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

HIV Awareness, Prevention, and Education Project in Pakistan

Project Report Published on World AIDS Day, December 1st, 2021

By

Dr. Fizza S. Gillani, MSc, MAPE, PhD

(APPNA-MERIT HIV Committee Chair)

Dr. Saima Abbas, MD

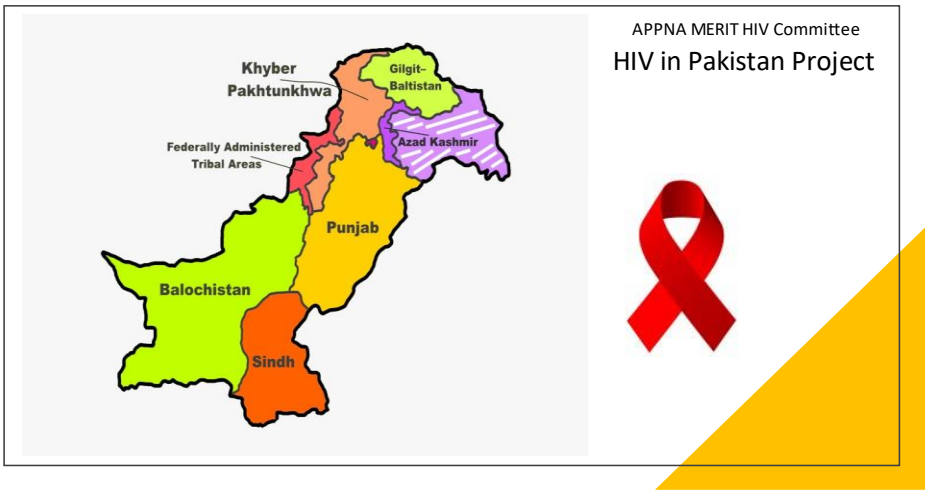
(APPNA-MERIT HIV Committee Co-Chair)

&

APPNA-MERIT HIV Committee, USA

Report Prepared in collaboration with

Dr. Bushra Jamil, MBBS, MRCP, FRCP, FACP



Collaborators

The Medical Microbiology and Infectious Diseases Society of Pakistan (MMIDSP), Pakistan

Pakistan Society of Internal Medicine (PSIM), Pakistan

Aga Khan University (AKU), Karachi, Pakistan

Common Management Unit for HIV, TB, and Malaria, Government of Pakistan; Islamabad, Pakistan

Association of Pakistani Physicians of New England (APPNE), Massachusetts, USA

The Brown University ID Division, Rhode Island, USA

Providence-Boston Center for AIDS Research (CFAR), Rhode Island, USA

In the Name of Allah, the Beneficent, the Merciful

EXECUTIVE SUMMARY

This report summarizes findings of a yearlong HIV educational campaign arranged by the APPNA-MERIT HIV Committee. The committee organized HIV educational webinars during 2021 that were attended by more than 700 HIV care providers from Pakistan and HIV experts from the USA. It was concluded 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. This report presents key recommendations made during these webinars to address these inadequacies.

VISION STATEMENT

Empowering the health care community in Pakistan with knowledge and education to control the HIV epidemic and future HIV transmissions.

The APPNA-MERIT HIV Committee is a group of professionals working in the fields of Infectious Diseases, Internal Medicine, Family Medicine, and Public Health in North America with the primary goal of helping Pakistan understand and control its HIV epidemic.

The **HIV in Pakistan Project** aims to increase awareness and reduce stigma about HIV/AIDS by empowering healthcare providers in Pakistan with knowledge about HIV disease and providing them the right tools to care for people living with HIV/AIDS, and most importantly, prevent future HIV transmissions. This is a volunteer-based academic collaboration designed and led by the APPNA-MERIT HIV committee. During 2021, we conducted a series of educational webinars and invited HIV care experts from the U.S., and physicians and health care workers who are involved in HIV care from Pakistan, to discuss multiple aspects of HIV, the challenges encountered in providing quality of care to people living with HIV in Pakistan, and ways to control future HIV transmissions. These webinars were a robust exchange of knowledge, information, and goodwill. As a follow-up activity, AKU and MMIDSP—in partnership with the APPNA-MERIT HIV committee—launched a CME-accredited activity in July 2021 called HIV ECHO (Extension of Community Health Outcomes). The monthly sessions are delivered in Urdu and have been successful in engaging healthcare professionals in case-based discussions, local issues, and evidence-based solutions.

This report summarizes the pertinent issues raised by the health care community in Pakistan during these APPNA-MERIT educational webinars and strongly advocates for immediate and urgent attention to address the deadly trajectory of HIV in Pakistan.

1. **Basic facts about HIV/AIDS**
    a. HIV 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. Once diagnosed with AIDS, 100 percent of patients will die within 1 - 2 years, on average, if untreated.

c. HIV is contagious and can spread in 3 ways.
    i. By blood products (unclean needles or unscreened blood)
    ii. By mother to baby by pregnancy, labor, or nursing
    iii. By having unprotected sex with any HIV positive person
d. High risk "key" populations that are affected by HIV include sex workers, men who have sex with men, transgender individuals, and injections drug users.
e. 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.
f. Antiretroviral treatment is safe, highly effective and lifesaving. It must be taken lifelong, and it is NOT curative. Once 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. With the ongoing HIV epidemic in the developing world, 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 more than 30 years. *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, namely, 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%. Latest statistics indicate that in 2019, 23% of the new infections occurred in PWID, 18% in MSM, 3% in TGs and 1% in FSW. A significant percentage of low-risk males, females, and clients of key populations were newly infected, suggesting an increase in HIV transmission to bridging populations (spouses, partners, and clients) of key populations.
c. As predicted by the survey in 2016, the HIV epidemic in Pakistan is following the *Asian Epidemic Model trend*, i.e., the epidemic has nearly plateaued in people who inject drugs and moved into sexual networks from where a *gradual spillover into the general population through bridging populations is silently taking place.*
d. In the last 7 years, Pakistan has witnessed a shift in transmission from "sex to syringe" and HIV is no longer confined to key populations. In the last decade, at least 5 out of 7 so called hot-spots or 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".
e. 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.
f. Despite the global attention, funding, and resource allocation to the infamous outbreaks which affected mostly innocent children, the outcomes were heartbreaking. Most of these victims were silenced by stigma, poor family support and ignorance in caregivers about the contagiousness of the virus. Eventually, unknown numbers of children and adults succumbed to AIDS.
g. Several more outbreaks have been reported in Punjab in Sargodha and Gujrat as well.

h. There has been no surveillance since the last survey in 2016 and the current database from ART centers is fragmented and sketchy without any concerted effort to truly estimate the burden of disease of this steadily enlarging epidemic.

3. Existing infrastructure

a. Currently, there are 49 antiretroviral therapy (ART) centers that are funded by the **Global Fund** (Global Fund to Fight AIDS, Tuberculosis & Malaria) and operating under the government's jurisdiction, providing services to the public sector. They provide free ART as well as multiple counselling, testing and treatment services to people living with HIV.

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. Challenges

GAPS IN KNOWELDGE

a. A high level of stigma in all stakeholders including the health care community remains the biggest challenge and has led to a culture of denialism. Commonly perceived to be a sexually transmitted disease, HIV/AIDS is a taboo subject and no one wants to acknowledge, discuss, or deal with it. This leads to a pervasive cluelessness about the magnitude of the problem and implications of not addressing it.

b. There is no accurate burden of disease estimates and poor surveillance of HIV. There is a National HIV surveillance system where all ART centers submit the number of registered patients and the number of new infections to a central database. There is evidence that this data is not being monitored, reviewed, critically evaluated or shared. Moreover, decisions, corrective measures and requests for funding are not driven by data at the National AIDS Control Program (NACP) level. Without regular updating of the database and vigilant monitoring of the number of new infections, we cannot estimate the true burden of the disease. Inadequate inter-provincial information sharing, and collation reporting have made utilization of the database difficult and tedious. Pakistan's COVID-19 response has proven that these hurdles can be overcome if the will is there.

c. The lack of real time information and data gathering about HIV infections (as witnessed in the COVID-19 response) feeds an attitude of denial in the health care community as well as the government. This leads to an attitude of complacency and refusal to acknowledge that there is a burgeoning problem.

d. Our future doctors and existing doctors have no way to gain education and training about HIV and are victims to the stigma, and hence have no interest in learning about HIV. Medical schools and universities continue to avoid raising the issue of HIV/AIDS and consider talking about the subject shameful and taboo. Our future doctors will have no education or training to deal with HIV patients if they are not educated about this disease, how it presents, and—crucially—how it transmits.

GAPS IN ATTITUDES

e. HIV stigma remains unrelenting and unforgiving. Innocent children and pregnant women through no fault of their own remain victims without a sanctuary in the health care community.

f. Insensitivity and judgement of those inflicted with a possible sexually transmitted disease invites shaming and blaming from all sectors of society. This leads to isolation and psychosocial issues which are also being ignored.
g. Key populations are doubly stigmatized firstly for being key populations and secondly for having HIV.

GAPS IN PRACTICE

h. ART centers are the providers of HIV monitoring, antiretroviral therapy, and disease management. They are unsuccessful in retaining patients in care and only 20 percent or less return to these centers after one year. Staff are not trained, including field workers and counsellors.
i. The HIV programs in the country are pre-dominantly donor-dependent (mainly the Global Fund grants) *with limited geographic coverage and targeted towards key populations* instead of the general population where the majority of new HIV cases are coming from.
j. Poor health infrastructure and stigma have *increased reliance on Community Based Organizations (CBOs)* for facilitating HIV diagnosis and care in key populations. There is a general lack of transparency in how these CBOs operate and they may not have the expertise to address these cases properly.
k. Weak coordination between stakeholders leads to *fragmented networking and support*.
l. *Lack of political will and compassion with dedication remain the most limited resource.* As the government is not invested in curbing the HIV epidemic, there is no accountability or monitoring of ART centers and their needs and demands.

5. Recommended solutions

In addition to international aid, Pakistan's HIV program requires active support from the federal government, provincial governments, and healthcare sector to curb the HIV epidemic.

1. Optimize national reporting system/database with mandatory reporting of all tested patients, by ensuring documentation and reporting of all HIV tests conducted outside the ambit of national and provincial AIDS Control Programs. This includes reporting in the private sector where data is harder to come by.
2. Ensure nonnegotiable transparency, accountability, and monitoring of all existing surveillance data with interprovincial sharing and collation reporting
3. Destigmatize HIV testing. Increase testing and mandate universal screening of all high-risk groups including those with tuberculosis, Hepatitis B and C, and pregnant women. Target key populations (including prisoners) and test them annually or twice a year.
4. Abolish employment termination or deportation upon disclosure of HIV status as this is discriminatory and unethical.
5. Immediate implementation of preventative strategies to decrease injection overuse and reuse of syringes in health care settings. Scaling up these interventions is the need of the hour.
6. Stringent infection control practices in health care settings.
7. Mandate the education of physicians, nursing and ancillary staff at all levels. Regulate education with certification requirements at regular intervals.
8. Dental clinics, barber shops and quack clinics must be under vigilance for HIV outbreaks and held to some standard of infection control practices and kept under surveillance.
9. Screening of blood products for HIV in addition to Hepatitis B and C should be non-negotiable.
10. Mandate HIV education in all medical schools and in all colleges and universities.

11. General practitioners and Family Medicine physicians must join hands and should have access to standardized training opportunities and certifications on how to treat HIV patients.
12. Acknowledge the lack of Infectious Disease physicians and increase opportunities for Infectious Disease fellowships in medical colleges and residency programs.
13. Involve CBO's and private sector physicians (with monitoring and supervision) to join hands in this war against HIV.
14. Regulate ART center staff training and HIV education.
15. Provide courses and counselling to patients to help them deal with sensitive issues pertaining to HIV.
16. Social, multimedia, and print media must step up to educate the public and destigmatize HIV.

If there is one legacy that COVID-19 response has underscored, it must be the collaborations witnessed both on the ground and globally across distances. We know how to end this HIV epidemic. Through collaboration, support, knowledge, and dedication we can write the ending to this story. The question remains: do we have the will to do that?

The HIV epidemic remains a challenge in Pakistan—addressing it is our collective responsibility.

End of the APPNA-MERIT HIV Committee Report