Editorial

HIV Surge: Pakistan's Silent Emergency

Feriha Fatima Khidri*

In 1987, Pakistan reported its first human immunodeficiency virus (HIV) case caused by unsafe blood transfusion[1]. Over the past two decades, local transmissions have been comparatively lower than in neighbouring countries. The first outbreak was reported in 2003 among injecting drug users (IDUs) in Larkana district, Sindh[2] Pakistan reports the second-highest rate of acquired immunodeficiency syndrome (AIDS) progression in the Asia-Pacific region.[3] The 2018 epidemic emerged in Kot Imrana village of Sargodha. It showed the initial 1.3% prevalence driven by quacks repeatedly using contaminated needles; that was escalated to 13% by 2019[4]. In April 2019, screenings confirmed 135 adults and 604 children as HIV-positive. Notably, these children had HIV-negative parents, confirming horizontal transmission via reused syringes in local clinics[5,6]. According to the 2021 HIV/AIDS Data Hub factsheet, Pakistan had about 210,000 people infected with HIV: 170,000 adult men, 41,000 adult women, and 4,600 children under 15 [7].

HIV is a retrovirus that targets CD4+ T cells, and HIV-1 is the most common strain worldwide. It spreads through the exchange of infected body fluids, mainly through blood, semen, vaginal secretions, and breast milk. The main routes of transmission include sexual contact, mother-to-child transmission during pregnancy, delivery, breastfeeding, sharing contaminated syringes or needles and if untreated, can lead to AIDS[8].

The mortality rate of HIV in Pakistan has been reported as 1.5 per 100,000, exceeding that of many neighbouring countries, indicating significant gaps in timely diagnosis, infection control, and treatment access. The children are the most affected in Sindh province, showing the highest burden of HIV/AIDS in Pakistan. During the Larkana outbreak in 2019, more than 700 children were diagnosed with HIV due to unsafe injection practices and the reuse of syringes. These factors highlight the shortcomings of poor healthcare regulation. The incident drew national and international attention, raising concerns about infection control, the need to expand HIV screening, and the importance of healthcare reform. It also revealed major gaps in infection prevention and showed how vulnerable children are to healthcare-associated transmission[9].

From the start of 2026 to date, 894 new cases, including 329 children, have been recorded in Sindh province. It has been reported that new cases of HIV among children have increased from 530 cases in 2010 to over 1,800 annually. This shows that Pakistan is now at a critical stage of this "man-made epidemic"[10], and the recurrent HIV outbreaks demand urgent and comprehensive transformation. First, strict regulations of healthcare providers should

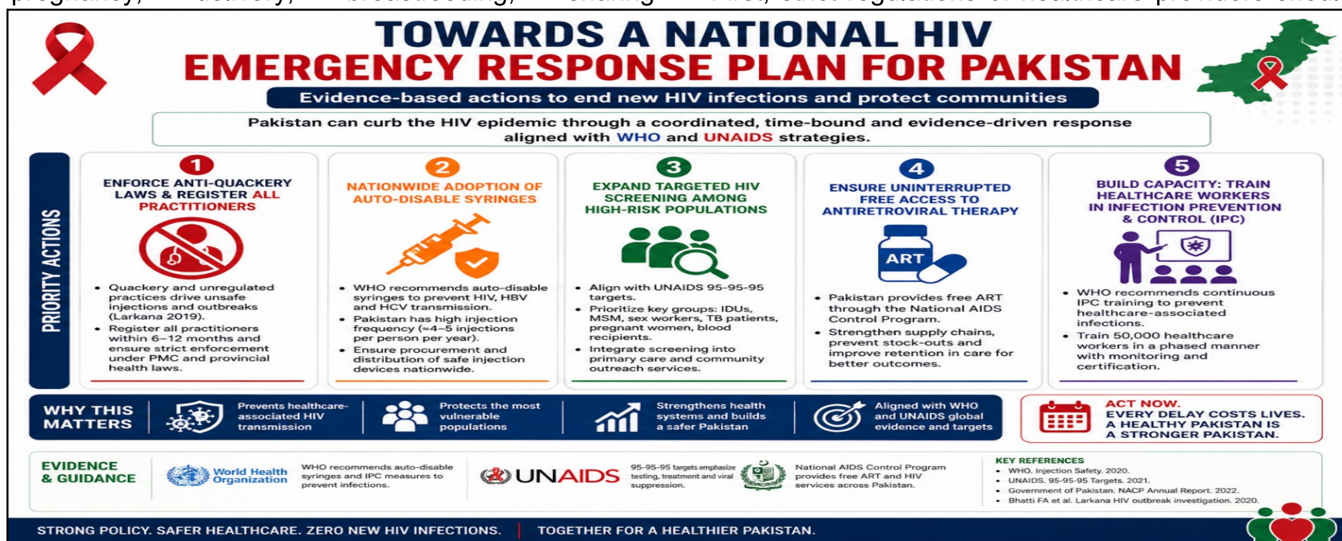

Figure 1: Policy framework for a National HIV Emergency Response Plan in Pakistan

be mandatory. Unlicensed practitioners or quacks must be identified, legal action taken, and they must be barred from practising. Mandatory use of single-use syringes, particularly auto-disable syringes, combined with strict disposal protocols and routine

*Associate Professor, Department of Biochemistry, Bilawal Medical College, Liaquat University of Medical and Health Sciences, Jamshoro
Correspondence: feriha.fatima@lumhs.edu.pk
doi: 10.22442/jlumhs.2026.01495

2026 © This is an Open Access article distributed under the terms of the Creative Commons Attribution – Non-Commercial 4.0 International License, which permits unrestricted use, distribution & reproduction in any medium provided that the original work is cited properly.

inspections, is considered a critical strategy for interrupting the transmission of HIV.

Secondly, expanded screening of HIV in Pakistan is crucial, especially in Sindh, which consistently has reported the highest burden of pediatric HIV cases. Early identification of infection will significantly improve survival rates for children and help prevent further transmission. Third, increased access to antiretroviral therapy (ART), without barriers at health facilities, is essential. This includes targeting high-risk areas to provide immediate, free treatment to registered, HIV-positive children.

Fourth, infection prevention and control (IPC) training must be standardized across all healthcare settings, from tertiary hospitals to remote rural clinics. The Larkana and Kot Imrana outbreaks were entirely preventable with basic IPC measures. Finally, public awareness campaigns must be implemented to combat stigma while educating communities about transmission routes and prevention strategies [11].

A coordinated, evidence-based approach highlighting five priority actions: enforcement of anti-quackery laws, nationwide use of auto-disable syringes, targeted HIV screening in high-risk groups, uninterrupted access to antiretroviral therapy, and training of healthcare workers in IPC, aligned with global strategies to reduce HIV transmission. (**Figure 1**)

REFERENCES

1. Khanani RM, Hafeez A, Rab SM, Rasheed S. Human immunodeficiency virus-associated disorders in Pakistan. AIDS Res Hum Retroviruses. 1988; 4(2): 149-154. https://doi.org/10.1089/aid.1988.4.149.
2. Shah SA, Altaf A, Mujeeb SA, Memon A. An outbreak of HIV infection among injection drug users in a small town in Pakistan: potential for national implications. Int J STD & AIDS. 2004; 15 (3): 209.
3. Nawaz A, Parkash O, Chand P, Kumar R, Reeta R. Outbreak of HIV/AIDS in very low-risk population in district Larkana, Pakistan: cross-sectional study. European J Pharm Med Res. 2019; 06: 673-675. doi:10.20959/ejpmr20199-6939
4. Wahid B. An update on the severe outbreak of HIV in Kot Imrana, Pakistan. Lancet Infect Dis. 2019; 19(3): 241. doi: 10.1016/S1473-3099(19) 30038-6
5. Davlidova S, Abidi SH, Ali S. Healthcare malpractice and continuing HIV outbreaks in Pakistan. BMJ Glob Health. 2019; 4(6):e001920. doi: 10.1136/bmjgh-2019-001920
6. Altaf A, Iqbal S, Shah SA. A third major human immunodeficiency viruses (HIV) outbreak in Larkana, Pakistan: caused by unsafe injection practices. J Pak Med Assoc. 2019; 69(8): 1068-1069.
7. Aizaz M, Abbas FA, Abbas A, Tabassum S, Obeagu EI. Alarming rise in HIV cases in Pakistan: challenges and future recommendations at hand. Health Sci Rep. 2023; 6: e1450. doi: 10.1002/hsr2.1450.
8. Zubair A, Ali M, Wdidi S, Alkhedaide AQ, Santacroce L. Unveiling the dynamics: understanding the current scenario and drivers of HIV epidemiology in Pakistan. Retrovirology. 2025; 22: 12. doi: 10.1186/s12977-025-00668-z
9. Ahmed W, Ahmed I, Bhanbhro F, Kerio A, Ali A, Ali S, Wassan P. Frequency of pediatric HIV infection among high-risk children admitted to a tertiary care hospital at Sukkur, Sindh, Pakistan. BMC Infect Dis. 2025 Jul 1; 25(1): 835. doi: 10.1186/s12879-025-11256-z.
10. Dawn Newspaper. Pakistan Medical Association warns of 'man-made epidemic' over syringe reuse. Dawn. 2026 May 2. Available from: https://www.dawn.com/news/ 1996833
11. Bughio NI. HIV/AIDS in Adolescent and Young Adults: Prevalence, Sexual Practices, Substance Use, Health Education, and Parental Guidance in Pakistan. J Liaquat Uni Med Health Sci. 2026; 25 (01): 01-02. doi: 10.22442/jlumhs.2025.01483.