

The Success Story of India's HIV/AIDS Policy: Efforts for HIV Prevention and Control

Prof. Beena Antony Reji¹ | Dr. Kumud Teresa Sawansi² | Prof. Pooja Khanna^{3*} | Prof. Rajeev Kaur⁴

^{1,3,4}Aditi Mahavidyalaya, University of Delhi, Delhi, India.

²Independent Researcher.

*Corresponding Author: poojak@aditi.du.ac.in

Citation: Reji, B., Sawansi, K., Khanna, P. & Kaur, R. (2026). *The Success Story of India's HIV/AIDS Policy: Efforts for HIV Prevention and Control*. *International Journal of Advanced Research in Commerce, Management & Social Science*, 09(04(I)), 39–46.

Abstract

India has one of the largest populations of people living with HIV (PLHIV) in the world, though prevalence is relatively low. The HIV/AIDS response began in the late 1980s and evolved into a structured national program. This article is an attempt to analyse the HIV/AIDS journey in India since its first emergences 50 years ago. The description here is also an effort to trace the Government of India's response to prevent and control the spread of HIV/AIDS over the last five decades in a country with diverse, vast population spread over the large expanse of our country. The HIV/AIDS policy in India has played a crucial role in fighting to prevent and control this epidemic by creating awareness, preventing its spread, providing access to its testing & treatment, across the lengths and breaths of our extensive country.

Keywords: HIV/AIDS, Health, Policy, Prevention, Control, High-Risk Population.

Introduction

A good policy is the corner stone to effective governance in any country; it composites the effective functioning of the elected government. Indian constitution provides the domain and structure of policy making in governance. Governments make and execute policies for public good, be it industrial policy to boost economic empowerment, labour policies for safeguarding labour rights and better wages, and health policies for promoting the well-being of the citizens. A health policy's core objective is to improve the health status of the population residing in a sovereign nation. Since the inception of India's constitution-making, the health subject has received focused attention from policymakers. In 1946, Sir John Bore led "The Health Survey and Development Committee" and was given the blueprint of health service system in independent India (Duggal, 1991). The disease control policy in India has a remarkable history dating back to the mid-1960s, when malaria elimination and tuberculosis elimination programs were already established in the mid-1960s (Amrith, 2007). The government had prudently worked on implementing tuberculosis and malaria control programs with exhaustive studies and recommendations by the experts. The same gesture was followed in the 1980s, when HIV control and preventive policies were made.

Health policy analysis has been gaining popularity these days. Many countries emphasise policy evaluations and analysis to improve the effectiveness of policies for the masses. However, the nature of the processes (how policies are made, and by whom) leading to these policies affects their appropriateness and often their implementation (Schiffman & Smith, 2007). It is required for the continuous improvement of the policies and so that the objectives of the policies reach to the target population in most cost-effective time. Health policy requires continuous monitoring, assessment and

* Copyright © 2026 by Author's and Licensed by Inspira. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work properly cited.

improvement from time to time. In the context of HIV policy and programs, one must understand the definition of policy and programs. In terms of design, efficiency, and effectiveness, the definitions of “public policy” and “government program” have always been practically correlated.

An institutionalised proposal, an HIV policy, is needed to set the law, guidelines, and regulations in the process of preventing and control of HIV infection. The increased number of HIV cases among the masses was and is a threat to most developing countries, mainly in Asia and Africa. It affects mainly the working class. Approaches are taken and many infections become difficult for the government to control. Thus, a constructive policy and strict guidelines are the preventive approaches taken by governments. In the current context, the AIDS epidemic in India has been controlled and we are moving toward stabilizing the rate of new infection in the current phase.

The latest National AIDS Control Program, Phase V has been launched in India in 2022 (NACO, 2023). It is important to look at the development in the policy of HIV control in India. From the first detection of HIV infection in a commercial sex worker in Chennai 1986, to the present times, the gradual progression of policy development has been noticed. India has 2.1 million people living with HIV, the third highest population of HIV-positive people after South Africa and Nigeria (NACO, 2021). The HIV epidemic in India is highly heterogeneous, the concentration of HIV positive population is in specific regions and among the High-Risk Groups. These high-risk group people are the adults who are prone to receive infection from activity which involves the risk of HIV infection: unprotected sex with multiple partners and IDUs using the same syringe and needles for injecting drugs.

In 1984 HIV infection arrived in India and it was hardly noticed. It was already detected in America in 1980 and in other countries, and the public health system of the Western world was tracking and tackling the epidemic. A weak public health infrastructure was visible in India in the early 80s due to overburdened social welfare policies (Anand et al., 1999). In 1985, the Vellore Christian Medical College's (CMC) Centre of Excellence in Virology, funded by the Indian Council of Medical Research (ICMR), established a cell to investigate the epidemic. HIV infections were thus detected in Vellore, Chennai, and Madurai in early 1986 (Kumar et al., 2011; Kunhi et al., 2021). Immediately, the ICMR established a task force to design a national strategy to control the spread of HIV/AIDS and mitigate the incoming epidemic in India. The public health experts at CMC Vellore guided the design of interventions and “sentinel surveillance” in order to monitor progress. Thus, two successive programs, National Program for Sero-surveillance 1987 and 1988 were formulated. These program guidelines were introduced to track sentinel sites where pockets of HIV-positive infections were found (Tripathi et al, 2002).

The task force for HIV Prevention and Control was later absorbed into the Directorate General of Health Services of India in 1992. Immediately after the finding few more HIV-positive cases, the World Bank came forward and supported National AIDS Control Organisation. With the assistance of WHO, the early interventions of HIV control and prevention policy became a success in limiting the epidemic in India. India's HIV control success story is a globally acclaimed one, thanks to an early start, proactive task force leadership, the right interventions, and reliable data.

The government has formulated a more robust policy to combat HIV/AIDS in India. Most developing nations are witnessing the resurgence of malaria and the rise of tuberculosis cases due to inevitable economic development activities such as rising construction and larger-medium small-scale industries. The emergence of drug-resistant bacteria has demonstrated that poorly ventilated hospitals can be a source of severe infections too (Bloom, 2001; WHO, 2024). The COVID 19 has exposed India's dilapidated public health system, which affected the population on a large scale.

Policy making is the process in which the government fixes an agenda and goes through several stages from its inception to the conclusion. The world order had experienced a modern-day pandemic of COVID five years back. Therefore, it is right to assess the previous policies of disease control programs such as HIV/AIDS. India has witnessed several policies related to HIV prevention and control since the 1990s. The critical analysis of HIV policy and programs of its progression could contribute to a new awareness for the readers/scholars to understand the benefits of universal access to preventive programs for HIV/AIDS.

The conceptual framework for this article draws on the theoretical literature in policy studies and sociology while studying various health policies related to HIV/AIDS prevention, control, and services. This paper has used secondary literature review as a methodology for analysing policy and programs. The article intended to provide the framework for the HIV/AIDS policy that had been adopted since the onset of the HIV epidemic in India in the mid-1980s.

Health System Response to HIV in India

First, there is a need to understand the state response when the first cases of HIV were reported in the year of 1986. The positive cases were detected from the sample of 102 female sex workers from Chennai. After that, several surveys were conducted to know the geographic extent of HIV infection in India. These surveys found more HIV-positive cases in many urban centres among various groups such as female sex workers, commercial blood donors, and injecting drug users. Then, 62 AIDS surveillance centres were established in pan India to know the confirmed number of infections and mode of infections (Ramachandran, 2012).

That same year, 1986, the government set up an AIDS Task Force under the Indian Council of Medical Research (ICMR) and established a National AIDS Committee (NAC) under the Department of Health and Family Welfare. In 1987, the National AIDS Control Programme (NACP) the national public health programme for HIV/AIDS was initiated with help from the World Bank. The National AIDS Control Organisation (NACO), a central agency was constituted to implement HIV/AIDS prevention programs all over the country. Since then, four phases of the NACP programs have been successfully implemented in the country.

Surveilling the Epidemic

The yearly HIV surveillance system under NACP gradually evolved into biennial HIV sentinel surveillance (HSS) plus. The 17th round, implemented in 2021, was implemented among eight population groups; pregnant women, single male migrants (SMM), long-distance truck drivers (LDT), prison inmates at central prison sites, female sex workers (FSW), men who have sex with men (MSM), hijra/transgender (H/TG) people and injecting drug users (IDU)] targeting bio-behavioural data collection from almost 5.06 lakh samples. The blood specimen was used to detect four biomarkers, i.e., HIV, Syphilis, HBV, and HCV. This round had also collected relevant data on the background characteristics, related knowledge, services uptake, and risk behaviours through a focused tool. A substantial dataset was compiled during this surveillance process, which facilitated the effective planning of epidemic control and prevention of HIV/AIDS in India. Through strategic and phased planning, India has successfully implemented a strategy to prevent and control HIV infection among the general population, as evidenced by the current situation. However, HIV remains highly infectious among high-risk group (HRG) populations.

There are some core areas in which India's HIV policy and programs have been formulated and targeted to force maximum benefits to the affected populations. The major portion of guidelines and directives were given in the "prevention" of HIV infection among high-risk groups (HRGs) and bridge populations. The bridge population are the people who are intermediaries of receiving infection from HRGs like the migrant populations and the truckers.

HIV/AIDS Control and Prevention Efforts in India

India, the second most populated country in the world, is home to an estimated 2.1 million people living with HIV (PLHIV) (NACO, 2015)

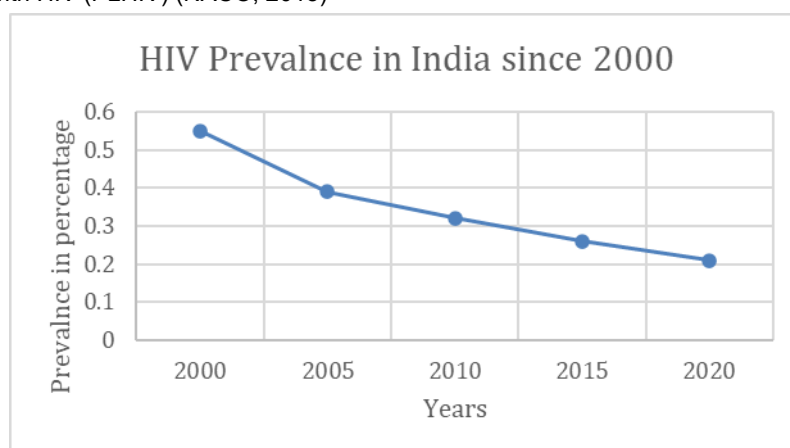


Figure 1: HIV prevalence in India since 2000

As per figure 1, it is evident that the HIV prevalence in India has been in declining situation since it peak in the year 2000. Though it was observed the cases and HIV prevalence were relatively low in India. However, the government of India strategically planned the roadmap to control the epidemic with the vision of NACO (Kumar et al., 2011; Tanwar et al., 2016).

There were 64000 new HIV cases detected (UNAIDS, 2024). HIV prevalence in India on current date is 0.24 %. Northeast states such as Mizoram (2.70%), Nagaland (1.36%) and Manipur (1.05%) have much higher number of HIV positive cases (NACO, 2022).

An extensive disease control program was needed to prevent and treat HIV cases, especially when the medicine or the treatment mechanism was absent in the early phase of the 21st century. Knowledge, prevention and behaviour change were the important tools that National AIDS Control Program implemented in the population. Incorporating these important concepts, the government has implemented five National AIDS Control programs to date.

National AIDS Control Program-Phase I

In India, HIV surveillance was one of the first interventions under the national AIDS response. Recognizing the HIV epidemic threat, the Indian Council of Medical Research (ICMR) initiated sero-surveillance in search of the virus in 1985, detecting the first case of HIV in India in April 1986. This sero-surveillance evolved into HIV sentinel surveillance (HSS), which was first piloted in 1994 and then formalized into the annual surveillance system in 1998 under the National AIDS Control Programme (NACP).

India's AIDS Control Programme is globally acclaimed as a success story. The National AIDS Control Programme (NACP) was being implemented as a comprehensive programme for preventing and controlling HIV/AIDS in India over the five-year program period.

In 1992, the Government launched the first National AIDS Control Programme (NACP) with an International Development Association (IDA) Credit of US Dollar 84 million and demonstrated its commitment to combat the disease. NACP I was implemented to slow down the spread of HIV infections to reduce morbidity, mortality and the impact of AIDS in India. National AIDS Control Board (NACB) was constituted, and an autonomous National AIDS Control Organization (NACO) was set up to implement the project under the Ministry of Health and Family Welfare, Government of India (Anand et al., 1999). The first phase focused on awareness generation, setting up a surveillance system for monitoring of the HIV epidemic, measures to ensure access to safe blood and preventive services for high-risk group (HRGs) population.

The primary objective of NACP I was to slow down the spread of HIV/AIDS infection by creating awareness. A robust strategy of mass awareness campaigns was launched across India. The World Bank had pushed technical and financial resource assistance through WHO in the form of US Dollars 84 million and later US dollar 1.5 million to India. The "component" was inserted in the program, which reflects the domain of the HIV program concerning prevention and control (NACO, 2022). The five focus area of the program planning were : programme management, surveillance, blood safety, STD control, and public awareness.

NACP I began as an urgent national response but later moved toward decentralization and greater involvement of NGOs and PLHIV networks.

National AIDS Control Program-Phase II

In November 1999, the second phase of the National AIDS Control Program (NACP II) was launched with World Bank credit support of USD 191 million. This time, the program became a 100 % Centrally Sponsored Scheme (CSS), funded by the central government, and the states were directed to provide human resources for the successful implementation of the program at the state level. Due to this adjustment between centre and state, the State AIDS Control Societies (SACS) were formed at the state level all across the country. The purpose of establishing grass root establishment is to implement the HIV program successfully (Tanwar et al., 2016)

The National Action Council witnessed a strategic shift in its objectives. The council aimed to reduce the spread of HIV infection and increase India's long-term capacity to respond to HIV/AIDS. Key policy initiatives taken during NACP II included adopting the National AIDS Prevention and Control Policy (2002) and the Scale-up of Targeted Interventions for High-risk groups in high-prevalence states. Additionally, the National Blood Policy was formulated to eliminate the risk of blood-to-blood HIV infection

through infective blood transfusions. This policy mandated the mandatory testing of blood components for HIV, Hepatitis B, and Hepatitis C before transfusion. The counselling component was also included in this program, leading to increased involvement of people with HIV/AIDS (GIPA) and the National Adolescent Education Programme (NAEP).

To reduce the chances of Parent-Child Transmission, the Prevention of Parent-to-Child Transmission program started. This guideline enforced mandatory testing for ANC mothers to test their HIV status. The National Antiretroviral Treatment (ART) programme was launched for the treatment of HIV-positive patients in government facilities. This initiative reflected the government's intentions to combat the HIV/AIDS epidemic which was in war mode during that phase.

The NACP II objectives were: behaviour change interventions, decentralised service delivery, voluntary counselling and testing, structured annual reviews, and management reforms were crucial for preventing high infection rate of HIV virus among high-risk population.

National AIDS Control Program-Phase III

In response to the evolving epidemic despite government interventions in NACP I and NACP II, the third phase of the national programme (NACP III) was launched in July 2007. The primary objective of this program is to "halt and reverse the epidemic" by the end of the project period. NACP III aimed at halting and reversing the HIV epidemic in India over its five-year period by scaling up prevention efforts among high-risk groups (HRG) and general populations and integrating them with care, support, & treatment services. Thus, prevention and Care, Support, & Treatment (CST) became the two key pillars of all the AIDS control efforts in India. Due to the rise of information technology, Strategic Information Management (SIM) and institutional strengthening activities at state and district levels (SACS and DAPCU) provided the required technical, managerial and administrative support for implementing the core activities under NACP-III at national, state and district levels.

During the period of NACP III (2007-2012), it was evidenced that the number of new infections was slowing down (NACO, 2022). Thus, the government of India made the target to halt the new infections and reverse the HIV/AIDS epidemic over the next five years through the integration of prevention, care support and treatment programs. The timeframe was targeted to be achieved in 2012.

The four objectives in this phase were:

- Prevention of new infections in high-risk populations through Targeted intervention projects for high-risk populations.
- Increase the proportion of PLHIV who receive care, support and treatment.
- Strengthening the infrastructure, system and human resources in prevention and treatment programs at district, state and national levels.
- Strengthening a nationwide strategic information management system.

The focus of the program in each phase has been improved in terms of nationwide coverage of comprehensive HIV Prevention, care, treatment, and counselling services (Tanwar et al., 2016, pp.15).

National AIDS Control Program- Phase IV

Consolidating the achievements of previous NACPs made till 2012, the National AIDS Control Programme Phase-IV aimed to accelerate the process of reversal and further strengthen the epidemic response in India. National AIDS Control Program IV was projected to continue the pace of progressing towards limiting new infection under the HIV/AIDS prevention program. The program was made through a cautious and well-defined integration process of all important components needed to strengthen the AIDS control and prevention program.

The objectives emphasised on:

- Reduce new infections by 50 % (2007 baseline of NACP III)
- Comprehensive care, support and treatment for all PLHIVs

Post- 2000, Millennium Development Goals (MDG) and later, Sustainable Development Goals (SDGs) were the focus of various government policies across the world. Health Equity is a distinguished part of the United Nation's Goals. Among all health goals, HIV prevention and control also became crucial goals, under Target No 3.3 of Sustainable Development Goal 2030 (SDG, 2020). The health

component of SDG 2030 became the predominant factor in determining the objectives of NACP IV (Extension 2017-20). The NACP IV extension period concluded in March 2021.

National AIDS Control Program-Phase V

The Government of India declared the NACP, in phase V, from April 2021 to March 2026 across India under the Central Government Scheme (ET Health World, 2022). The target of “Ending the HIV/AIDS epidemic as a public health threat by 2030” was fixed by the government through prevention, detection and treatment services. The objectives of NACP V phase are to make a comprehensive HIV prevention programme that will cover over 70 lakhs of the key population annually, with 15 crores of vulnerable people, including five crores pregnant women, testing for HIV within three years. Additionally, 2,32,00,000 units of blood will be collected at NACO-supported blood banks during the same period (NACO, 2023).

National AIDS Control Program was a scientifically well-evolved programme, grounded on a strong structure of policies, programmes, schemes, operational guidelines, rules and norms. Following the NACP V, several pioneering initiatives were undertaken. Notably, the HIV/AIDS Prevention and Control ACT (2017) was enacted, empowering the affected population to live healthy lives without discrimination or societal judgment regarding their dignity and personal choices.

HIV/AIDS Prevention and Control Policy (2017) in India

It is a central legislation which protects the rights of a person infected with HIV and affected by HIV/AIDS status on her/his health. This act was passed by the central government and became law on 10, September 2018. The main objective of this legislation is to support the human and legal rights of a person affected by HIV/AIDS and protect the rights of the healthcare workforce treating HIV infections.

Debates on the Program's Policy Framework

It is a well-established context discussed across literature that international pressure enforced government policymakers to act against HIV/AIDS control (Asthana, 1996). Despite India's quick response to global concern about the HIV epidemic, the HIV/AIDS prevention and control policy has been frequently debated among scholars. One of the first debates is the “structure” of the program of NACP. The “vertical program”, HIV/AIDS one-disease program shadowed the funding of other important disease; malaria, leprosy, and tuberculosis control program (Williams et al., 2005). The expansive plan with limited objectives also garnered criticism. A case study of a stringent Polio Elimination program was presented, highlighting the achievement of the swift target while simultaneously acknowledging the potential resurgence of wild poliovirus strains (Paul, 2008).

Initially, the denial of the severity of the disease was reported. Ramasubban writes that the traditional culture, not monogamy, societal prohibition of sex and sexuality in public social interactions provided shelter for accepting the existing STD among the communities. It was reported that STDs were the third most infectious disease after TB and malaria (Ramasubban, 1998).

Challenges on Rise: High Risk in IDUs

The most recent statistics demonstrate the efficacy of government policies in preventing and controlling HIV infection in India since the 1990s. Government of India now covering 94% of its financial needs, leaving only 6% to the Global Fund (Bhat et al, 2022). The prevalence of HIV infection among the population consistently remains below 1%. However, these efforts the challenges persist. By 2024-25, 84% of those with HIV were aware of their status, and 86% of these individuals were receiving antiretroviral therapy, which falls short of the 95-95-95 target (UNAIDS, 2025). Certain northeastern states, including Mizoram, Nagaland, and Manipur still exhibit prevalence rates exceeding 1% (NACO, *HIV Estimates*, 2021). As per current estimates (NACO, 2021), India has 24 lakhs of PLHIV in 2021 and around 62.97 thousand were new infections in the year 2021. Maharashtra leads the states with the highest number of PLHIV. Testing of HIV infections, awareness and IEC have been important components of the HIV control program. Among the high-risk groups, HIV prevalence is high in IDUs cases followed by transgender (HIV sentinel surveillance, 2021). Injected Drug Users still have lower awareness of HIV testing which is alarming as HIV prevalence among IDUs is high (Pachua et al., 2022).

States that were once deemed low priority are now facing a significant challenge with the rise of drug injection practices. Among those who inject drugs, the national HIV prevalence stands at approximately 8.8 percent, marking the highest rate among key populations (Jha et al, 2025). In Bihar, a public health expert recently reported that 60% of young people who inject drugs share needles, a major

driver of new infections among youth (Youth at High Risk, 2025). In Uttarakhand, a Haldwani hospital recorded 477 new HIV cases between January 2024 and March 2025 (Choubey, 2025). The ART nodal officer identified syringe sharing among drug-dependent men as the primary cause and noted that fear of ostracism discourages many from registering for care.

Recent patterns suggest that the intervention model designed for the Northeast and Punjab should now be extended. This involves introducing needle-syringe programmes, opioid substitution therapy, and efforts to reduce stigma in Bihar and Uttarakhand. Additionally, there should be a stronger integration between health services and drug-control efforts.

Conclusion

The success of HIV programs in India can be attributed to their effective planning and robust implementation. Notably, the National AIDS Control Program (NACP) implements phase-wise programs with well-defined objectives and decentralised mechanisms for policy implementation. While the current statistics do not indicate an alarming situation, continuous surveillance and effective disease control policies are necessary until the prevalence of new HIV cases becomes negative. The ongoing struggle requires sustained efforts, including the treatment management of people living with HIV (PLHIV) for an extended period to achieve the elimination of HIV from India.

References

1. Amrith, S. (2007). Political culture of health in India: A historical perspective. *Economic and Political Weekly*, 114-121.
2. Anand, K., Pandav, C. S., & Nath, L. M. (1999). Impact of HIV/AIDS on the national economy of India. In *Health Policy* (Vol. 47).
3. Asthana, S. (1996). AIDS-related policies, legislation and programme implementation in India. *Health Policy and Planning*, 11(2), 184-197.
4. Bhat, R., Sudhakar, K., Kurien, T., & Rao, A. S. R. S. (2022). Strengthening India's Response to HIV/AIDS Epidemic Through Strategic Planning, Innovative Financing, and Mathematical Modeling: Key Achievements over the Last 3 Decades. *Journal of the Indian Institute of Science*, 102(2), 791-809.
5. Bloom, G. (2001). Equity in health in unequal societies: Meeting health needs in contexts of social change. *Health Policy*, 57(3), 205-224.
6. Choubey, N. (2025, April 10). 477 HIV cases reported in Uttarakhand hospital in 15 months. *The CSR Journal*. <https://thecsrjournal.in/hiv-cases-reported-uttarakhand-hospital-months>
7. Duggal, R. (1991). Bhore Committee (1946) and its relevance today. *The Indian Journal of Pediatrics*, 58(4), 395-406.
8. ET Healthworld. (22 July, 2022). *Govt approves continuation of NACP, Phase-V till March 31, 2026*. ETHealthworld.Com. Accessed on 28 July 2022, from <https://health.economictimes.indiatimes.com/news/policy/govt-approves-continuation-of-nacp-phase-v-from-april-1-2021-to-march-31-2026/90357419>
9. Jha, S., Thakur, N., Slim, L., Rai, S., Kumar, P., Misra, P., Kumar, R., Halder, P., & Das, C. (2025). HIV prevalence and associated risk factors among people who inject drugs in four states of central India: Findings from the 17th round of HIV sentinel surveillance. *International Journal of STD & AIDS*, 36(13), 951-958.
10. Kumar, R., Mehendale, S. M., Panda, S., Venkatesh, S., Lakshmi, P., Kaur, M., Prinja, S., Singh, T., Viridi, N. K., Bahuguna, P., Sharma, A. K., Singh, S., Godbole, S. V., Risbud, A., Manna, B., Thirumugal, V., Roy, T., Sagarwal, R., & Pawar, N. D. (2011). *Impact of targeted interventions on heterosexual transmission of HIV in India*. <https://doi.org/10.1186/1471-2458-11-549>
11. Kunhi, S., Senior, M., Specialist, H., Bank, W., & Mutasa, R. U. (2021). *Targeted Interventions India's pathbreaking approach to address the HIV/AIDS Epidemic*. www.worldbank.org
12. NACO (2015), National Integrated Biological and Behavioural Surveillance (IBBS) 2014-15, Ministry of Health and Family Welfare, Government of India
13. NACO (2021), *India HIV Estimates 2021, Technical Report*, Ministry of Health and Family Welfare, Government of India

14. NACO (2023), *India HIV Estimates 2023, Technical Report*, Ministry of Health and Family Welfare, Government of India
15. National HIV & AIDS (Prevention and Control) Act, 2017. Available at www.naco.org
16. Pachua, L. N., Tannous, C., Dharmi, M. V., & Agho, K. E. (2022). HIV among people who inject drugs in India: A systematic review. *BMC Public Health*, 22(1), 1529.
17. Paul, Y. (2008). OPV cannot eradicate polio from India: Do we need any further evidence? *Vaccine*, 26(17), 2058–2061.
18. Ramachandran, P. (2012). ICMR's tryst with HIV epidemic in India: 1986-1991. *The Indian Journal of Medical Research*, 136(1), 13–21.
19. Ramasubban, R. (1998). HIV/AIDS in India: Gulf between Rhetoric and Reality. *Economic and Political Weekly*, 33(45), 2865–2872.
20. Shiffman, J., & Smith, S. (2007). Generation of political priority for global health initiatives: a framework and case study of maternal mortality. *The Lancet*, 370(9595), 1370-1379.
21. Tanwar, S., Rewari, B., Dharma Rao, C., & Seguy, N. (2016). *India's HIV programme: successes and challenges*.
22. The joint United Nations programme on HIV/AIDS. (2025). UNAIDS Global AIDS Update 2025: AIDS crisis and the power to transform. United Nations.
23. Tripathi, S., Joshi, D. R., Mehendale, S. M., Menon, P., Joshi, A. N., Ghorpade, S. V., & UNAIDS (2024), *The Global AIDS report The urgency of Now: AIDS at a crossroads Report 2024*.
24. Williams, B. G., Granich, R., Chauhan, L. S., Dharmshaktu, N. S., & Dye, C. (2005). The impact of HIV/AIDS on the control of tuberculosis in India. *Proceedings of the National Academy of Sciences*, 102(27), 9619–9624.
25. WWW.NACO.org
26. WHO (2024) *Antimicrobial resistance*. Accessed on 4 July 2024 from <https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance>
27. Youth at high risk of HIV and hepatitis due to injectable drugs, cautions Dr. Diwakar Tejaswi. (2025, May 30). Patna Press. <https://patnapress.com/youth-at-high-risk-of-hiv-and-hepatitis-due-to-injectable-drugs-cautions-dr-diwakar-tejaswi/>.

