Self-testing is commonly used to test for diabetes, pregnancy, sexually transmitted infections, HIV, and, more recently, for COVID-19. It allows the user to conduct the test in the safety and comfort of home, alone or with someone they trust. These tests use finger prick blood, urine, saliva, or nasal swabs, and give results within 15 to 20 minutes.

Hepatitis C self-testing (HCVST) is now increasingly gaining acceptance following recommendations from the World Health organization (WHO) for their use, although HCVST kits are currently available for research purposes only using either saliva or finger prick blood.
ACCEPTABILITY, FEASIBILITY AND USABILITY OF HCVST

Given that HCVST products are currently implemented for research purposes only, it is useful to understand how testing kits have been assessed by different users, as this will have implications for their future uptake.

WHO and FIND conducted several values and preferences studies on HCVST across 10 low- and middle-income countries in key populations, including people who inject drugs (PWID), men who have sex with men (MSM), female sex workers (FSW), the general population and healthcare workers (HCW). Participants from these population groups said the benefits and advantages of HCVST outweigh any potential disadvantages. They considered HCVST to be an innovative method to motivate users to access testing, demand treatment and modify risk behaviours.

SITUATION OF DIAGNOSIS AND TREATMENT OF HCV IN THE WHO SOUTH-EAST ASIA AND WESTERN PACIFIC REGIONS

An estimated 58 million people are living with chronic HCV globally, with only 21% diagnosed, and of which only 13% have access to treatment. The South-East Asia region has a rate of 7% positive diagnosis, of which only 5% are on treatment. The Western Pacific region has diagnosed 25% of its population as HCV positive, of which only 10% is on treatment. These low rates of diagnosis and treatment are attributed to lack of awareness, poor access to testing and treatment services, stigma, discrimination and other structural barriers. At these rates of diagnosis and treatment, it will not be possible to achieve the global HCV elimination targets by 2030, which aim at 90% reduction of new infections and 65% reduction in mortality. Studies have suggested that except for Australia and South-Korea, no countries in the region is likely to achieve the 2030 global elimination targets. Because of these shortcomings, WHO now recommends HCVST as an additional approach to HCV testing services in its guidelines “Recommendations and guidance on hepatitis C virus self-testing”. The WHO HCVST recommendations were based on evidence from HIV self-testing (HIVST), which has been successfully implemented in a range of settings and has proved effective in increasing access to and uptake of testing, particularly for populations that may not otherwise test, including key populations (see next section). By July 2020, globally, 88 countries had developed national policies supporting HIVST, with nearly half of them implementing such self-testing. In the Asia-Pacific region, 15% of the countries have policies for HIVST, while countries in the South-East Asia region have yet to adopt HIVST.

WHO RECOMMENDATION ON HEPATITIS C VIRUS SELF-TESTING (HCVST)

HCVST self-testing should be offered as an additional approach to HCV testing services (strong recommendation, moderate-certainty evidence).

Remarks
- HCVST needs to be followed by linkage to appropriate post-test services, including confirmation of viraemic infection, treatment, care and referral services, according to national standards.
- It is desirable to adapt HCVST service delivery and support options to the national and local context, which includes community preferences.
- Communities, including networks of key and vulnerable populations and peer-led organisations, need to be meaningfully and effectively engaged in developing, adapting, implementing and monitoring HCVST programmes.

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WHO and FIND also conducted multi-country usability and feasibility studies of HCVST in China, Egypt, Georgia, Kenya, Pakistan and Vietnam among PWID, MSM and the general population. The proportion of participants who found HCVST very easy or easy to conduct ranged from 55% to more than 80%. Acceptability was high, with > 90% of participants in four countries willing to use HCVST again. Most participants were able to use the HCVST kits correctly. Over 94% of participants in five of the six countries said they would recommend HCVST to friends and family; in China, only 74% said they would recommend this.

IMPLEMENTATION OF HCVST: NATIONAL CONTEXT AND POLICY CONSIDERATIONS

Countries are increasingly developing national viral hepatitis management plans and are at various stages of their implementation. However, these plans are often not sufficiently costed and funded and consequently awareness, access to testing, diagnostics for confirmation of chronic infection and treatment access remain low. These gaps need to be addressed to improve demand for HCV testing. In light of this, HCVST could be focused on areas and populations with the greatest burden and gaps in testing and treatment services.

Given the experience and understanding from HIVST and the findings of the studies on HCVST, self-testing is a particularly attractive solution to reach people who may be unable or have difficulty accessing existing services or who prefer self-care options, especially MSM, PWID and part of the general population. HCVST services could be integrated into existing self-testing services for HIV, for example, or become part of traditional HCV testing approaches.

National policy makers should consider reviewing national policies to update and include HCVST. National regulatory policies can be reviewed to improve expedited approval and availability of quality assured HCVST products.

To ensure wider dissemination of information on HCVST, high-risk groups and community-based organizations should be involved in the design or upgrading of national policies, programme implementation, programme monitoring for quality improvement, and in the development of information and communication materials on HCVST.

CONCLUSION

The current rate of diagnosis and linkage to treatment for HCV will hinder countries from achieving the elimination targets by 2030. HCVST offers a solution to this problem by being an additional approach to HCV control, allowing people to test for HCV safely and privately, and getting results rapidly. As a result of existing evidence from HIVST, and additional data from recent HCVST studies, WHO has now recommended the use of HCVST as an additional strategy to increase access to and uptake of testing, particularly for populations, such as high-risk groups, that may not otherwise want to get tested. Countries need to consider updating or introducing policies and regulatory frameworks that are supportive of HCVST and can ensure expedited availability of HCVST kits.

POLICY RECOMMENDATIONS

WHO has recommended the use of HCVST as a complementary HCV testing strategy for national programmes. It is vital that countries start adopting HCVST strategies for their local context to improve testing and linkages to treatment. We therefore urge governments to take the following policy and programme steps to ensure optimal benefit from HCVST services.

1. Understanding the current data and gaps: It is essential for national health programmes to understand the current data on testing gaps and identify populations that can be prioritized for uptake of HCVST.

2. Enabling national policy and regulatory framework: National policies should be introduced or updated in support of HCVST. Regulatory frameworks and procedures to enable expedited registration and availability of quality assured HCVST testing kits must be developed to address any potential access barriers.

3. Engage high-risk communities: High-risk groups and their national or local networks should be involved in the design, implementation and monitoring and development of appropriate information and education materials to enable HCVST services in their country.

4. Develop appropriate service delivery models: Appropriate models, based on evidence and national data, service delivery points and resources available must be developed to best suit local needs. Effective linkages to HCVST for diagnosis of chronic infection, care, treatment, and integration in existing HIV and other health services should be considered.
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