

Unsafe injection practices: A silent epidemic of HIV in Pakistan?

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In Pakistan, human immunodeficiency virus (HIV) infections continue to increase, even though there have been considerable global advancement in reducing or stabilizing new cases. Recent estimates from the United Nations program on HIV/AIDS (UNAIDS) indicate that around 210,000 individuals in Pakistan are living with HIV. However, merely around 23% of these people know their condition, and fewer than 14% are on anti-retroviral treatment. This highlights notable deficiencies in diagnostic and treatment access.¹ Pakistan is classified as having a concentrated HIV epidemic, with the highest prevalence recorded among the key populations, which includes individuals who are injection drug users (IDUs), sex workers, and transgender people. Emerging research shows that the transmission is increasingly spreading beyond the core population to the general population. Lack of testing, stigma, and fragmented surveillance systems result in late detection, hence the spread of the disease within the public. In addition, transmission through healthcare setting, which involves unsafe injections, is emerging as a major, yet neglected, mode of transmission.

HIV outbreaks among children with no conventional behavioral risk factors is the notable manifestation of healthcare-associated transmission. The largest and most reported outbreak occurred in 2019 in Ratodero, Larkana district of Sindh, where 930 individuals were diagnosed with HIV. Majority of those infected were children younger than 16 years, many of whom had HIV-negative parents.² Twenty-five hemodialysis dependent patients contracted HIV in a recent outbreak at the hemodialysis unit of a tertiary care hospital. Investigations including phylogenetic analysis revealed this to be a point source outbreak suggesting healthcare-associated transmission possibly due to lapses in infection prevention and control practices within the dialysis facility.³

In Pakistan, the overuse of injections for minor health issues has led to a high risk of spreading blood-borne infections like HIV, hepatitis B, and hepatitis C. This is

often due to unsafe practices in unregulated healthcare settings, such as reusing syringes and needles without proper sterilization. A recent study on the Ratodero outbreak found that many affected children had received injections, IVs, or minor medical procedures, highlighting the need for safer injection practices.⁴

Furthermore, unsafe blood transfusions are a major risk factor for HIV outbreaks in Pakistan. Although national policies require blood screening, implementation is inconsistent due to poor regulation of blood banks and reliance on professional donors. Unqualified practitioners often operate clinics with inadequate infection control, increasing the risk of contaminated blood products being used. Stigma surrounding HIV also limits discussion and testing, allowing infections to spread silently until outbreaks become apparent.

To prevent future HIV outbreaks in Pakistan, a multi-faceted approach is needed. This includes enforcing safe injection practices nationwide, making single-use syringes and auto-disable devices mandatory, and tightening regulations on blood banks and private clinics. Expanding HIV testing and surveillance systems can help detect outbreaks early. Public awareness campaigns can reduce stigma and promote safer healthcare practices. Without sustained efforts, localized epidemics will continue to threaten public health gains. Pakistan needs stronger healthcare regulation and medical interventions to break this cycle.

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