Reaching key and peripheral populations: a phone-based survey of HIV self-test users in West Africa



Arsène Kouassi Kra¹, Arlette Simo Fosto¹, Kouassi Noël N'guessan², Olivier Geoffroy², Sidibé Younoussa³, Odé Kanku Kabemba³, Baidy Dieng⁴, Pauline Dama Ndeye⁴, Nicolas Rouveau¹, Mathieu Maheu-Girou⁷, Boily Marie-Claude⁵, Silhol Romain⁵, Marc Delbe⁶, Anthony Vautier⁴ and Joseph Larmarange¹ on behalf of the ATLAS team.

¹Centre Population et Développement (Ceped), Institut de Recherche pour le Développement (IRD), Université de Paris, Inserm, France – ²Solidarité Thérapeutique et Initiatives pour la Santé (Solthis), Côte d'Ivoire – ³Solidarité Thérapeutique et Initiatives pour la Santé (Solthis), Mali – ⁴Solidarité Thérapeutique et Initiatives pour la Santé (Solthis), Sénégal – ⁵MRC Centre for Global Infectious Disease Analysis, School of Public Health, Imperial College London, London, United Kingdom - ⁶Department of Global Health and Development, Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, UK - ⁷Department of Epidemiology, Biostatistics, and Occupational Health, School of Population and Global Health, McGill University, Montréal, QC, H3A 1A2, Canada







In West Africa, community-based strategies focussing on key populations (KP) such as

female sex workers (FSW) and men having sex with men (MSM) have significantly improved access to HIV testing for KP. However, some of them (like "occasional FSW" or "hidden MSM") remain difficult to reach, as well as their sexual partners and clients.

HIV self-testing (HIVST) kits can be distributed to primary contacts for personal use and through secondary distribution, where contacts are invited to redistribute kits to their peers, partners, and relatives.

Since 2019, the ATLAS program implements such a strategy in Côte d'Ivoire, Mali, and Senegal, including FSW-based and MSM-based activities within the communities.





A total of **2'405 participants** were recruited across countries out of 44'598 HIVST kits distributed (participation rate: 5.4%), 1'305 among the FSW-DC (3.9%) and 1'100 through MSM-DC (9.1%).

Of participants, 69% received their self-test kit through primary distribution and 31% received it from a friend (17%), sexual partner (7%), relative (6%) or colleague (1%), which illustrates the **feasibility of secondary distribution**.

Half of participants perceived themselves as "not exposed at all" to HIV risk.

In the FSW-DC, 48% of participants were male, and in the MSM-DC 9% were female, showing the **capacity of HIVST to reach sexual partners and clients of KP**.

Only 55% of male participants in the MSM-DC reported to the interviewer that they ever had sex with a man, suggesting that **some "hidden MSM" may have been recruited**.



To examine the **profiles of actual HIVST** users without actively tracking them, we implemented a **phone-based survey**.

Between March and June 2021, leaflets were distributed in Côte d'Ivoire, Mali and Senegal with the HIV test kits, inviting users to call a free phone number anonymously. Participation was rewarded with \$3 USD of phone credit.

Each flyer had a **unique participation number** to indirectly identify the Distribution channel (DC), FSW-based or MSM-based.



Proportion of first-time testers in Coupons survey compared with other surveys conducted among MSM and FSW



Similarly, men participants from the MSM-DC and female participants from the FSW-DC are **older and more educated** compared to surveys conducted among MSM and FSW.



HIVST offers a complementary testing approach to increase diagnosis coverage among key populations that face barriers to conventional HIV testing strategies.

Secondary distribution of HIVST is feasible and has the potential to reach, beyond key populations, vulnerable peripheral groups.







