

A success story: identified gaps and the way forward for low HIV prevalence in Bangladesh

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Abstract

Bangladesh remains a low prevalence country for HIV infection. In this article we attempt to address the reasons for the present success in this country and the challenges lying ahead to minimise the spread of HIV in the future.

Keywords: Bangladesh, HIV, migration

Epidemiology

The first case of HIV infection in Bangladesh was reported in a migrant in 1989 [1]. The country is considered to have a low prevalence for HIV as it is estimated that only around 9600 (8400–11,000) individuals are living with HIV [2]. There were 3674 individuals reported to have HIV up until December 2015 [2]. The prevalence in the general population remains low and below 0.1%. In key populations such as people who inject drugs (PWIDs) and in men who have sex with men (MSM), prevalence is at 5% and 1%, respectively [2,3].

Testing for HIV

Currently the National AIDS/STD Programme (NASP) offers voluntary counselling and testing (VCT) through 12 drop-in-centres (DICs), which are hospital-based. Non-governmental organisations (NGOs) and community-based organisations (CBOs) offer HIV testing to key populations (KPs) with the support from the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM).

Routine HIV testing is not offered to pregnant women due to the low HIV prevalence in the general population. Among patients with tuberculosis (TB), HIV testing is performed in those with multi-drug resistant (MDR) TB and treatment failure. HIV testing is not offered in sexual health clinics. Sentinel surveillance was performed among PWIDs, MSM and female sex workers (FSW) until 2011.

HIV prevention programmes are carried out by NGOs and CBOs with external funding. This is understood to be one of the key factors behind the low HIV prevalence in Bangladesh.

Of those diagnosed HIV, 50% of infected persons are migrants who have been deported from the Gulf countries. Couples counselling and testing are not performed owing to the stigma attached to HIV [4]. There is no HIV testing policy for returning migrants or structured HIV prevention programme in place for this population.

The Bandhu Social Welfare Society, a community organisation, offers an intervention and testing programme for MSM and transgender populations. Among MSM, 1% are HIV positive. It is estimated that around 40,000–150,000 MSM live in Bangladesh. Only around 40,000 of them will be covered by the GFATM and among them, only 35% will have tested for HIV. Fifty percent of MSM are married to female partners and no interventions or testing

programmes are in place for their spouses owing to the stigmatisation of HIV.

There are around 10,000 transgender individuals in the country and 1% of them are HIV positive. Not all are routinely offered HIV testing.

MUKTHI, a CBO, has been running an intervention programme for PWIDs since 1998 and offers HIV testing. There is an estimated HIV prevalence of around 5% and a poor uptake of HIV testing in this population. In this context, behavioural intervention should be coupled with HIV testing.

Community-based organisations are involved in intervention programmes such as condom distribution for FSWs. Testing and STI services are not widely accessible for this population. NGOs are increasingly seeing that resources are decreasing in terms of prevention, testing and STI services. Interventions such as mobile VCT centres should be studied and implemented for this population to promote HIV testing.

Linkage to care and treatment

There are 3674 persons diagnosed with HIV infection in Bangladesh. Among them, 2536 are linked to care [2]. NASP works closely with the Ashar Alo Society (AAS), a CBO facilitating the linkage to antiretroviral therapy (ART) care and clinical follow-up. Around 2000 HIV-positive individuals are registered with this society and approximately 1200 have initiated ART.

Treatment is provided by the government. The programme was initiated in 2005 by the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR-B) with its own funding for a small number of patients. The GFATM-supported ART programme started in 2008 and has been supported by the government since 2012.

Patients with a CD4 T cell count below 500 cells/mm³ are initiated on ART, with a new threshold of CD4 T cell count above 500 cells/mm³ to be implemented by this end of this year. First- and second-line ART regimens are available. Two centres in the country have the facilities for HIV viral load testing but due to lack of resources, it is not performed for treatment monitoring. There are eight centres for CD4 T cell measurements but the majority of them are affected by a chronic lack of resources and cannot sustain regular testing (Figure 1).

Patients who are sick with opportunistic infections (OIs) and drug toxicities are admitted to infectious diseases hospitals (IDH), ICDDR-B and medical college hospitals. Few facilities are available for the diagnosis of OIs and co-infections but dedicated doctors and nursing staff are available in these in-patient wards.

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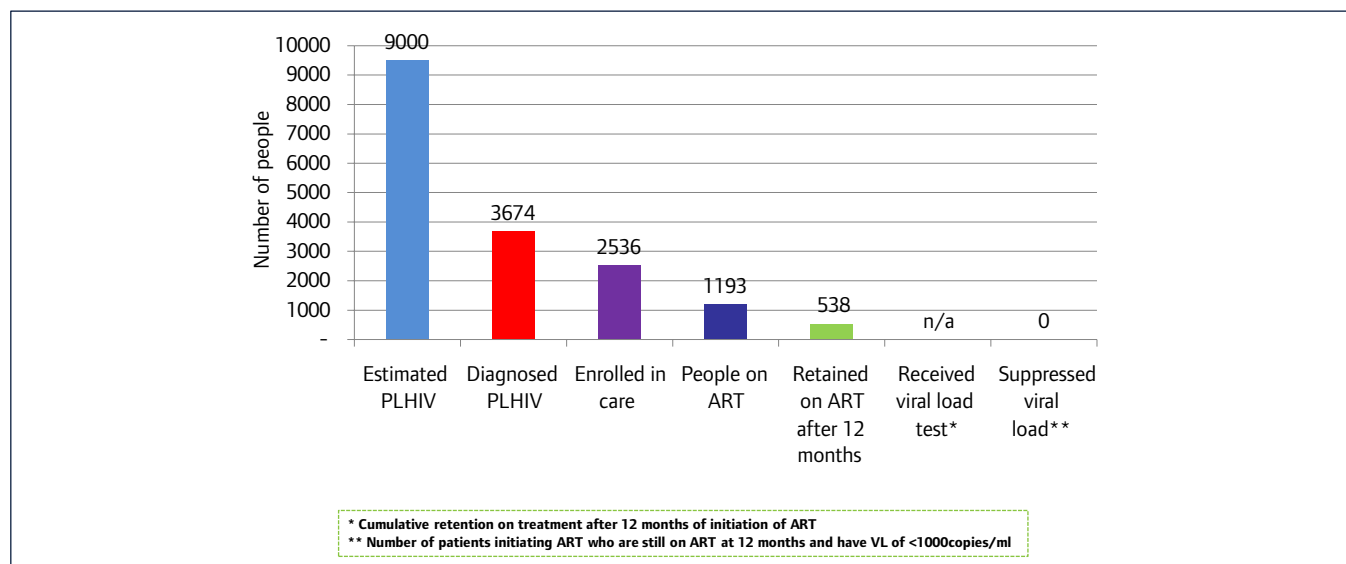


Figure 1. Cascade for HIV treatment and care in Bangladesh. PLHIV: people living with HIV

Support services for comorbidities like malignancy, hypertension and diabetes remain insufficient. Specialty hospitals/doctors also tend to discriminate against HIV-positive patients. Hepatitis C (HCV) co-infection occurs in 35% of HIV-positive PWIDs.

In terms of paediatric HIV, there are 200 diagnosed children with limited dedicated treatment facilities available for them.

Tuberculosis

Patients with tuberculosis are not routinely tested for HIV. Testing is performed only in the case of MDR-TB, extrapulmonary TB, treatment failure and for contacts of TB patients. Isoniazid preventive therapy is not implemented; however, Genexpert testing is available.

Twenty-three districts, in which 80% of all HIV patients live, including KPs, are now recommending HIV testing for all TB patients as of the first quarter of 2016. Sentinel surveillance of HIV in TB patients has not been implemented since 2004.

Antiretroviral regimens (ARVs)

Tenofovir, emtricitabine and efavirenz (TDF/FTC/EFV) have been used as first-line treatment since 2012. Zidovudine, lamivudine and nevirapine (ZDV/3TC/NVP) were used previously and patients are continuing on this regimen. Ritonavir-boosted lopinavir (LPV/r) and atazanavir (ATV/r) are available as second-line treatment.

Gaps identified and the way forward

HIV testing for key populations remains inadequate. User-friendly services should be offered to increase the uptake of testing. The success in terms of the low prevalence in Bangladesh is in part due to the early response soon after the detection of the first case. With the help of CBOs, NGOs and international funding, various intervention programmes have helped to contain the HIV infection rate. However, sustained funding is needed for NGOs to maintain the present success. Some are closing down their services due to a lack of funding and this is expected to impact on the containment of HIV. Sustainable models should therefore be developed by the NASP.

Several interventions are needed in terms of testing/diagnosis, treatment, its monitoring and patient follow-up as well as healthcare training. HIV counselling and testing should be offered to all patients with TB, STI attendees and spouses of HIV-infected patients after

initial counselling. The current WHO Treatment Guidelines are not implemented locally as not all patients are initiated on ART as recommended. However, it is expected that implementing WHO 2016 Guidelines would be cost effective for the country in the long run owing to the small number of diagnosed individuals. HIV load for treatment monitoring should also be made available and implemented with the necessary resources. Sustainable linkage and follow-up models are needed to prevent onward HIV transmission and the emergence of a drug-resistant virus.

Resources for the diagnosis of opportunistic infections are inadequate in all hospitals and should be allocated in a sustainable way to prevent morbidity and mortality. Non-communicable diseases (NCD) care should be strengthened in this population. Furthermore, doctors in charge of HIV patients require ongoing training programmes to keep up with medical developments.

We believe that investing in prevention yields significant savings on treatment costs and will make the HIV programme affordable over the long term. If ART is scaled up without expanding and optimising prevention coverage of KPs, new infections will continue to increase, treatment costs will spiral upwards, and the programme will become financially unsustainable. As a result, to significantly reduce new HIV infections we recommend the following:

- Scaling up both prevention among KPs and ART coverage among PLHIV by using strategic approaches;
- Addressing HIV-TB co-infection, focusing on migrants;
- Implementing integrated interventions for clients of sex workers and PWIDs;
- Providing information to vulnerable adolescents through existing services.

A separate consultation is also needed between NASP and the International Organization for Migration to draft an effective and robust policy on HIV for migrants. Educational programmes and systematic VCT should be offered to all migrants, who amount to approximately 5 million individuals per year. A cost-effectiveness analysis of the frequency of HIV testing in KPs and migrants should also be carried out.

Acknowledgements

MKR, RP and SS are staff members of the World Health Organization. The authors alone are responsible for the views

expressed in this article and they do not necessarily represent the decisions, policy or views of the World Health Organization.

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