the

disease and 49% were confident that they would never get HIV. Again, the researchers pointed to the vast lacunae in the knowledge regarding HIV/AIDS among women in India, and compared their study to others and concluded that though their group was unique in terms of education levels, the risk perception of their group was below satisfactory levels and needed improvement (Sharma, Gupta & Aggarwal, 2001).

Women in India are subjected to a lower status in society, this attitude manifests into low levels of educational attainment, socio-economic dependence and in general, limited access to resources. Chatterjee (2004) states that cumulatively, such factors hamper an Indian woman's ability to protect herself from diseases such as HIV. As stated earlier in this paper, women are particularly vulnerable to HIV infections due to a variety of reasons, not only in India, but in the world, and data reflecting abysmally low levels of HIV/AIDS awareness among women are disturbing and call for greater educational programs targeted towards women.

## HIV/AIDS Health Education in India

Chatterjee (2004) cites poverty, varied socio-economic norms, extremely low levels of literacy, untreated sexually transmitted infections, and vulnerability of women to HIV due to gender inequality as the top five problems associated with the HIV/AIDS problem in India. The top three priorities of India's current government as outlined in its Tenth Five-Year Plan, for the curtailing the spread of HIV/AIDS in the country are 1)"targeted or focused interventions" directed towards high risk groups, 2) extensive education programs in 90% of schools and colleges and 3) awareness programs conveyed through the media (TV, radio, newspapers, magazines) (Chatterjee, 2004). India's response to its HIV/AIDS crisis is led by the National AIDS Control Organization (NACO) a subsidiary of the Indian Ministry of Health and Family Welfare, and is responsible for carrying out the Indian government's National AIDS Control Program which was established in 1987. However, most of India's HIV/AIDS awareness/education efforts are carried out through non-government or voluntary organizations (NGOs), working in tandem with NACO and the Indian Ministry of Family Health and Welfare (Drynan, 2001). NACO (2003) reported that 35,000 schools were involved in HIV/AIDS education of some sort, and in 2002-2003, identified 11 "centers of excellence" where mother to child HIV transmission (breast-feeding) rates were reduced from 30% to 10% and 220 such centers were providing counseling and testing services. Although there have been studies that report the success of education efforts, clearly, more needs to be done to arrest the spread of HIV in India (Bhatia, Swami & Kaur, 2004; Farooq, et al, 2004; Kore, et al, 2004; Raizada, et al, 2004; Paul & Gopalakrishnan, 2003; Agrawal, et al, 1999). Chatterjee (2004) states that the challenge of HIV in India calls for a multi-pronged approach, involving not only sound strategic planning, but adequate resources to implement the strategies. Currently, NACO is working with a $100 million grant from the Global Fund for AIDS, TB and Malaria (GFATM) and the Bill and Melinda Gates Foundation has made a contribution of $ 200 million to the pool of Government allocations in the prevention efforts of HIV/AIDS in India. However, Dryden (2001) states that India received only 1% of the global funds, even though more than 10% of the world's HIV infected people live in India, as do 17% of the world's youth . A joint report by NACO and UNAIDS estimated that targeted interventions for sex workers, intravenous drug users and MSMs would cost as little as $ 26.6 per person, $2.2 per transport worker, $ 5.7 per migrant worker and $ 15.9 per street child (NACO & UNAIDS India Country Programme, 2004).

The state-of-the-art in HIV prevention in India is focused or targeted intervention. Drynan (2001) suggests that the "focus" or "target" of such interventions should be youth with special needs such as young women, commercial sex workers (CSWs) and street youth/children who are extremely vulnerable to sexual exploitation. The essential elements of focused interventions are: creating an enabling environment supporting those who live on the fringes of society such as sex workers, street children and intravenous drug users, increasing the availability of condoms, skill training in the use of condoms and negotiation, improving accessibility and quality of STD diagnosis and treatment, and finally Behavior Change Communication (BCC). The BCC component of focused interventions comprises culturally sensitive and appropriate peer-education programs, and aims to alter knowledge and attitudes towards HIV/AIDS (NACO & UNAIDS India Country Programme, 2004). Needless to say, this aspect of focused interventions is the most difficult to deliver and assess. Drynan (2001) and Keller and Brown (2002), also suggest that the media could be used as a powerful vehicle to promote awareness and a change in attitude towards HIV among youth from the upper to upper-middle classes. Access of upper to upper-middle class youth in India to the Internet, movies, literature etc., can be comparable to the access of any young person in a developed nation. In general, multi-media campaigns targeted towards young people in countries of Africa have shown high

levels of success in promoting HIV/AIDS awareness (The Population Information Program, 2001).

## Conclusion

HIV/AIDS anywhere in the world is everyone's problem. Global surveillance and research has identified emerging high-risk or vulnerable groups as the youth of the world, particularly women. The HIV/AIDS problem is more alarming in developing nations such as India where although prevention efforts abound and are often innovative, they are simply not enough. Currently, India's public health programs have achieved high levels of success, particularly in the eradication of poliomyelitis and its HIV prevention programs have become highly visible. Although India has not remained complacent in tackling its HIV problem, much work need to be done, at an accelerated pace (Rao, et al, 2004).

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