Acceptability and feasibility of HIV self-testing distribution modes among key populations in Morocco

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Abstract

Background: HIV self-testing was introduced to enhance HIV testing uptake, especially among key populations. Despite the benefits, its use remains relatively low in the WHO Eastern Mediterranean Region.

Aim: To assess the acceptability, usability and feasibility of HIV self-testing among key populations in Morocco.

Methods: We assessed the usability and acceptability, as well as the feasibility of ordering online and picking up in pharmacies and of distribution by people living with HIV of an oral HIV self-testing kit among 3465 female sex workers, men having sex with men, and partners of newly diagnosed people living with HIV in Morocco. Data were collected using 4 questionnaires administered online anonymously and analysed using Stata version 14.0.

Results: A total of 3465 individuals received the HIV self-testing kits, 54.4% male, 43.7% female and 1.9% transgender. High acceptability rates of 90.2%, 86.2% and 80.4% were reported among the female sex workers, men having sex with men, and partners of newly diagnosed people living with HIV, respectively. HIV positivity rates were 1.2% among the female sex workers and men having sex with men, and 4.3% among partners of people living with HIV. Between 44.0% and 73.4% of the participants had never been tested for HIV.

Conclusion: Our findings highlight the value of extending HIV self-testing services to key populations in Morocco and possibly other countries in the Middle East and North Africa.

Keywords: HIV, self-testing, key population, MSM, CSW, FSW, PLHIV, transgender, MENA, Morocco

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Background

According to the 2022 United Nations Global AIDS Report, approximately 38.4 million people are living with HIV globally (*1*). To complement the substantial gains achieved during the 90-90-90 campaign against the HIV/AIDS epidemic, the United Nations has set an ambitious new goal of "95-95-95" to accelerate end game elimination by 2030 (*2*). Closing the gap on the additional 5% required to achieve these goals requires rethinking and diversifying existing HIV testing strategies, particularly as testing is only a means of entry into the care system and not an end game strategy (*2*).

In Morocco, among the achievements of the National HIV Strategic Plan 2017-2023, launched by the Moroccan Ministry of Health, is the introduction of innovative approaches to diversify HIV screening methods with the specific aim of targeting key populations at high risk of transmitting or acquiring new infections (*9*). Even though Morocco implements a sound HIV testing strategy, with free and confidential testing offered by numerous health, community and non-clinical providers, it is estimated that 17% of the 22 700 PLHIV in Morocco were still unaware of their HIV status as of the end of 2021 (*10*). Lack of awareness among key populations, such as men having sex with men (MSM), transgender people and female sex workers (FSWs) is partly due to the unfavourable intervention environment, as they may not use hospital, clinic or laboratory-based HIV testing because of the fear of stigma and discrimination.

To improve testing and retesting uptake, the World Health Organization recommends that users of HIV self-testing perform and interpret the test by themselves, in a self-determined location. Users typically sample either mucosal cells and saliva or blood. Easy to use and interpret, HIV self-testing is an important screening tool for key populations and partners of people living with HIV (PLHIV). WHO also recommends testing high risk individuals, such as new sex partners of PLHIV, to facilitate ethical partner notification strategies that are also effective and evidence-based (*11*).

Our self-test, self-determination model has the advantages of promoting appropriate use of self-tests, directing users to care and facilitating confidentiality and privacy (*6*). Self-tests are also available for

administration with assistance through demonstration by a trained provider on how to perform the test and interpret the results. Reactive HIVST are confirmed in a hospital or laboratory using the Morocco national testing algorithm before making a conclusive determination of HIV status (3).

Self-testing for HIV has been available in Morocco since September 2019, thanks to a pilot study called 'Autotest-Maroc'. Despite its obvious benefits for at-risk populations, use rate remains relatively low, particularly in the Eastern Mediterranean Region (7-8). To overcome this challenge, we have identified several possible distribution channels for HIV self-test kits in Morocco: i) open (in pharmacies, internet, vending machines, and kiosks); ii) restricted (via private providers, caregivers, or at health centres); and iii) semi-restricted (withdrawal or distribution through an Intermediary) (4-5).

The objective of our research was to determine if features such as anonymity, confidentiality and usability could increase access to and frequency of HIV testing, particularly among PLHIV and their new sex partners. To achieve this, we conducted an intervention study to assess the feasibility, acceptability and usability of in Morocco by PLHIV and related at-risk populations.

Methods

We initiated our study, Autotest Maroc, in 2019 as a intervention-demonstration project in collaboration with the Association de Lutte Contre le Sida (ALCS), a community-based organization (CBO) focused on HIV/AIDS testing and treatment in Morocco and the Moroccan Ministry of Health and Social Protection (MOHSP), with funding from The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), UNAIDS and the World Health Organization (WHO).

Pre-intervention

We engaged in the following pre-intervention activities:

i. **Formation of the steering committee:** We established a steering committee consisting of healthcare providers, community actors, and representatives of MOHSP, UNAIDS, GFATM, WHO, and the research team. The committee supervised the study's implementation and monitoring.

ii. **Consultation with communities:** We consulted MSM and FSW communities to discuss distribution methods, promotional strategies, and monitoring strategies.

iii. **Preparation of test kits:** We used WHO's-prequalified OraQuick rapid salivary HIV-1/2 antibody test. We placed each kit in a numbered box with an inforgraphic brochure in Moroccan Arabic, French, and pictorial form. The brochure explained how to use the kit and interpret the test result, steps to follow after a reactive result, and addresses of care centres for diagnosis confirmation and linkage to care. It also included the phone number of a peer navigator for assistance.

iv. **Development of promotional materials:** We created a flyer, available in electronic and paper formats, that covered HIV transmission modes, testing benefits, and the advantages of self-testing. ALCS produced a demonstration video in dialectal Moroccan Arabic, and we posted adverts on dating platforms used by key populations (e.g. Gayromeo, Grindr, Badoo).

v. **Training:** We organized a 2-day training for the research team, including physicians, FSW and MSM peer educators, lay providers and peer navigators. The training covered the benefits and limitations of HIV self-testing, promotional approaches and details of the research protocol.

Intervention

This was an intervention study with 4 arms:

- Arm 1: To verify the usability of HIV self-testing among MSM and FSWs
- Arm 2: To assess the acceptability and feasibility of distribution by peer educators
- Arm 3: To assess the feasibility and acceptability of ordering HIV self-testing kits online and collecting them at designated pharmacies
- Arm 4: To assess the feasibility and acceptability of HIV self-testing kit distribution by PLHIV to new sexual partners

Sampling and data collection

The inclusion criteria for participants in Arms 1, 2, and 3 were: i) self-identification as MSM or FSW; ii) 18 years of age or older prior to study commencement; and iii) completion of informed consent to participate in the study. In these 3 arms, we excluded PLHIV on antiretrovirals and pre-exposure prophylaxis (PrEP) users because the study test – OraQuick rapid HIV-1/2 antibody test- is unreliable due to a high risk of false negatives (12). For Arm 2, we also excluded PLHIV or others who received voluntary HIV test kits and counselling from ALCS centres in the last 12 months. For Arm 4, we included participants who were PLHIV, aged 18 years or above, on care, and who had not yet shared their HIV status with their partners.

Sample size for Arms 1, 2 and 3: ALCS centres distributed convenience samples to each arm in every city, based on the active file for each city. The number of kits allocated to ALCS determined the sample size for each key population, including MSM and FSW.

Sample size calculation for Arm 4: We recruited 173 people for this arm of the study. Assuming that 50% of PLHIV do not share their HIV status with their partners, a risk of error of 5%, a study power of 80%, and a design effect of 1, we recruited people according to the following formula with rounding:

$$N=(Za)^2 \frac{P(1-P)}{DP^2}$$

Za= 1.96
P= 0.50

DP: Desired precision that corresponds to the width of the IC95 (value around 0.08).

We recruited participants according to these sample size calculations from ALCS care centres in Agadir, Marrakech, and Casablanca.

We used a different questionnaire to collect data from each of the 4 arms of the study. All 4 questionnaires included common sections on socioeconomic data. Additionally, we included specific sections: ease of use and interpretation of HIV self-testing for arm 1, frequency of HIV testing and reasons for not accessing testing for arms 2 and 3, and partner notification strategies for arm 4.

Peer educators and pharmacies used a diary to track the number of kits distributed and record the unique code for each kit. Referral and counter-referral forms helped peer navigators monitor the linkage to care. For feedback on the use of the kits, we made 3 communication pathways available to the participants: a hotline ("Allo auto-test"), a messaging platform ("Bila Haraj"), and a website ("autotest.alcs.ma").

Self-test kit

The OraQuick HIV-1/2 kit (OraSure Technologies, USA) is an HIV self-test kit for the detection of HIV-1/2 antibodies in human oral fluid. It is simple and easy to use, with a visual read panel like a pregnancy test, providing accurate results in 15 minutes. Laboratory confirmation test demonstrated 99% concordance with confirmatory Western blot tests. Because of its ease of use and its accuracy, the WHO recommends it. We distributed the WHO-recommended salivary test kits to the 4 study arms. The details of this distribution are provided in Table 1.

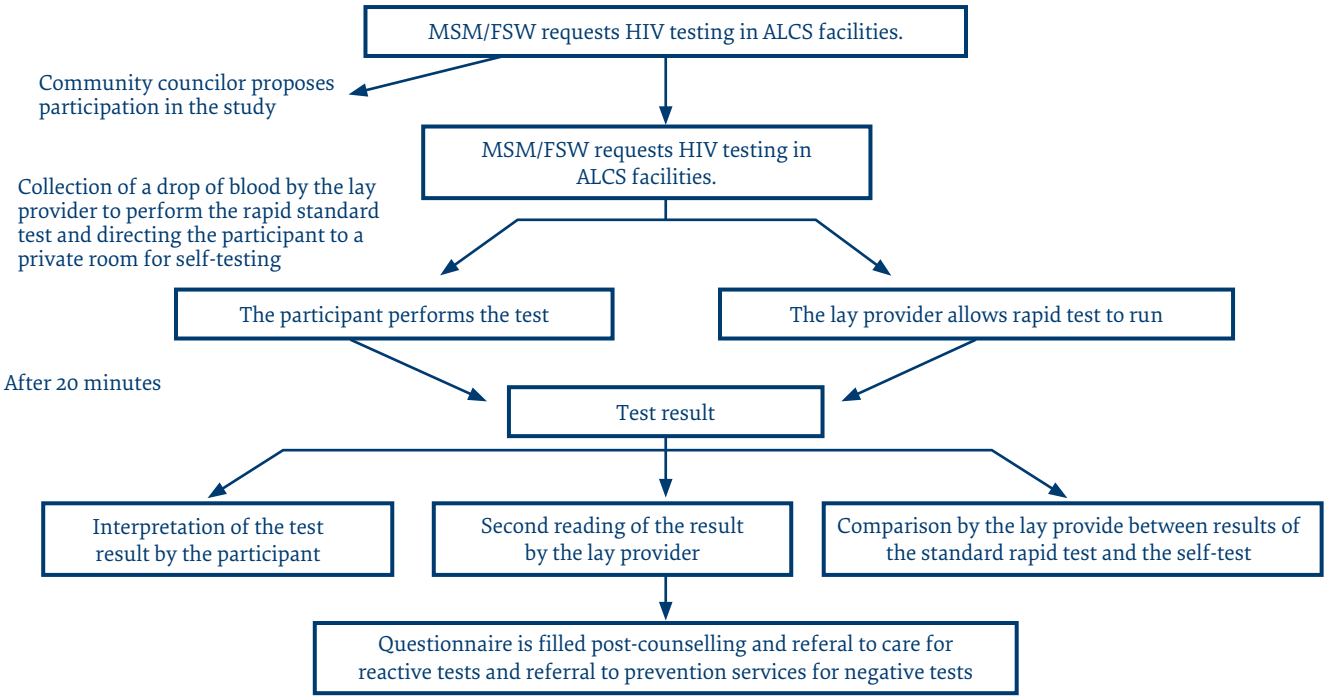
Ethics approval

All participants gave written consent to participate voluntarily in this study. We obtained ethics clearance from the Casablanca Biomedical Research Ethics

Table 1. Number of HIV self-test kits distributed in Arms 1, 2 and 3, Morocco, 2019

Arm	Number of kits distributed	Percentage of total kits (%)	Cities
1	492	14.2	Agadir, Marrakech, Casablanca, Tangier, Rabat
2	2428	70.1	Agadir, Marrakech, Casablanca, Tangier, Rabat
3	240	6.9	Marrakech, Casablanca
4	305	8.8	Agadir, Marrakech, Casablanca
Total	**3465**	**100**	

Figure 1. Flow chart of study intervention arm 1, Morocco, 2019



Committee (IRB00002504) in the Faculty of Medicine and Pharmacy of Hassan II University in Casablanca, Morocco.

Study design

We conducted a 4-arm intervention study on the feasibility, acceptability, and useability of HIV self-testing among key at-risk populations in Morocco.

Arm 1

We suggested participation in our intervention study to all MSM and FSWs who arrived at ALCS centres to request standard HIV testing. Arm 1 lasted 6 months and during this time our main objective was to test the usability of HIV self-test kits. We provided consenting participants with a saliva kit and offered them a private room at the ALCS centre. Participants self-reported the results to study enumerators. In parallel, we took a blood sample from each participant and conducted a HIV 1 / 2 rapid test at ALCS. We then matched the results for concordance. Figure 1 is a flow chart of the study intervention in Arm 1.

Arm 2

To assess the acceptability of HIV self-testing among key at-risk populations and the feasibility of distribution by peer educators in 'HIV hotspots,' peer educators identifying as FSW and MSM promoted HIV self-testing among their peers and suggested participation to eligible beneficiaries. Before offering the kit, the peer educators explained the importance of giving accurate feedback on their test results through any of the available channels. Arm 2 lasted 6 months. We have provided a flow chart of the second Arm 2 in Figure 2.

Arm 3

In Arm 3, our objective was to test the feasibility of HIV self-test kits distribution among MSM and FSW in a wealthier population. This population is generally hard to reach by standard public health prevention programmes at ALCS. The participants accessed the autotestalcs.ma website and filled an anonymous questionnaire. We directed them to retrieve their free test kits from one of the 8 participating pharmacies. We have provided the flow chart of Arm 3 in Figure 3.

Arm 4

The main objective of Arm 4 was to assess the feasibility of anonymous HIV self-test kit distribution by PLHIV to their sex partners as a means of status disclosure. Each participant received 1–3 self-test kits from a peer educator based on their current number of sex partners. If they indicated that they had more than 3 simultaneous active sex partners, we referred them to an ALCS facility for blood-based confirmatory testing. Peer educators offered screening and treatment for partners of PLHIV who tested positive. We have provided the flow chart of Arm 4 in Figure 4.

Data analysis

For arms 1 and 2, trained data entry assistants at ALCS centres in 5 cities entered the data using EpiData. In Arm 3, we recorded all data electronically via online questionnaires. Peer educators completed data entry for Arm 4 using Voxco software. We conducted a descriptive analysis using EpiData and Stata/SE 14.0 software.

Figure 2. Flow chart of study intervention Arm 2, Morocco, 2019

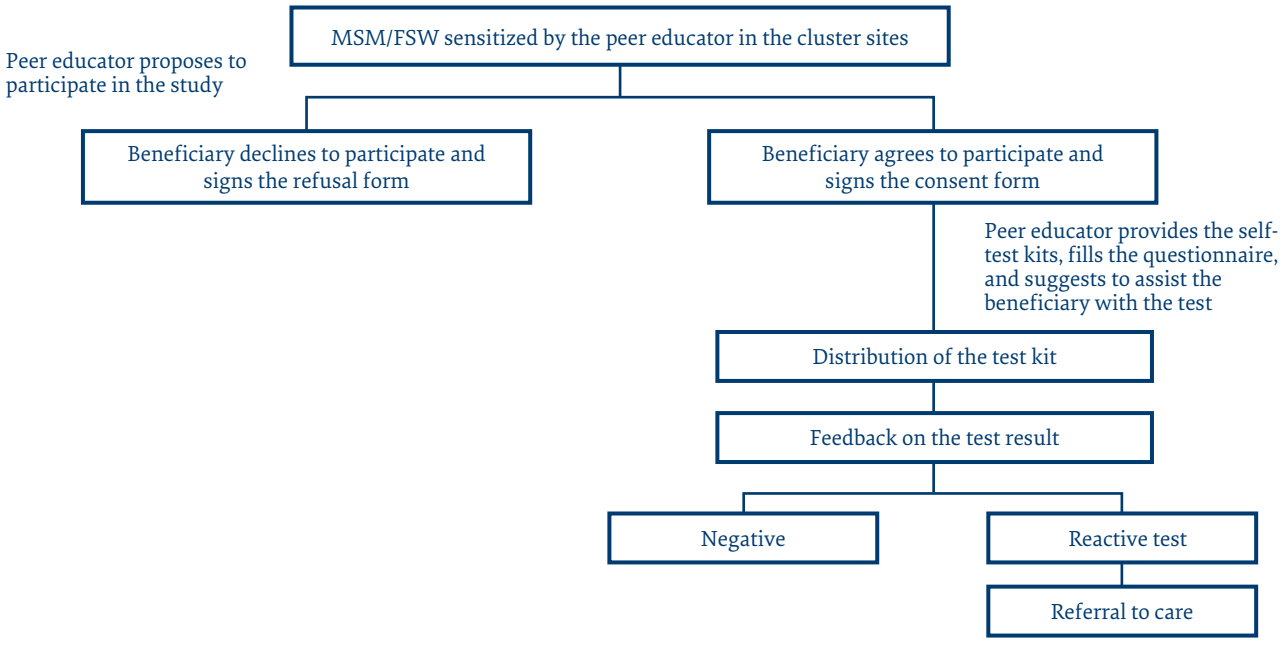


Figure 3. Flow chart of participation in Arm 3 of the intervention, Morocco, 2019

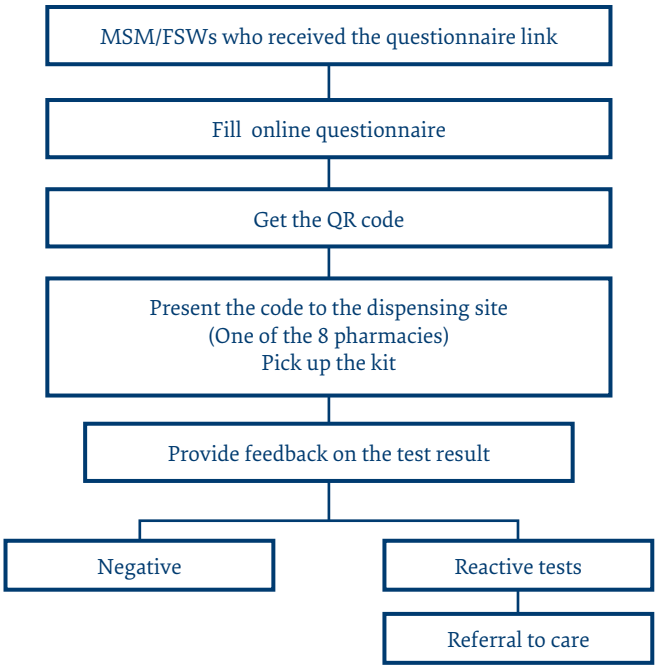
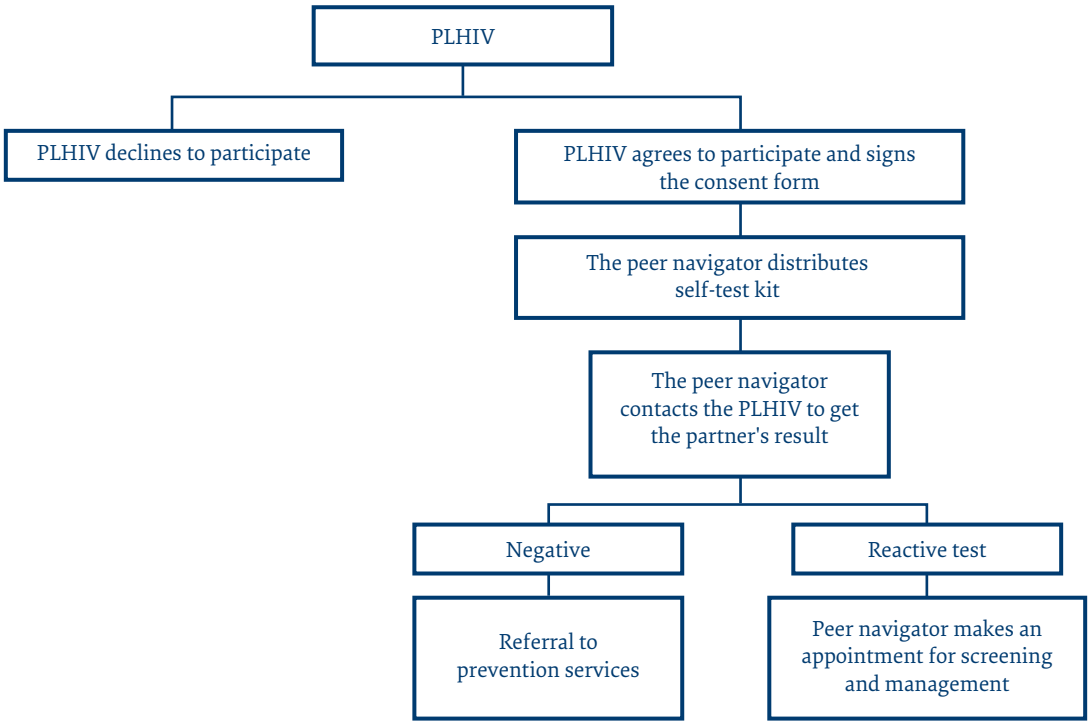


Figure 4. Flow chart of participation in Arm 4, Morocco, 2019



Results

Sociodemographic characteristics

We distributed 3465 HIV self-test kits across the 4 intervention arms, reaching 3333 participants. Of these, 1812 (54.4%) participants identified as male, 1459 (43.7%) as female, and 62 (1.9%) as transgender. In terms of sexual orientation, 1168 (35.0%) identified as homosexual, 556 (16.7%) as bisexual, and 1511 (45.3%) as heterosexual. Two thousand two hundred and one (66.0%) participants reported being single, while 621 (18.6%) were divorced or separated. We observed a difference in educational level and employment status across the 4 arms. For instance, Arm 3, which targeted MSM and FSWs with a higher socioeconomic status, included participants with a higher average level of education and a lower unemployment rate than Arms 1, 2, and 4. One hundred and ninety-five participants (83.3%) in Arm 3 had attained higher education, and 34 (14.3%) were unemployed. Overall, across all participants, 1243 (37.3%) had graduated from middle school, and 1202 (36.0%) were unemployed. Table 2 provides a more detailed breakdown of the sociodemographic characteristics.

All the distribution modes were found to be feasible and effective in reaching people who had never been tested. Based on this, within Arms 2 and 3, 1776 (73,4%) and 103 (44.0%) participants had never been tested for HIV, respectively. In contrast, 645 (26.6%) and 131 (56.0%)

Table 2. Sociodemographic characteristics of participants, Morocco, 2019

Categories	ARM 1	ARM 2	ARM 3	ARM 4	Total
Characteristic	n = 492 (%)	n = 2428 (%)	n = 240 (%)	n = 173 (%)	N = 3333 (%)
Gender					
Male	259 (52.6)	1241 (51.1)	213 (88.8)	99 (57.2)	1812 (54.4)
Female	233 (47.3)	1128 (46.5)	26 (10.8)	72 (41.6)	1459 (43.7)
Transgender male or female	0	59 (2.4)	1 (0.4)	2 (1.2)	62 (1.9)
Key population					
MSM	259 (52.6)	1300 (53.5)	ND	0	1559 (46.7)
FSW	233 (47.4)	1128 (46.5)	ND	0	1361 (40.8)
PLHIV	0	0	ND	173 (100)	173 (5.2)
Sexual orientation					
Homosexual	190 (38.6)	856 (35.3)	60 (25.0)	62 (35.8)	1168 (35.0)
Bisexual	77 (15.7)	421 (17.3)	43 (17.9)	15 (8.7)	556 (16.7)
Heterosexual	212 (43.1)	1106 (45.5)	97 (40.4)	96 (55.5)	1511 (45.3)
Undefined	13 (2.6)	45 (1.9)	40 (16.7)	0	98 (3.0)
Relationship status					
Single	338 (68.7)	1629 (67.1)	153 (66.8)	81 (46.8)	2201 (66.0)
Married	16 (3.3)	135 (5.6)	22 (9.6)	41 (23.7)	214 (6.4)
Stable partner	13 (2.6)	120 (4.9)	41 (17.9)	15 (8.6)	189 (5.7)
Divorced or separated	110 (22.4)	476 (19.6)	7 (3.1)	28 (16.2)	621 (18.6)
Widowed	15 (3.0)	68 (2.8)	6 (2,6)	8 (4.6)	97 (3.0)
Professional situation					
Unemployed	203 (41.3)	880 (36.2)	34 (14.3)	85 (49.1)	1202 (36.0)
Non-formal employment	98 (19.9)	674 (27.8)	26 (11.0)	61 (35.3)	859 (25.8)
Civil servant	66 (13.4)	154 (6.3)	87 (36.7)	19 (11.0)	326 (9.8)
Liberal profession	55 (11.2)	489 (20.1)	41 (17.3)	5 (2.9)	590 (17.7)
Student	70 (14.2)	231 (9.5)	49 (20.7)	3 (1.7)	353 (10.6)
Educational Level					
No formal education	83 (16.9)	412 (17.0)	4 (1.7)	18 (10.4)	517 (15.5)
Elementary School	90 (18.3)	603 (24.8)	6 (2.6)	52 (30.0)	751 (22.5)
Secondary School	182 (37.0)	959 (39.5)	29 (12.4)	73 (42.2)	1243 (37.3)
Higher Education	137 (27.8)	454 (18.7)	195 (83.3)	30 (17.3)	816 (24.5)
HIV screening history					
Yes, I have already had an HIV test	–	645 (26.6)	131 (56.0)	–	(26.6–56.0)
No, I have never had an HIV test	–	1776 (73.4)	103 (44.0)	–	(44.0–73.4)

Table 3. **Acceptability of HIV self-testing among MSM and FSWs in Arms 1, 2 and 3**

Categories	ARM 1		ARM 2		ARM 3		Total	
Acceptability (willingness to buy and use HIV self-test if available)	n = (492)	%	n = (2 428)	%	n = (240)	%	N= (3 160)	%
Yes	444	90.2	2 092	86.2	193	80.4	2 729	86.4
No	45	9.1	336	13.8	47	19.6	428	13.5

participants in Arms 2 and 3 reported having previously undergone HIV testing, either as part of routine healthcare, out of curiosity, or following engagement in risky behaviour.

Of the 3160 participants included in Arms 1, 2, 3 and asked about their willingness to purchase and use HIV self-test if it was available, 2729 responded positively, while 428 were not willing to do so. We recorded high acceptability rates of 90.2% (444/492) for Arm 1, 86.2% (2092/2 428) for Arm 2 and 80.4% (2729/3 160) for Arm 3 (Table 3).

In Arm 4, we found that nearly all the PLHIV agreed to distribute the test kit to their partners. However, maintaining privacy was a significant concern for them. Approximately 67.05% (116/173) of them preferred to provide the HIV self-test kit to their partners anonymously without revealing their current HIV status while 30.64% (53/173) agreed to disclose their HIV status and personally give the kit to their partners with full disclosure.

Regarding usability of the OraQuik test, our evaluation in Arm 1 provided valuable insights. We found that 92.2% (239/259) of MSM and 80.6% of FSWs (188/233) found the saliva test very easy to perform. Conversely, 6 individuals found the test very difficult to perform, 5 of whom were illiterate FSWs.

The most common reasons for accepting self-testing in Arm 2 were privacy (46.4%), routine health check(16.2%), and concerns about the potential risk of HIV infection (18.9%). Figure 5 details additional reasons.

The rates of positivity among MSM and FSWs in Arms 1, 2, and 3 were 3.8%, 1.2%, and 1.25%, respectively. In contrast, Arm 4 focused on distributing test kits to partners by PLHIV. Consequently, we observed a positivity rate of 4.3% among the 305 test kits distributed to PLHIV partners (Figure 6).

Discussion

We conducted our study through a 4-arm intervention. The first arm confirmed the usability of an oral HIV self-test, while the remaining 3 arms evaluated different distribution methods. In Arm 2, we implemented a semi-restricted distribution using peer educators at key population hotspots, targeting only FSWs and MSM who had not tested for HIV in the past 12 months. Arm 3 focused on MSM and FSWs with higher socioeconomic status, using social media platforms like Grindr and Badoo to reach those who were less likely to engage in

Figure 5. **Reasons for accepting HIV self-testing in Arm 2, Morocco, 2019**

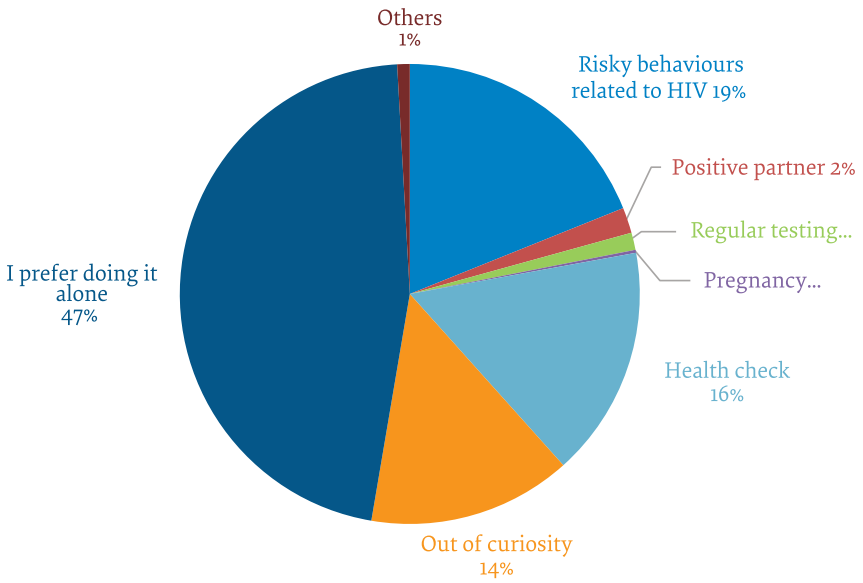
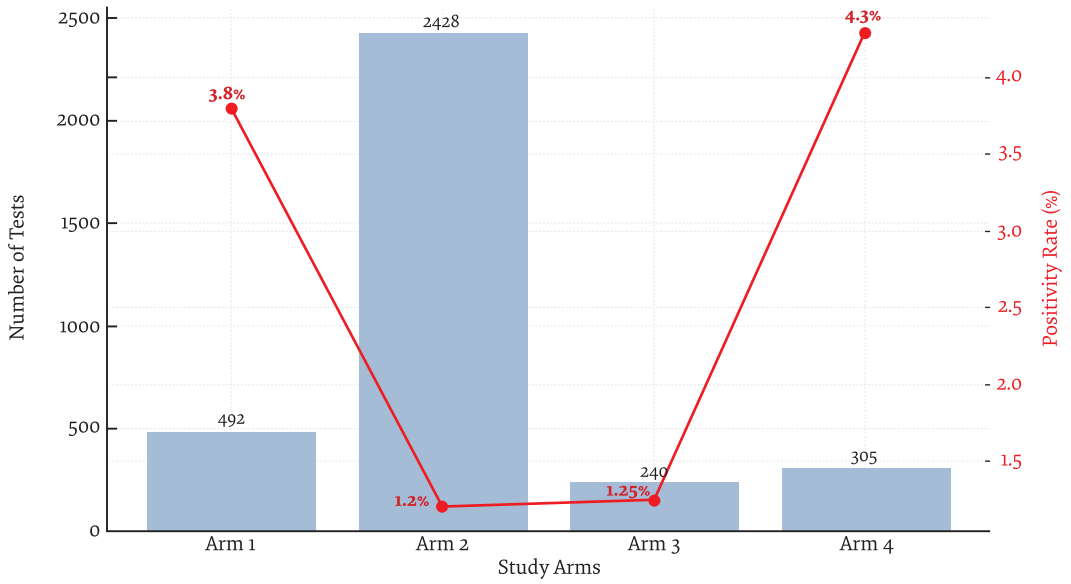


Figure 6. Participants flow for Arm 4, Morocco, 2019



standard prevention activities. In Arm 4, we distributed test kits to the partners of PLHIV, with PLHIV agreeing to provide the kits to their partners.

Choosing the most appropriate distribution method is crucial for a successful HIV self-testing programme. The selection must consider several factors, including the type of epidemic, the integration of self-testing into the national HIV testing strategy, the existing supply chain for test kits, the social and economic environment of the country, the socioeconomic characteristics of key population, and the role of communities and civil society in the national response (*13-15*). In 2019, during the implementation of this research, Morocco's strategic plan had already incorporated self-testing. The Ministry of Health and Social Protection chose a community-based model and collaborated with ALCS.

As in any implementation research, pre-intervention was crucial. We successfully conducted this essential phase with community participation. The commitment of MOHSP was very helpful and allowed rapid finalization of the protocol, data collection tools, implementation, and follow-up of the study.

Our intervention style study is not exclusive to Morocco. Similar intervention studies distributed 151 066 HIVST kits among FSWs, MSM, and people who use drugs, their peers, partners and relatives in Côte d'Ivoire, Mali and Senegal using peer educators (*16*). Another study in China assessed the feasibility of secondary distribution of HIV self-test kits via social media (WeChat) among MSM (*17*), reporting high feasibility of social media–based indirect secondary distribution of HIV self-test kits among MSM, with an 88.3% return rate for test results. The study also highlighted an important role in increasing HIV testing frequency. Among MSM, 23.14% of those who received the kit through direct secondary distribution were tested for HIV, compared to 28.2% of those who received it through indirect secondary distribution and had not been tested before (*17*).

The results of our 'Autotest-Maroc' study showed that 71% of MSM and 43% of FSWs in Arms 2 and 3, respectively, had never tested for HIV. Similar findings was reported in China, where only 47% of MSM had ever tested for HIV. In the United States, Hecht et al. reported that 36% of MSM had never tested for HIV before receiving the test kits (*19*).

Similarly, a pilot study in Uganda revealed that 95% of MSM completed HIV testing, with 32% MSM who had never tested. The study also demonstrated the feasibility and effectiveness of peer distribution of test kits among MSM (*20*). In Arm 2 of this study, we observed a higher percentage of participants who had never tested for HIV than in previous studies. This may be because our eligibility criteria excluded key populations who had already tested for HIV through ALCS within the past 12 months.

Monitoring and evaluating HIV self-testing programmes pose unique challenges compared to traditional HIV testing services. Since self-testing empowers individuals to test themselves, the process relies on users voluntarily sharing their results and seeking care for reactive tests. In our study, we achieved a high feedback rate on kit usage, test results, and linkage to care through effective monitoring and data triangulation from field reports, online submissions, and care centres.

However, the study faced limitations, such as potential underreporting of test results due to reliance on self-reported data and the possibility of missing individuals who did not seek care after a reactive test. Additionally, despite the community-based approach used, certain key populations may have been harder to reach, limiting the generalizability of the findings. This low-cost, community-based monitoring system, involving peer educators and peer navigators, can easily be integrated into existing evaluation frameworks, and sustained post-pilot. Similarly, WHO recommends using routine clinic data and triangulating multiple data sources to monitor HIV self-test programmes effectiveness (*21-23*).

Conclusion

This study's protocol marks a pioneering step in evaluating the feasibility and usability of HIV self-testing among FSWs, MSM, and partners of PLHIV in Morocco. With the tailored support and demonstration tools we developed, HIV self-testing holds great potential to significantly expand access to HIV testing in the country. Our research protocol and findings have proven their value and can be adapted for use in other communities across countries in the Eastern Mediterranean Region with similar contexts.

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Acceptabilité et faisabilité des modes de distribution de kits d'autodépistage du VIH auprès des populations clés au Maroc

Résumé

Contexte : L'autodépistage du VIH a été mis en place en vue d'accroître le recours au dépistage, en particulier parmi les populations clés. Malgré ses avantages, son utilisation demeure relativement faible au sein de la Région OMS de la Méditerranée orientale.

Objectif : Évaluer l'acceptabilité, la facilité d'utilisation et la faisabilité des modes de distribution de kits d'autodépistage du VIH auprès des populations clés au Maroc.

Méthodes : Nous avons évalué l'utilisabilité, l'acceptabilité ainsi que la faisabilité d'un système de commande en ligne, de retrait en pharmacie et de distribution d'un kit d'autodépistage oral par des personnes vivant avec le VIH. L'évaluation a porté sur 3465 travailleuses du sexe, hommes ayant des rapports sexuels avec d'autres hommes et partenaires de personnes vivant avec le VIH récemment diagnostiquées au Maroc. Les données ont été collectées à l'aide de quatre questionnaires administrés en ligne de manière anonyme et analysées à l'aide du logiciel Stata version 14.0.

Résultats : Au total, 3465 individus ont reçu les kits d'autodépistage du VIH, parmi lesquels 54,4 % d'hommes, 43,7 % de femmes et 1,9 % de personnes transgenres. Des taux d'acceptabilité élevés de 90,2 %, 86,2 % et 80,4 % ont été signalés chez les travailleuses du sexe, les hommes ayant des rapports sexuels avec d'autres hommes et les partenaires de personnes vivant avec le VIH nouvellement diagnostiquées, respectivement. Les taux de séropositivité étaient de 1,2 % dans les premier et deuxième groupes de personnes susmentionnés, et de 4,3 % dans le troisième groupe. Entre 44,0 % et 73,4 % des participants n'avaient jamais fait de test VIH.

Conclusion : Nos recherches mettent en évidence la nécessité de généraliser l'utilisation de kits d'autodépistage du VIH dans les populations clés du Maroc, mais également dans d'autres pays du Moyen-Orient et d'Afrique du Nord.

مقبولية وجدوى أنماط توزيع الاختبار الذاتي للكشف عن فيروس العوز المناعي البشري بين الفئات السكانية الأكثر عرضة للإصابة بالمرض في المغرب

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الخلاصة

الخلفية: استُحدث الاختبار الذاتي للكشف عن فيروس العوز المناعي البشري لتعزيز الإقبال على اختبار فيروس العوز المناعي البشري، وخصوصًا بين الفئات السكانية الأكثر عرضة للإصابة بالمرض. وعلى الرغم من فوائد الاختبار، فإن استخدامه لا يزال منخفضًا نسبيًّا في الشرق الأوسط وشمال أفريقيا.

الهدف: هدفت هذه الدراسة الى تقييم مقبولية الاختبار الذاتي للكشف عن فيروس العوز المناعي البشري وإمكانية استخدام ذلك الاختبار وجدواه بين الفئات السكانية الأكثر عرضة للإصابة بالمرض في المغرب.

طرق البحث: أجرينا تقييماً لمدى سهولة الاستخدام والمقبولية، بالإضافة إلى جدوى طلب الأشخاص المصابين بفيروس العوز المناعي البشري المتعايشين معه مجموعة الاختبار الذاتي الفموي للكشف عن فيروس العوز المناعي البشري وتسلمها في الصيدليات وتوزيعها، وشمل التقييمُ 3465 من العاملات بالجنس، والرجال الذين يمارسون الجنس مع رجال، وشركاء مصابين شُخِّصت حالاتهم مؤخرًا بأنهم مصابون بفيروس العوز المناعي البشري في المغرب. وجُمعت البيانات عبر أربعة استبيانات أُجريت عبر الإنترنت دون الكشف عن هوية المشاركين والمشاركات، وحُللت البيانات بالإصدار 14.0 من برنامج ستاتا (Stata).

النتائج: تلقّى 3465 فردًا مجموعات الاختبار الذاتي للكشف عن فيروس العوز المناعي البشري، ٪54.4 منهم ذكور، و٪43.7 منهم إناث، و٪1.9 من المتحولين جنسيًّا. وأُبلغَ عن معدلات مقبولية مرتفعة بلغت ٪90.2 و٪86.2 و٪80.4 على التوالي في أوساط المشتغلات بالجنس، والرجال الذين يمارسون الجنس مع رجال، وشركاء مصابين شُخِّصت حالاتهم حديثًا بفيروس العوز المناعي البشري. كما بلغت معدلات الحالات الإيجابية المصابة بفيروس العوز المناعي البشري ٪1.2 بين العاملات بالجنس والرجال الذين يمارسون الجنس مع رجال، و٪4.3 بين شركاء الأشخاص المتعايشين مع فيروس العوز المناعي البشري. وتبين أن ما بين ٪44.0 و٪73.4 من المشاركين لم يخضعوا قط لاختبار الكشف عن فيروس العوز المناعي البشري.

الاستنتاجات: تُبرزُ النتائجُ التي توصلنا إليها أهمية توسيع نطاق خدمات الاختبار الذاتي لفيروس العوز المناعي البشري، لتشمل الفئات السكانية الأكثر عرضة للإصابة بالمرض في المغرب، وربما تشمل أيضًا بُلدانًا أخرى في الشرق الأوسط وشمال أفريقيا.

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