

HIV in Pakistan

Association of Physicians of Pakistani Descent of North America (APPNA)-the Medical Education and Research Investment Task Force (MERIT) HIV Committee 2022 Report

EXECUTIVE SUMMARY

This report summarizes activities of the APPNA-MERIT HIV Committee before and after its inception in January 2021. The committee organized HIV educational campaigns during 2021 that more than 700 HIV care providers from Pakistan and HIV experts from the USA attended. These campaigns found that the existing infrastructure and available framework is inadequate for increasing treatment uptake and reducing the number of new HIV infections, HIV transmissions, and morbidity and mortality in Pakistan. The committee planned activities for 2022 based on these findings, with the aim of helping Pakistan's HIV care-providing sector build capacity by creating networks with local educational institutions.

1. Basic facts about HIV/AIDS

- a. Human Immunodeficiency Virus (HIV) is a chronic infection which progresses with little or no symptoms for 10 years, on average, until the first symptoms of acquired immunodeficiency syndrome (AIDS) appear.
- b. HIV is contagious and can spread in 3 ways: 1) by blood products (unclean needles or unscreened blood), 2) by mother to baby by pregnancy, labor, or nursing, and 3) by having unprotected sex with any HIV positive person. ¹ Iatrogenic (relating to illness caused by medical treatment or diagnostic procedures) transmission is caused by unsafe injection practices in health care settings as well as from unscreened contaminated blood products.
- c. Antiretroviral treatment is safe, highly effective and lifesaving. It must be taken lifelong, and it is NOT curative. Once the virus is completely suppressed, which means undetectable, it is untransmissible. **Treatment is the best way to prevent transmissions.**

2. Burden of disease in Pakistan and shifting trends in transmission

- a. Pakistan has been registering 20,000 new HIV cases every year for the past few years, **the fastest growing case count among all countries in the region based on WHO reports.**
- b. In Pakistan, HIV disease has affected high risk, key populations for over 30 years.² More recent statistics from 2019 indicate that a significant percentage of low-risk males, females, and clients of

¹ High risk "key" populations that are affected by HIV include sex workers, men who have sex with men, transgender individuals, and injections drug users.

² The fifth Integrated Biological and Behavioral Surveillance Round conducted in 2016 revealed a steady increase in the weighted prevalence of HIV among the key populations. This includes People who inject drugs (PWID) = 38.4%, Transgender Sex Workers = 7.5%, Transgenders (TG) = 7.1%, Male Sex Workers = 5.6%, Men who have Sex with Men (MSM) = 5.4%, and Female Sex Workers (FSW) = 2.2%.

key populations were newly infected, suggesting an increase in HIV transmission to bridging populations (spouses, partners, and clients) of key populations.^{3 4}

- c. In the last 7 years, Pakistan has witnessed a shift in transmission from “sex to syringe”, as at least 5 out of 7 recent outbreaks of HIV in Pakistan have occurred in children as well as men and women without traditional high-risk behaviors. **Investigations of these outbreaks have revealed that unregulated use of contaminated needles for routine vaccinations, intramuscular and intravenous medical treatments and unscreened blood products are the leading cause of transmission in the general population perceived to be otherwise “low risk”.**⁵
- d. Despite the global attention, funding, and resource allocation to Pakistan’s infamous outbreaks in recent years which affected mostly innocent children, the outcomes were heartbreaking. **Most of these victims were silenced by stigma, poor family support, and ignorance about the contagiousness of the virus.** Eventually, unknown numbers of children and adults succumbed to AIDS.

3. Existing infrastructure

- a. Currently, there are 49 antiretroviral therapy (ART) centers operating under the federal and provincial governments, providing free ART, counselling, testing, and treatment service.
- b. Per limited and unverified data from these ART centers who register HIV patients in a database, 65% of registered patients do NOT belong to key populations but are from the general public.
- c. The number of patients lost to follow-up is significant, and at the end of 1 year only 18% of patients are retained in care on average.

4. 2019-2021 HIV Activities in Pakistan

2019 HIV outbreak in Larkana, Pakistan: After the HIV outbreak in more than 1400 children in Larkana (April 2019 – September 2019), Dr. Gillani was contacted by Larkana area healthcare providers for HIV education. Our team delivered 6 HIV educational webinars to raise awareness and address HIV stigma. Webinars were well attended by local healthcare providers including faculty members from different medical schools in the area. Reports and recommendations were presented to different departments of the Pakistani government.

2020 HIV in Pakistan situation awareness efforts continued: HIV situation in Pakistan was closely followed. The team performed many dissemination activities, including presenting a CME lecture at APPNA annual meeting, presenting lectures in different higher education institutions in Pakistan, and publishing editorial reports in Pakistan journals to raise awareness about the outbreak.

2021: APPNA-MERIT HIV committee was created on Dr. Gillani’s request.

- a. Partners from different institutions in the USA and Pakistan were invited; the team laid out a mission statement and identified committee aims.

³ In 2019, only 23% of the new infections occurred in PWID, 18% in MSM, 3% in TGs and 1% in FSW.

⁴ As predicted by the survey in 2016, the HIV epidemic in Pakistan is following the Asian Epidemic Model trend, where the epidemic has nearly plateaued in people who inject drugs and has moved into sexual networks where a gradual spillover into the general population through bridging populations is silently taking place.

⁵ Injection overuse and unsafe injection practices have been driving the Hepatitis B and Hepatitis C epidemics and now HIV has joined this opportunistic pathway of transmission.

- b. “HIV Awareness, Prevention, and Educational Project in Pakistan” was launched as an educational activity. Primary aim was to reduce stigma and increase awareness about HIV/AIDS disease among the healthcare community by empowering them with knowledge about HIV disease and its management. Thus, providing them with the right tools to care for people living with HIV enabling them to achieve viral suppression and thereby improving their quality of life and preventing future transmissions.
- c. A total of 11 educational webinars focusing on different aspects of HIV management were delivered by top faculty members from 27 different educational, clinical, and policy related institutions from the USA and Pakistan. **Speakers from the USA presented the latest evidence and guidelines pertaining to HIV care as well as the challenges in delivery of care in USA. Colleagues and faculty members from Pakistan presented the challenges encountered with implementation of standards of HIV care in Pakistan.**
- d. HIV care providers and other healthcare providers from Pakistan attended the webinars. Feedback evaluations confirmed that the webinars were viewed as helpful and successful in achieving the goal of increasing awareness and reducing stigma about HIV.
- e. HIV Committee also supported the Common Management Unit for HIV, TB, and Malaria, Government of Pakistan, and their initiative to start an HIV-ECHO program to train HIV care providers working in different centers across Pakistan.
- f. Based on the rich collaboration and the valuable knowledge shared in the webinars, the committee published an “HIV in Pakistan Report” on World AIDS Day in 2021. The report included many policy implications questions, and suggested solutions from the participants. After this report publication, for the last webinar in December, we invited all funding institutions and stakeholders involved in HIV care in Pakistan to discuss actions items from the published reports.
- g. The group is also working on creating an HIV 101 course for the HIV care providers and their staff.

5. 2022 planned activities

- a. **Build capacity: Adopt an ART Center to enhance HIV care in Pakistan project** aims to help develop and strengthen the skills, abilities, processes, and resources that the healthcare sector and communities need to provide the best HIV care services in Pakistan as well as to control future HIV transmissions in the country.
- b. **HIV Research/Clinical Awards:** MERIT HIV Committee with APPNE partnership and/or through other sources will award two scholarships of \$500 each in 2022: one to a 4th or 5th year medical student to pursue a research/clinical project in the HIV area, and one to a PhD scholar doing research in HIV. These students are then required to publish their project findings in local journals. Appropriate guidance with the help of Pakistani and US faculty members will be provided to the winning students for their project.
- c. **HIV 101 Course** will be finalized within the next few months.
- d. **HIV knowledge dissemination:** the HIV committee members are working to publish summaries and scientific HIV knowledge from webinars in different journals of Pakistan

In summary, APPNA-MERIT HIV Committee will keep working with the healthcare institutions and medical colleges in Pakistan who can play a vital role in controlling Pakistan's HIV epidemic through educating themselves, their colleagues, their students, and their patients, and by adopting complementing strategies implemented by government agencies.

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