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# Analysis of the Screening of Contact Subjects of People Living with HIV at the Antivenereal Health Center of the National Institute of Public Hygiene of Treichville, Abidjan/Côte d'Ivoire from January 2009 to December 2018
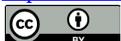
Djoman Christiane Antoinette[1,2*], Gakoué Zadi Désiré[2], Douba Alfred[1,2],
Ayekoé Adou Ignace[2], Akani Bangaman Christian[1,2], Akpro Loes Cynthia Marie-Dominique[1],
Tiembré Issaka[1,2]

[1]UFR Medical Sciences, University Felix Houphouët Boigny de Cocody, Abidjan, Côte d'Ivoire
[2]Institut National d'H ygiène Publique (INHP), Abidjan, Côte d'Ivoire
Email: *djomanchristiane@gmail.com

## Abstract

**Introduction:** In Côte d'Ivoire, people living with HIV are estimated to 460,000 with about 290,000 who know their HIV status. Index testing is a strategy for screening unidentified HIV carriers. This study aimed at analyzing the screening of contact subjects of people living with HIV at the anti-venereal health center of Treichville in Abidjan. **Methods:** We carried out a cross-sectional study from January 2009 to December 2018. The target population was index patients and their sexual partners. After giving their consent, index patients and their sexual partners were interviewed during their medical visit. Data were analyzed using Epi info 3.5.4. The khi$^2$ test was performed at 5% significance level. **Results**: A total of 114 index patients and 114 contact subjects (106 sexual partners and 08 children) have been included in the study. The majority of sexual partners were men (sex ratio M/F = 1.5) with an mean age of 43 years (±9.77). 87.7% of index patients lived with a partner. The analysis showed that 87.7% of index patients had disclosed their HIV status to their sexual partners and 94.3% of index patients invited their sexual partners to be tested. 85.8% of sexual partners had been tested. 19.8% of sexual partners who have been tested were HIV positive. All the 8 children of female index patients were HIV negative. HIV test acceptability was statistically associated with living in pairs (P < 0.05). **Conclusion:** Screening sexual partners from index patients has been an effective way to detect HIV carriers who did not know their status.

rng. C. Antoinette *et al.*

## 1. Introduction

More than 30 years after its discovery, the HIV/AIDS pandemic remains a public health problem in sub-Saharan Africa. In 2019, WHO estimated that 38 million people lived with HIV, including 25.4 million on antiretroviral therapy. Despite the actions taken to combat this disease, 690,000 deaths were recorded in the same year [1].

West Africa is one of the regions heavily affected by this pandemic with 4.9 million people living with HIV (PLHIV) including 2.9 million on antiretroviral therapy and 140,000 reported deaths [1].

In Côte d'Ivoire, the number of PLHIVs is estimated at 460,000 with only about 290,000 people knowing their status [2] [3].

HIV carriers not yet screened are a serious problem since there is estimated at 170,000 people [2]. Therefore, HIV control is a public health priority in Côte d'Ivoire. HIV control focuses on primary prevention (information, education, communication for behavior change), treatment, and screening.

Screening is one of the key elements of the control serving to identify HIV carriers and to proceed with their treatment. To solve the problem of HIV carriers not yet screened, in Côte d'Ivoire, health authorities adopted the approach of targeted screening including index testing which consists of the contact subjects screening of an index subject. An index subject is an HIV-infected individual who first agrees to involve their sexual contacts and biological children in HIV/AIDS testing. According to the WHO, sexual partners of people living with HIV are infected in proportions of up to 70% [4].

The Antivenereal Health Center (AHC) of the Institute National d'Hygiène Publique (INHP) of Treichville in Abidjan, Côte d'Ivoire, has implemented this index testing activity since January 2018 according to national recommendations.

To contribute to the achievement of the national objective of screening 90% of people living with HIV, some key questions raised our interest: What is the performance of the AHC for this activity in our context of stigmatization and discrimination of people living with HIV? What were the factors influencing the acceptability and rate of testing among the sexual partners of PLHIVs at AHC?

The interest of this study lays in the optimization of the care of people living with HIV and in the self-assessment of health care staff.

## 2. Materials and Methods

### 2.1. Scope of the Study

Our study took place at the AHC of the INHP of Treichville in Abidjan. It is a third-level reference center for STI care. Medical consultation is provided by two

specialists in dermatology-venereology assisted by three nurses and five social workers. HIV management only concerns people over 15 years of age.

## 2.2. Type of Study

It is an observational, cross-sectional study with a descriptive and analytical focus. The study period ran from January 2009 to December 2018.

## 2.3. Study Population

Study population was medical records of people living with HIV and enrolled in the AHC and their sexual contacts (wife/husband and other sexual partners) and children (for female index patients).

## 2.4. Inclusion Criteria

All medical records of people living with HIV, enrolled in the AHC from January 2009 to December 2018, and meeting the following criteria have been included in the study:

- having a medical record in the site caseload from January 2009 to December 2018 (the site caseload is defined as the number of PLHIV screened and receiving Antiretroviral (ARV) treatment);
- providing an informed consent to participate in the study;
- agreeing to be interviewed for the completeness of the investigation;
- agreeing to provide contact details for the sexual partner(s);
- being able to bring the sexual partner and children to the AHC for screening;
- Children must be from female index patients and be under the age of 15.

## 2.5. Non-Inclusion Criteria

The patient records meeting at list one of the following criteria have not been included in the study:

- PLHIV whose contacts were not identified;
- PLHIV whose partner(s) have already been screened before our study;
- Index patients with no sexual partners or children under the age of 15;
- Sexual partners or children under the age of 15 screened before the implementation of index testing in the AHC of Treichville in Abidjan;
- Patient records with missing data.

## 2.6. How Data Is Collected

The data were collected using patient records and then by an interview with patients during the medical visit for the collection of information not included in the patient file.

## 2.7. Study Variables

Variables included the socio-demographic characteristics of index subjects and their sexual partners, the disclosure of HIV status to the sexual partner, the invitation of the sexual partner to be tested, the acceptability of the screening test by

sexual contact, the conduct of the screening test, the reasons for not performing the screening test and the result of the screening test of the contact subjects.

In terms of socio-demographic characteristics, the people living in pairs included those who were in relationships with a commitment such as civil marriage and/or religious marriage, and/or traditional marriage. Single individuals were those who did not have sexual partners and those who had sex without commitments.

## 2.8. Data Processing and Analysis

Data entry and processing were done using EPI INFO version 3.5.4. A descriptive analysis has been performed. A comparative analysis has been performed using the chi 2 test at 5% significance threshold to look for a relationship between the acceptability of the screening test and the socio-demographic data.

## 2.9. Ethics

We obtained the authorization of the INHP's Director to conduct the study. All data were collected with the informed consent of index patients and their sexual partners in strict confidentiality.

## 3. Results

The AHC database contained data from 397 people in the active file enrolled from January 2009 to December 2018. Of these, 227 people who did not meet the inclusion criteria were not included in the study. A total of 170 index patients were eligible in the study after analysis of their records.

At the end of the study, 114 index patients responded to our call and agreed to be interviewed and to bring their contacts for screening.

Concerning the contact subjects, there were also 114 including 106 sexual partners (93%) and 08 children under 15 (7%).

### 3.1. Sociodemographic Characteristics of Index Patients and Sexual Contacts

The mean age of index patients was 42 years (±8.53) while the mean age of sexual partners was 43 years (±9.77). Regarding sex, the majority of index patients were women (72 women; 63.2% and 42 men; 36.8%; sex ratio M/F = 0.6) while the majority of sexual partners were men (64 men or 60.4% and 42 women or 39.6%; sex ratio M/F = 1.5).

84.2% of index patients and 94.3% of sexual partners were enrolled in school. The majority of index patients (64.1%) had a level of study beyond primary so were their sexual partners (82.1%). Most respondents (81.6% of index patients and 51% of sexual partners) had an income-generating activity. 87.7% of index patients and 80.2% of sexual partners lived in pairs. All index patients surveyed reported having only one sexual partner. 86.8% of index patients and 81.1% of sexual partners had at least one child (Table 1).

62.5% of children of female index patients were females. Their mean age was

8.62 years.

## 3.2. Acceptability of HIV Testing among Sexual Partners of PLHIVs

87.7% index patients had disclosed their HIV status to their sexual partners. 94.3% of index patients invited their sexual partners to be tested. Sexual partners who agreed to be tested for HIV accounted for 89.6%. Sexual partners who did not accept the screening test mentionned fear in 81.8% of cases and non-formal union in 9.1% of cases. However, 9.1% of the partners did not mention any reasons (Table 2).

## 3.3. Factors Influencing the Acceptability of Testing for Sexual Partners of PLHIVs

Statistical tests did not show a link between age, sex, educational attainment, occupation, and acceptability of the screening test among sexual partners (p ≥ 0.05). However, there was an association between marital status and the acceptability of the screening test (p = 0.04) (Table 3).

## 3.4. Testing for HIV in Sexual Contact with PLHIVs

All but one of the female index patients with children under the age of 15 had given their consent to testing their child. As for sexual partners, 85.8% had been tested. In total, 86% of the contact subjects had been screened.

The reasons given for not carrying out the screening test were the non-acceptability of the test (73.3% of cases), the disclosure of the HIV status to the sexual partner not done (13.3%), the departure on trip (6.7%), and the distance from the place of residence to the health center (6.7%) (Table 4).

**Table 1.** Distribution of PLHIV and their sexual partners by sociodemographic characteristics at the AHC of INHP Treichville from January 2009 to December 2018.

| Sociodemographic characteristics | | Percentage (%) | |
|---|---|---|---|
| | | Index patients (n = 114) | Sexuals partners (n = 106) |
| Sex | Male | 36.8 | 60.4 |
| | Female | 63.2 | 39.6 |
| Age (years) | ≤45 | 64 | 66 |
| | >45 | 36 | 34 |
| Education level | Schooled | 84.2 | 94.3 |
| | Out-of-School | 15.8 | 5.7 |
| Occupation | Income generating activity | **81.6** | **84.9** |
| | Activities not generating income | 18.4 | 15.1 |
| Marital status | Single | 12.3 | 19.8 |
| | Living with partners | **87.7** | **80.2** |
| Number of children | 0 | 13.2 | 18.9 |
| | ≥1 | 86.8 | 81.1 |

Table 2. Distribution of sexual partners by reasons for non-acceptability of HIV testing at the INHP Treichville AHC from January 2009 to December 2018.

| Grounds for non-acceptability | Actual | Percentage (%) |
|---|---|---|
| Fear | 9 | 81.8 |
| No reasons | 1 | 9.1 |
| Non-formal union | 1 | 9.1 |
| Total | 11 | 100 |

Table 3. Distribution of sexual partners by acceptance or not of the screening test and sociodemographic characteristics at the INHP Treichville Antivenereal Health Center from January 2009 to December 2018.

| | Acceptability of the screening test | | Degree of significance (p) |
|---|---|---|---|
| Socio-demographic characteristics | Yes | Not | |
| **Sex** (n = 106) | | | |
| Female | 40 (95.2%) | 2 (4.8%) | 0.11 |
| Male | 55 (86%) | 9 (14%) | |
| **Age** (n = 106) | | | |
| ≤45 | 62(88.6%) | 8(11.4%) | 0.44 |
| >45 | 33(91.7%) | 3 (8.3%) | |
| **Marital status** (n = 106) | | | |
| Bachelor | 16 (76.2%) | 5(23.8%) | 0.04 |
| Lives with partner | 79 (92.9%) | 6 (7.1%) | |
| **Education level** (n = 106) | | | |
| Schooled | 91(91%) | 9(9%) | 0.11 |
| Out-of-School | 4 (66.7%) | 2 (33.3%) | |
| **Occupation** (n = 106) | | | |
| Income-generating activity | 51 (94.5%) | 3(5.5%) | 0.08 |
| No income-generating activity | 44 (84.6%) | 8 (15.4%) | |

Table 4. Distribution of sexual partners by the causes of non-completion of the screening test at the INHP Treichville AHC from January 2009 to December 2018.

| Reasons for not performing the HIV test | Number | Percentage (%) |
|---|---|---|
| The non-acceptability of the screening test | 11 | 73.30 |
| No disclosure of HIV status to sexual partner | 2 | 13.30 |
| Traveling | 1 | 6.70 |
| Distance | 1 | 6.70 |
| Total | 15 | 100 |

### 3.5. HIV Test Results for Sexual Contact of PLHIVs

All children screened were HIV negative while 19.8% of sexual partners have been tested positive for HIV.

## 4. Discussion

Index patients and sexual partners in the study were young. In their study, Gakoue *et al.* found also young sexual partners (average age: 37.5 years ± 8.9) [5]. This youth of index patients was also in line with national data reported by UNAIDS on the age of PLHIVs [1]. The youth of sexual partners was also observed in the 2015 Tanzania study by Kahabuka *et al.* on the effective partner notification approach for screening undiagnosed sexual partners. The average age of sexual partners in this study was 35.5 years [6]. The majority of index patients were women while the majority of sexual partners were men. This result was consistent with the demographic characteristics of PLHIVs in Côte d'Ivoire which show a predominance of females (60.47%) [2]. Regarding sexual partners, the non-governmental organization management sciences for health (MSH) in Malawi found in its study a predominance of females (53%) [7].

Most index patients had a study level beyond primary school as did sexual partners. This result is similar to that of Kahabuka *et al.* This author found 66.1% of a sexual partners who had primary school level [6]. The instruction could allow for good communication between the healthcare provider and the index patient to encourage the latter to promote the detection of these contacts. Nearly 80% of index patients and sexual partners had an income-generating activity. Index patients and sexual partners were able to take care of themselves financially. This financial autonomy could be in favor of the announcement of the HIV status to the sexual partner and facilitate the screening of the latter. 87.7% of index patients and 80.2% sexual partners in the study lived in pairs. Living as a couple facilitates access to sexual partners and children. It also facilitates their screening as shown by the study by Lian Y. *et al.* in China in 2015. In this study, married index patients encouraged their sexual partners for screening testing [8]. The majority of index patients (86.8%) and sexual partners (81.1%) had at least one child. Given the risk of contamination, it is necessary to intensify the implementation of index testing in this health center.

In our study, 87.7% of index patients had disclosed their HIV status to their sexual partners. This result was higher than one from the study conducted by Michael D. *et al.* in the United States on the disclosure of HIV status to the partner. In their study, 60% of index patients had revealed their HIV status to all their partners [9]. In Nigeria, in the study conducted by Katbi M. *et al.* on the effects of the index client testing strategy on community-based detection of HIV infections (STRICT study), the rate of disclosure of HIV status was 68.3% [10]. The high school enrolment rate of index patients as well as their ability to take care of themselves could explain this high rate of the announcement in the study.

Although the rate of reporting HIV status to the partner is high, there is a need to help PLHIVs who do not want to disclose their status to their partner by offering a double notification. This is an assisted notification method in which the health care provider accompanies and supports the PLHIV when the PLHIV discloses their HIV status to their sexual partner. 94.3% of the index patients in the study had invited their sexual contact to be tested. This high proportion could be explained by a good implementation of the recommendations for counseling and testing carried out by health personnel. 89.6% of sexual partners had agreed to carry out the HIV test. This result is similar to that of Kingbo *et al.* who reported the acceptability of 83.7% of sexual partners of index patients living with HIV in the San Pedro area [11]. On the other hand, acceptability was low (23.4%) in Touré *et al.* study on STI carrier patients in Adjamé, a district of Abidjan, in Côte d'Ivoire [12]. This strong acceptability in our study could be explained by the good awareness conducted by the nursing staff but also the participation of index patients in the awareness of their sexual partners for screening. Sexual partners who did not accept the screening test cited fear in 81.8% of cases as a reason for non-acceptability. In Adjamé, fear of knowing one's HIV status was the main reason (69%) among STI carriers in the Touré B. *et al.* study on the acceptability of HIV testing in patients with sexually transmitted infections at the Adjamé anti venereal clinic [12]. In Ferkessédougou, in Côte d'Ivoire, a study on the factors related to refusal of the screening test in the prevention of mother-to-child transmission conducted by Kouamé A. *et al.*, fear was mentioned in 32% of cases as a reason for non-acceptability of the test [13]. Fear is one of the reasons generally mentioned to explain the refusal of the screening test. This fear could be explained by the stigma and discrimination that PLHIVs still face in our communities.

Statistical tests had not shown a link between age, gender, educational attainment, occupation, and acceptability of the screening test among sexual partners. However, there was an association between marital status and the acceptability of the screening test (p = 0.04). The acceptability of the screening test would be favored by life as a couple.

In total, 86% of the contact subjects had been screened. In South Africa, the rate of testing was 72% in the Jubilee M. *et al.* study of HIV testing by the index patient to improve HIV positivity rate, link to care and treatment of sexual partners, adolescents, and children of PLHIVs in Lesotho [14]. This high completion rate in our study reflects the availability of equipment and the involvement of staff. The reasons for not performing the screening test were dominated by the non-acceptability of the screening test by the sexual partner followed by the refusal of the index patient to disclose his status to his partner. Distance from home to the screening site and travel were cited in the same proportions. These results show the need to involve psychologists alongside social workers and community health workers in the screening of contacts.

The screening test made it possible to detect new cases of HIV among the

contact subjects. Indeed, all children screened were HIV-negative while 19.8% of sexual partners tested positive for HIV. In Malawi in the Management Sciences for Health (MSH) study of index case screening, the HIV positivity rate was 22% among sexual contacts [7]. In Nigeria in the study by Katbi M. *et al.*, 51% of sexual partners were HIV-positive [10]. In Vietnam, the HIV positivity rate was 28.6% among sexual partners and 50% among children of PLHIVs in Nguyen V *et al.*'s study of community-led HIV testing services, including HIV self-testing and assisted partner notification services [15]. In Cameroon in Henley C *et al.*'s 2013 study on the effectiveness of HIV case finding in sexual partners, 50.1% of them were HIV-positive [16]. These results show that the index testing approach is a strategy that promotes the identification of HIV carriers.

This study had some limitations. Indeed, not all the patients selected for the study could be met because some were lost to follow-up and others went on a trip. In addition, all index patients reported having at most one sexual partner. This result is to be taken with reservations because of the poor perception of people with multiple partners in the community.

## 5. Conclusion

Our study showed that the performance of the INHP AHC was good during this activity despite the obstacles to screening. The performances were good in the support to the HIV status disclosure to the sexual partner, in the invitation of the partner to be tested, as well as in the realization of the screening test. These performances were the result of good practice of national recommendations for screening services, and good collaboration of subjects indexed to this activity. Index testing was also used to detect new cases of HIV among the sexual contacts of HIV PVs. This is a good strategy for identifying PLHIVs who are unaware of their status. It is, therefore, to be encouraged.

## Authors' Contribution

Akpro LCMD, Tiembré I developed the protocol and carried out the data collection; Djoman CA, Gakoué ZD wrote the manuscript; Douba A, Ayekoé AI, Akani BC, read and translated the manuscript. All authors declare that they have read and approved the final version of the manuscript.

## The Current State of Knowledge on the Subject

- HIV prevalence is high in key populations but is not known in the group of contacts and partners of PLHIVs.
- Testing is one of the key elements in HIV control because it is used to identify HIV carriers and start the treatment.

## Contribution of Our Study to Knowledge

This study shows that:
- The reasons for not performing the screening test were dominated by the

non-acceptability of the screening test by the sexual partner, the refusal of the index patient to announce his status to his partner, the distance from home to the place of screening, and the fact of being on the trip.
- The group of sexual contacts and partners is also key populations that will need to be sensitized to HIV testing.
- HIV self-testing (ADVIH) would be a relevant strategy to improve knowledge of HIV status due to confidentiality issues, stigma, and other barriers related to testing in health centers.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

[1] (2019) Programme Commun des Nations Unies sur le VIH/SIDA. Statistiques mondiales sur le VIH. ONUSIDA, Genève, 7 p.

[2] (2018) Programme Commun des Nations Unies sur le VIH/SIDA. Côte d'Ivoire. ONUSIDA, Abidjan.

[3] (2018) Côte d'Ivoire. Ministère de la santé et de l'Hygiène Publique. Rapport annuel sur la situation sanitaire. MSHP, Abidjan, 312 p.

[4] Organisation Mondiale de la Santé (2016) L'OMS publie de nouvelles orientations sur l'autodépistage du VIH à la veille de la journée mondiale du sida. OMS, Genève.

[5] Zadi, D.G., Djoman, C.A., Djédjé, D.M. and Tiembré, I. (2018) Analyse du suivi des patients sous ARV au Dispensaire Antivénérien (DAV) de l'Institut National d'Hygiène Publique (INHP) de Treichville, Abidjan, de 2009 à 2013. *Médecine et Santé Tropicales*, **28**, 404-407. https://doi.org/10.1684/mst.2018.0852

[6] Kahabuka, C., Plotkin, M., Christensen, A., Brown, C., Njozi, M., Kisendi, R., *et al.* (2017) Addressing the First 90: A Highly Effective Partner Notification Approach Reaches Previously Undiagnosed Sexual Partners in Tanzania. *AIDS and Behavior*, **21**, 2551-2560. https://doi.org/10.1007/s10461-017-1750-5

[7] Nyaka, G. (2018) Index Case Testing: A Promising Strategy for Achieving HIV Epidemic Control. Management Sciences for Health. 4 p.

[8] Lian, Y., Zhao, Y., Wang, J., Shi, C., Wang, K., Wang, X., *et al.* (2018) A Health Communication Intervention to Integrate Partner Testing with Antiretroviral Therapy Service among Men Who Have Sex with Men in China: An Observational Cohort Study. *BMC Public Health*, **18**, Article No. 1235. https://doi.org/10.1186/s12889-018-6147-5

[9] Stein, M.D., Freedberg, A.K., Sullivan, M.L., Savetsky, J., Levenson, M.S., Hingson, R., *et al.* (1998) Sexual Ethics: Disclosure of HIV-Positive Status of Partners. *Archives of Internal Medicine*, **158**, 253-257. https://doi.org/10.1001/archinte.158.3.253

[10] Katbi, M., Adegboye, A., Adedoyin, A., Yunusa, F., Kayode, G., Bello, M., *et al.* (2018) Effect of Clients Strategic Index Case Testing on Community-Based Detection of HIV Infections (STRICT Study). *International Journal of Infectious Diseases*, **74**, 54-60. https://doi.org/10.1016/j.ijid.2018.06.018

[11] Kingbo, M.H., Lasry, A., Takarinda, K.C., Manzi, M., Pringle, J., Konan, A.F., *et al.* (2020) Approches de notification des partenaires pour les partenaires sexuels et les

enfants des casd'index au virus de l'immunodéficience humaine en Côte d'Ivoire. *Maladies Sexuellement Transmissibles*, **47**, 450-457. https://doi.org/10.1097/OLQ.0000000000001180

[12] Touré, B., Koffi, N.M., Gohou, V., Ake, O. and Konan, Y.E. (2006) Acceptabilité du dépistage du VIH chez les patients atteints d'infections sexuellement transmissibles au dispensaire antivénérien d'Adjamé, Côte-d'Ivoire. *Bulletin de la Société de Pathologie Exotique*, **99**, 251-253.

[13] Kouamé, A., Kouakou, F., Adjoby, R., Koime, H., Gbary, E., Konan, J., *et al.* (2011) VIH/SIDA: Facteurs de refus du test de dépistage dans le cadre de la Prévention de la transmission Mère-enfant (PTME): Cas de l'hôpitalgénéral de Ferkessédougou, en zone rurale. *Revue Internationale des Sciences Médicales d'Abidjan* (*Rev int sci méd abj*), **13**, 9-13.

[14] Jubilee, M., Park, F.J., Chipango, K., Pule, K., Machinda, A. and Taruberekera, N. (2019) HIV Index Testing to Improve HIV Positivity Rate and Linkage to Care and Treatment of Sexual Partners, Adolescents and Children of PLHIV in Lesotho. *PLOS ONE*, **14**, e0212762. https://doi.org/10.1371/journal.pone.0212762

[15] Nguyen, V.T.T., Huong, T.T.P., Kato, M., Nguyen, Q.T., Kim, A.L., Son, H.V., *et al.* (2019) Community-Led HIV Testing Services Including HIV Self-Testing and Assisted Partner Notification Services in Vietnam: Lessons from a Pilot Study in a Concentrated Epidemic Setting. *Journal of the International AIDS Society*, **22**, 40-48. https://doi.org/10.1002/jia2.25301

[16] Henley, C., Forgwe, G., Welty, T., Golden, M., Adimora, A., Shields, R., *et al.* (2013) Scale-Up and Case-Finding Effectiveness of an HIV Partner Services Program in Cameroon: An Innovative HIV Prevention Intervention for Developing Countries. *Sexually Transmitted Diseases*, **40**, 909-914. https://doi.org/10.1097/OLQ.0000000000000032

## Annexe 1

**ANALYSIS OF SCREENING OF CONTACTS OF PEOPLE LIVING WITH HIV AT THE
ANTIVENEREAL DISPENSARY OF THE NATIONAL INSTITUTE OF PUBLIC HYGIENE
OF TREICHVILLE, ABIDJAN, COTE D'IVOIRE FROM JANUARY 2009 TO DECEMBER 2018**

**QUESTIONNAIRE**

*Ms. or Mr., the Department of Public Health of the UFR of Medical Sciences of Abidjan is studying the problem of screening of contact subjects of people living with HIV that the country is facing. This study will make it possible to propose other strategies to raise awareness about testing at all levels of the health pyramid in order to achieve the 1st 90 of UNAIDS. This anonymous interview will take only 10 minutes of your time. Thank you for helping the scientific community to control the HIV/AIDS pandemic in Côte d'Ivoire.*

### 1) IDENTIFICATION OF THE INDEX CLIENT

Client code /__/__/__/     Age /__/__/__/     Sex: M ☐  F ☐

Number of sexual partners /__/__/__/     Number of children /__/__/__/

Education level ………………     Occupation ………………     Marital status ………………

Place of residence ………………

Is your partner aware of your HIV status?   Yes ☐   No ☐

Have you invited your partner to get tested?   Yes ☐   No ☐

### 2) IDENTIFICATION OF SEXUAL CONTACT

Type of sexual contact: sexual partner ☐   Offspring ☐

Client code /__/__/__/     Age /__/__/__/     Sex: M ☐  F ☐

Contact: ………………     District of residence: ………………

Education level: ………………     Occupation ………………

Nationality: ………………     Marital status: ………………

Number of children: /__/__/__/

### 3) SCREENING FOR SEXUAL CONTACT

a) DESCENDANT

Do you give your consent for the screening of your descendant?   Yes ☐   No ☐

b) SEXUAL PARTNER

Do you agree to be tested?   Yes ☐   No ☐

If no, what are the reasons?

Fear ☐

Discrimination ☐

Loss of trust in medical staff ☐

Other reasons:………………………………………………………

Was the screening test performed? Yes ☐   No ☐

If no, what were the reasons for not having the test done?

Announcement of the serological status to the partner not made ☐

No acceptance of the test by the sexual partner ☐

Obstacles encountered by the contact ☐

Last of testing materials ☐

Other reasons:………………………………………………………

### 4) TEST RESULTS

Positive ☐   Négative ☐

If positive, what is the type of HIV?

HIV 1 ☐   HIV 2 ☐   HIV 1/2 ☐   Undetermined ☐

## Annexe 2

<div align="center">INFORMED CONSENT FORM</div>

I have understood the oral explanation of this survey, and/or I have read the fact sheet that explains the reasons for this survey (for literate subjects). I understand that:

- I am invited to participate in the survey and I am informed of the implications of my participation;

- I may stop my participation at any time without giving any reason and that this will not interfere with my job.

- My interlocutor has answered all my questions regarding this survey in a clear and satisfactory manner.

- I hereby give my consent to participate in this survey.

Identification number in the study: /__/__/__/__/__/__/__/__/__/

**Participant:**                                **Person collecting consent:**

                                                ………………………………………….

                                                ………………………………………….



Date:                                           Date:



Signature:                                      Signature:

## List of Abbreviations

| | |
|---|---|
| HIV | Human Immunodeficiency Virus |
| WHO | World Health Organization |
| PLHIV | People Living with HIV |
| AHC | Antivenereal Health Center |
| INHP | Institut National d'Hygiène Publique |
| STI | Sexually Transmitted Infections |
| UNAIDS | Joint United Nations Program on HIV/AIDS |