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HIV self-test during the time of COVID-19, India

The Joint United Nations Programme on HIV/AIDS (UNAIDS) has set a target of achieving 90:90:90 by 2020. This means that 90 per cent of people living with HIV (PLHIV) should know their status, of whom 90 per cent of those detected should be on anti-retroviral therapy (ART) and 90 per cent of those on ART should be virally suppressed by 2020[1]. Despite all the efforts made by the National AIDS Control Programme (NACP) of India, only 76 per cent of the PLHIV know their status and just over a half of these are under the umbrella of ART[2]. The HIV epidemic is mainly concentrated among the key population groups. There are still pockets of untested and unreached population groups who need to be identified.

The World Health Organization (WHO) introduced HIV self-testing guidelines in 2016[3]. HIV self-test is an approach where a person collects his or her own specimen (blood or saliva), and performs this test and interprets the results either alone or in the presence of someone he or she trusts[3]. The WHO pre-qualification programme was initiated to facilitate the quality diagnostic and treatment facilities for HIV, tuberculosis and malaria. As yet, there are four HIV self-tests that have been pre-qualified by the WHO. The pre-qualification process approximately takes three months or more[4]. Locally available HIV self-test kits have received national-level approval in countries such as Belarus, Brazil and Nigeria; however, the quality of these kits is still unknown[5]. HIV self-screening is viewed by the WHO as a triage strategy that stands to complement facility-based testing. Africa is presently leading in the implementation of HIV self-test, and there are some countries in the Asian Pacific regions that have included this in their national guidelines or strategic plan[6,7]. These screening tests have the potential to increase the access to HIV testing across all population groups. The latest evidence suggests that HIV self-testing when directed towards those who are at risk of HIV infection is cost-effective and also plays an important role in early diagnosis[8,9].

The policy for HIV self-testing is in varying stages of acceptance across different countries around the world. France, United States of America and United Kingdom have legally introduced HIV self-test kits, while India is yet to adopt such a strategy[3]. In the last two decades, various studies have been conducted in high- and low-income country settings in different population groups with different supervised and unsupervised self-testing approaches. The evidence generated from these studies suggests a high level of acceptability for HIV self-test[10,11].

The current National Strategic Plan of India mentions the need to generate evidence around HIV self-testing for the containment of this disease; however, there is no policy around HIV self-testing in the country[12]. Globally, the concerns around HIV self-test vary from accuracy, stigma, misuse of the test and linkage to care and treatment[13]. These could also be the reasons for apprehension among Indian policy makers. The fact remains that India is lagging behind other developing countries in implementing and evaluating HIV self-tests and studies pertaining to HIV self-test from the country are also sparse. In most of these studies HIV self-test manufactured by OraQuick (which was approved by the U.S. Food and Drug Administration in 2002[14] and also evaluated in many countries[15,16]) was used. Pai *et al*[17,18] examined the feasibility of using oral self-tests during labour and its impact in reducing transmission of HIV to new-borns in rural India. Currently, there is no indigenous HIV self-test available in India and HIV self-test approach is yet to be an integral part of the NACP. An appropriate policy framework and guidance is urgently required in this respect.

Recently a study conducted in the red-light area of Pune city, India, revealed that the concept of HIV self-test was acceptable among female sex workers due to its convenience, comfort and ease of doing the self-test[19]. These reasons were echoed across various high risk population groups such as men having sex with men, transgender women and female sex workers groups in Mumbai[20]. Evidence generated across all strata of population in a country will help understand the implementation of HIV self-test as socio-cultural difference varies across different countries.

As stated above, the NACP in India aims to achieve HIV test among 90 per cent of PLHIV Community-based testing, which uses rapid finger-prick test, has been initiated to such effect and is yet to gain its full potential[21]. On the other hand, Nepal has explored the possibility of community-based HIV self-testing among the key and vulnerable population groups and is working towards developing a policy for the same[22].

The realities of this programme need to be examined, in the context of the SARS-CoV-2 pandemic. In view of the rise in the number of people affected by COVID-19, the Government of India implemented a nationwide lockdown towards the end of March 2020 initially for 21 days and later extended further because of the escalation in cases[23]. Although the lockdown was needed for the management of the COVID-19 pandemic, it limited the movement of the people and access to quality healthcare. A shift in the priorities in the health system affected all the health programmes not only in India but the world over. All the resources were diverted towards the COVID-19 pandemic, resulting in disruption of the ongoing activities for communicable and non-communicable diseases. Thus, the promotive, preventive, treatment and curative services across the country were affected. HIV/AIDS was no different and had to bear the brunt of the pandemic. A modelling exercise conducted by the WHO along with UNAIDS for Sub-Saharan Africa revealed that an interruption in the ART supply and prevention services could lead to a rise in the HIV-related deaths and new infections across the region. As a precautionary measure, the countries were asked to build their own strategy to ensure continuity of HIV prevention and treatment services during the COVID-19 pandemic[24]. It was warned that without immediate actions to ensure continuous supply of medicines and access to preventive services, the gains that the countries had achieved would be negated.

India has a long way to go in terms of achieving the targets of 90:90:90. Despite creating awareness around HIV, nearly a fourth of PLHIV are yet to know their status and less than half are yet to be linked to the ART centres[12]. It is quintessential to continue accessing these population groups without hampering the HIV testing and care services. The good thing is that the national programme in India, in the time of COVID-19, ensured multi-medicine dispensing and encouraged local action plans to be developed by the State AIDS Control Societies to ensure uninterrupted services[25]. The needs for maintaining social distancing at the HIV Integrated Counselling and Testing Centres (ICTC) and Targeted Intervention sites were also urged upon. The number of people attending the ICTCs for HIV testing has dwindled primarily due to the fear of contracting the COVID-19 infection and also due to the restriction of travel. Amidst the COVID-19 pandemic, the US Centers of Disease Control and Prevention (CDC) has recommended the use of HIV self-test for those who are at a risk of contracting the disease[26].

In a country like ours with the current prevailing situation of COVID-19 and with a limited population movement and access to healthcare services, HIV self-test can certainly be beneficial. Innovative plans for linking people with positive HIV self-test results with confirmatory diagnostic services and treatment would be required. The strategic framework serves as a brief guide for preparation, implementation and monitoring of HIV self-test in countries that are planning, starting or scaling up implementation of HIV self-test. Examples can be drawn from other countries that have already adapted HIV self-test[27]. Finally, in the current COVID-19 pandemic situation, the WHO pre-qualification for HIV self-test kits needs to be expedited for promising candidates and concurrent approval by the regulatory bodies under the Government of India and NACP would help in early incorporation of such kits in the programme. The dream of ending AIDS, for its fruition, demand such multi-partner collaboration, where listening to the voices of people and responding to their needs remain central.

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