



AIDS Concern position paper on HIV self-testing (HIVST)

Self-testing refers to a process in which an individual performs an HIV rapid diagnostic test to know their HIV status in private. The World Health Organization (WHO) has strongly recommended HIV self-testing as an additional approach to be included in national HIV programs.

This is a public position statement setting out AIDS Concern's views about the use of self-testing and what needs to be done for self-testing to be best implemented in Hong Kong as an effective additional approach to HIV testing services. AIDS Concern sees that self-testing has a great potential to increase the uptake of HIV testing, and can play an important role in the HIV cascade of care if it is integrated well with the current healthcare system. We will be advocating for self-testing to be more available in Hong Kong.

Executive Summary

- Both local and international studies have proved that self-testing is effective in increasing the uptake and frequency of HIV testing.
- AIDS Concern supports combination approaches to HIV prevention and recognizes self-testing as an effective method to know about one's HIV status in addition to facility-based testing.
- Accuracy of the tests and linkage to care are important issues to be addressed for self-testing to be best implemented in Hong Kong.
- AIDS Concern believes that it is essential to have more demonstration projects on self-testing in Hong Kong to understand how it can be implemented to obtain the best public health outcomes.
- Urgent measures should be implemented by the Hong Kong government to ensure the quality of self-testing kits sold in the market to minimize the public health risks brought by substandard self-testing kits.

Self-testing as an effective additional approach to HIV testing services

It has long been known that HIV testing service has a significant place in the cascade of care as it facilitates individuals' access to prevention and treatment services. To reduce HIV transmission and HIV-related mortality, it is paramount that HIV positive individuals learn their HIV status as soon as possible, to avoid transmitting the virus to others and personally benefit from early treatment.

However, even though HIV testing uptake has increased in Hong Kong over the years, and despite the prevalence of facility-based HIV testing services in Hong Kong, facility-based services are unlikely to meet ongoing need to the full. According to the HARiS study in 2015, 40% of men who have sex with men (MSM) are still unaware of their HIV status in the last preceding year.

International studies have shown that providing the individuals with the option of learning their HIV status in private, self-testing can be effective in increasing HIV testing numbers by alleviating barriers individuals face in accessing facility-based testing, including fear of stigma and discrimination, perceived lack of confidentiality and inconvenience.

Both local and international evidence have proved that self-testing is valuable for increasing the uptake as well as the frequency of HIV testing in high risk populations. A local trial in Hong Kong shows that self-testing proves especially effective in increasing the uptake of testing among men who have sex with men (MSM)¹, which is consistent with results from other international systematic reviews.² A cross sectional feasibility study in Africa also shows high uptake of self-testing among participants (91.9%), suggesting that self-testing has potential to greatly scale up HIV testing.³ Studies also show that self-testing is effective in increasing the frequency of HIV testing among MSM by approximately 2 times a year⁴, which could be

¹ Wang Z, Lau J, Ip M, Ho S. A randomized controlled trial evaluating the efficacy of promoting HIV self-testing and online real-time counseling on increasing HIV testing among men who have sex with men in Hong Kong. Presented at: International Congress of Behavioral Medicine;7-10 December; Melbourne, Australia: 2016.

² Figueroa C, Johnson C, Verster A, Baggaley R. Attitudes and acceptability on HIV self-testing among key populations: a literature review. *AIDS Behav.* 2015;19(11):1949–65.

³ Augustine Talumba Choko. (2011) The Uptake and Accuracy of Oral Kits for HIV Self-Testing in High HIV Prevalence Setting: A Cross-Sectional Feasibility Study in Blantyre, Malawi. *PLoS Medicine* Volume 8 Issue 10

⁴ Katz D, Golden M, Hughes J, Farquhar C, Stekler J. HIV self-testing increases HIV testing frequency among high-risk men who have sex with men: a randomized controlled trial. Presented at:8th International AIDS Society Conference;19–22 July 2015;Vancouver, Canada;2015.

particularly useful for identifying HIV infections among those who are at high ongoing risk in need of frequent testing. In light of the evidence of its effectiveness, self-testing is now strongly recommended by the World Health Organization (WHO) to be offered as an additional approach to HIV testing services.⁵

AIDS Concern is confident that people can get easy access to friendly facility-based HIV testing services in Hong Kong and it is still our first line of recommendation for people who would like to know about their HIV status. However, we acknowledge the psychological or physical barriers some people may face in accessing the facility-based testing services. Therefore, we believe that self-testing should be included as an additional option to be considered by people at risk of HIV in a combination prevention strategy.

While self-testing offers great potential for more people to be aware of their HIV status, some people raise concerns over:

- Accuracy of the self-testing kits
- Linkage to post-test services
- Potential HIV risk behavior following self-testing

With inadequate support to self-testing users, people may misinterpret the HIV test results and miss the opportunity to be linked to care services, which may result in bad public health consequences. In the following paragraphs, we would look into the issues one by one and set out ways to obtain the greatest benefit from the implementation of self-testing in Hong Kong.

Accuracy of self-testing

Some people raise concerns over the accuracy of self-testing, worrying users may perform the tests incorrectly and misinterpret test results. However, many studies conclude that HIV rapid diagnostic test performed by a self-tester is as accurate as HIV rapid diagnostic tests (RDTs) used and interpreted by a trained health worker.

While different study designs vary in the levels of assistance given to the users, ranging from providing only manufacturer-provided instructions for use to giving in-person demonstration on how to perform the test, an overview of the study

⁵ World Health Organization (December 2016). Guidelines on HIV self-testing and partner notification (Supplement to consolidated guidelines on HIV testing services): 10

results show that both directly assisted and unassisted approach can achieve high sensitivity and specificity as long as quality products are utilized and support tools are provided. No difference is found in sensitivity or specificity between approaches that offered direct assistance (in-person demonstration) compared to those that did not.⁶

While the overall results for the accuracy of self-test kits are encouraging, it is still critical to implement the following measures that ensure the quality of the HIVST and the implementation fidelity of the users to maximize the performance of rapid diagnostic tests for self-testing.

- a) The government should provide clear pathways for validation and registration of HIVST kits. More and more people are now obtaining self-testing kits online from informal and non-validated sources, which may impose risks to their health if the kits they get do not meet the quality and safety standards. The government should address this issue by informing consumers about how to identify quality-assured HIVST kits and take legal actions to prevent products of unknown quality from reaching the market.
- b) Instructions for use of self-testing kits should be concise and clear to minimize errors and maximize the performance of HIV RDTs used for self-testing.
- c) Support tools like telephone-based or internet-based messaging services, 24-hour hotlines, and videos should be readily available. While in-person demonstrations can enhance the performance of HIVST, users should always have the option to perform the test in private with support tools provided with the test kit to alleviate their concern over confidentiality, which are also proved to be equally effective in ensuring the accuracy of the tests.

Linkage to care

As self-testing is usually performed in private without the presence of healthcare workers, some people express the concern over the difficulty in assuring the HIV-positive individuals are linked to treatment and care services. Missed linkage to care means that HIV-positive individuals would not be able to benefit from early treatment, and has serious implications for both the individual and public health.

⁶ World Health Organization (December 2016). Guidelines on HIV self-testing and partner notification (Supplement to consolidated guidelines on HIV testing services): 10, 29

To assure self-testing contributes to the enhanced efficiency of the health system instead of being a barrier to the HIV cascade of care, we believe self-testing users should be given the following *proactive and appropriate pre-test information and post-test counseling services* that link them to care services, regardless of which delivery model is used.

- a) All self-testing users should be clearly informed of accurate HIV knowledge and where to access treatment and support services before they perform the test.
- b) Users should be reminded of the limitations of testing in the window period before an HIV infection is detectable, and advised to retest or seek facility-based testing if they have doubts about their non-reactive test result. They should also be reminded of the importance of getting a confirmatory test in facility-based settings if they receive a reactive result.
- c) Workers should always provide *proactive* follow-up to identify potential new infections. Professional counseling services and accompanied referrals to other care services should be readily available.

HIV risk behavior

There was no increase of HIV risk behavior following self-testing shown in international studies. Studies show that MSM who receive HIV self-testing did not increase condomless anal intercourse compared to those receiving standard facility-based testing.⁷ It is also found that HIVST does not decrease the frequency with which MSM test for STIs⁸, which is contrary to some of the worries about high risk people reducing their clinical visits for sexual health check-ups.

However, some observational studies suggest that some users may be interested in using self-testing to screen potential sex partners as a way of serosorting, and may even use the testing results to inform decisions on HIV prevention behavior, such as using condoms. In many of these studies, users were unaware that the current HIVST technologies have a three-month window period and have limitations in identifying acute or early HIV infection.

⁷ Katz D, Golden M, Hughes J, Farquhar C, Stekler J. HIV self-testing increases HIV testing frequency among high-risk men who have sex with men: a randomized controlled trial. Presented at: 8th International AIDS Society Conference; 19–22 July 2015; Vancouver, Canada; 2015.

⁸ Jamil M, Prestage G, Fairley C, Grulich A, Smith K, Chen M, et al. Access to HIV self-testing doubles the frequency of HIV testing among gay and bisexual men at higher risk of infection: a randomised controlled trial. Presented at: 21st International AIDS Conference; 18-22 July; Durban, South Africa; 2016.

AIDS Concern believes that serosorting following HIVST should not be recommended in populations with high HIV incidence like the MSM community. More community education should be carried out to give clear messages about the potential risks of using HIVST to make decisions about risk behavior and minimize misuse.

Conclusion

AIDS Concern recognizes self-testing as an effective additional approach to HIV testing services. If self-testing can be integrated into the healthcare system, it would be a very powerful tool in identifying new infections and controlling the epidemic. To increase the uptake of self-testing and minimize the risks of misuse, urgent measures should be implemented by the Hong Kong government to ensure the quality of self-testing kits in the market, and ensure the high risk communities have correct information and easy access to the quality self-test kits.

March 2017