

## **A review of values and preferences for blood-based versus oral fluid HIV self-tests**

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### **Background:**

In 2016, WHO recommended HIV self-testing (HIVST) as an additional approach to HIV testing services. As of June 2017, 40 countries have a supportive policy for HIVST, and 48 countries are planning to introduce HIVST as part of their national strategic plans, testing strategies and policies, and regulatory frameworks.

HIVST product options can generate demand, by giving users a choice of different types of test. Preference for blood versus oral specimen varies depending on factors such as the type of population, setting, behavioral characteristics and availability of products.

This review aims to support expansion of HIVST with information about the values and preferences of users regarding HIVST specimen types (oral or blood).

### **Methods:**

Four electronic databases (Pubmed, Embase, Scopus and Popline) were systematically searched between January 1995 and July 2017. We included studies comparing oral to blood self tests that reported on preferences for specimen type for HIVST, whether participants self-tested or not. Extracted data was analyzed by type of population (general or key population).

### **Results:**

11 studies met inclusion criteria. The majority found that participants preferred blood-based tests (n=8/11), because they considered blood based tests to be more accurate than oral based tests. In particular, men who have sex with men, people who inject drugs, as well as men in general, had strong preference for blood-based self-tests.

However, three studies (n=3/11) also reported participants preferred oral fluid-based HIVST, in particular men who have sex with men, men in general and female sex workers, primarily because these were considered painless.

Young people in Malawi and female sex workers in Kenya in particular appeared to have a preference for oral fluid self-tests. The methodological quality of studies was variable, and some studies were small in scale. No meta-analysis was performed because of the heterogeneity of the studies.

### **Conclusions and Recommendations:**

Some users expressed preference for blood-based HIVST because of considered higher accuracy than oral tests. However, countries should consider both blood and oral test options for HIVST, to provide choice and to reach a variety of people who may not test otherwise.