

The Growing Threat of HIV, TB and TB-HIV Co Infection in Pakistan

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The estimated population of Pakistan is around 176 million people. The country is placed at a strategic hinge and shares its borders with South Asia, Central Asia, China and Middle East. As a result of the global economic turmoil and internal governance issues, the economy is in tatters which has also affected the health sector including three key communicable diseases such as HIV/AIDS, TB and TB-HIV co infection.

While the country has low prevalence for HIV among the general population, the presence of HIV among high risk group persons has been documented since early 2005 and consecutive surveillance rounds have established the fact that injection drug users (IDU) are driving the epidemic and there are other emerging risk groups such as transgender (hijra) sex workers.² Most recent national surveillance round (Round IV) completed in 2011 showed expansion of HIV infection in main urban centers of the country. While the national prevalence of HIV among IDUs is 36.7% (data from 16 cities), in Karachi 42.2% IDUs are HIV positive while the prevalence in Lahore is 30.8%, in Peshawar 20% and in Quetta 7.1%.² Among transgender sex worker the overall prevalence in the country is 7.3% but in some cities such as Karachi, the prevalence is 12.3%, Larkana 15% and Lahore 5.3%. (Ref) The national prevalence among male sex workers is 3.1% and 0.8% among female sex workers.¹ Data from Round IV also showed that 33.8% IDUs were married, clearly suggesting that the spouses of IDUs are at an increased risk of acquiring HIV infection. The clients of transgender sex worker can play the role of bridging population as a study has found that 40% of these clients are married and with such high HIV infection rates among hijra sex workers and a condom rate of only 42% the spouses of these married bisexual clients are at risk.² Treatment of HIV with antiretroviral drugs (ARVs) has been proven to be an effective strategy to reduce the risk of transmission however, in Pakistan, where UNAIDS/WHO estimate close to one hundred thousand persons infected with HIV and only around about 4000 receiving the drug indicating that there is a clear lag of strategy.

Pakistan is ranked as the fifth highest burden country for tuberculosis (TB) in the world. It contributes more than half (63%) burden of TB in the Eastern Mediterranean Region of World Health Organization (WHO). The estimated prevalence is 350 per 100,000 and the incidence rate is 231 per 100,000 persons.³ HIV

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infection is a potent risk factor for TB, not only does HIV increase the risk acquiring TB, it also increases the risk of rapid TB progression soon after infection or reinfection.^{4,5} A recent study in Pakistan conducted at sentinel sites screened 12,552 persons and found 42 (0.34%) infected with HIV.^[6] With maturation of the HIV epidemic in the country it is highly likely that the cases of TB HIV co infection will increase which will be a great challenge for prevention and control for TB as well as HIV infections.

For effective HIV prevention UNAIDS, World Bank and international experts recommend effective:

1. Coverage and quality of HIV prevention services for high risk group persons
2. Coverage and quality of HIV diagnostic, treatment, care and support services
3. Programme management and coordination

The World Health Organization has three key recommendations for countries like Pakistan:

1. Prompt detection of infected (ious) patients
2. Treatment of people who have suspected or confirmed TB disease and
3. Decrease default of TB patients

This special supplement of JPMA will serve as a ready reference for academicians, policy makers and planners, program managers and all other stakeholders who are striving to prevent and control HIV and TB and TB-HIV co infection in Pakistan.

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