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SHORT PAPERS

- J. LARMARANGE, O. KASSOUM, É. KAKOU, Y. FRADIER,
L. SIKI, C. DANIEL, DOD-
CI ANRS 12 287 GROUP
- Feasibility and Representativeness of a Random Sample Mobile Phone Survey in Côte d'Ivoire
- M. BANENS, E. LE PENVEN
- Sex Miscoding in the Census and its Effects on the Enumeration of Same-Sex Couples



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Yves FRADIER,♦ Lazare SIKA,** Christine DANIEL,♦♦
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Feasibility and Representativeness of a Random Sample Mobile Phone Survey in Côte d'Ivoire

Since the early 2000s, mobile phone use has grown very rapidly across West Africa (Chéneau-Loquay, 2010), and in Côte d'Ivoire especially. According to the International Telecommunications Union (ITU, 2013), there were 91.2 mobile phone subscriptions per 100 inhabitants in 2012, up from just 2.9 in 2000. On 9 March 2013, the country had 19.6 million mobile phone subscriptions,⁽¹⁾ shared between six operators (Hué, 2013) for an estimated population of 23.2 million in 2012 according to the National Institute of Statistics (INS).

Telephones have been used to conduct surveys in western countries for many years, either simply to administer the questionnaire, or also to construct the sample by listing numbers from a directory or by random digit dialling.

With the development of mobile phone use, this type of approach can now be applied in Côte d'Ivoire. For example, the need for a survey of this kind emerged during the preparation of a project to study supply and demand for HIV and viral hepatitis screening in Côte d'Ivoire (DOD-CI).

However, while mobile phones have already been used in Africa to collect data (Demombynes et al., 2013; Tomlinson et al., 2009) or to track patients (Déglise et al., 2012; Karanja et al., 2011), to our knowledge, no surveys based on random digit dialling samples have ever taken place in sub-Saharan Africa.

(1) It is important to distinguish between mobile subscriptions and mobile phones. Many people in West Africa use mobile phones that accept several SIM cards, so the number of subscriptions is higher than the number of actual phones.

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Before proceeding with such a survey, we conducted an initial pilot study⁽²⁾ to examine its feasibility. The results are described in this paper.

I. Survey description and methodological choices

In France, the first telephone surveys were conducted using landline numbers only (Guilbert et al., 2011). At that time, each number was associated with a household, and the first stage of each survey involved listing all household members and then randomly selecting a respondent from among them. With the emergence of mobile phones, certain surveys, such as the French Baromètre santé 2010 health survey (Beck et al., 2013), expanded the survey sample by recruiting households with a mobile subscription only, in addition to those with a landline. For other surveys, such as the KABP 2010 (Sommen and Beltzer, 2012), two samples were constructed: a first sample of households with a landline, and a second one of persons with a mobile phone only.

The situation is very different in Côte d'Ivoire, where the landline network is very small. According to the Demographic and Health Survey (DHS) 2011-2012 (National Institute of Statistics and ICF International, 2012), only 3.3% of adults aged 18 and over lived in a household equipped with a landline. Among these, 94.4% lived in a household where at least one member had a mobile phone, making it possible to envisage a survey protocol that excludes landlines altogether.

As the pilot survey had a very limited budget, only one five-minute questionnaire could be administered. If a household approach had been used, the questionnaire would have included a module to identify all household members, and this would have used up practically the entire time available for the survey. Moreover, as individual mobile phone ownership had never been documented by a national survey, the exact coverage rate was unknown at the time the protocol was drafted. We therefore chose to survey only the main subscriber of each selected line, assuming that this would be a conservative approach to test the sample representativeness; selection biases would be greater than under a "household" approach since mobile non-subscribers living with mobile subscribers were excluded from the sample.

Telephone numbers in Côte d'Ivoire have eight digits. The telephone numbering plan dated 30 June 2011 issued by the Côte d'Ivoire telecommunications agency (ATCI)⁽³⁾ gives us the three-figure prefixes or "ABP" blocks attributed to each operator. With 500 phone numbers generated randomly for each prefix, we obtained a total of 112,500 numbers (255 prefixes × 500). Batches of

(2) Survey funded by the Agence nationale de recherche sur le sida et les hépatites virales (ANRS 12287).

(3) In 2013, it became the Autorité nationale de régulation des télécommunications de Côte d'Ivoire (ARTCI). This was the most recent numbering plan. A new plan was issued on 20 January 2014.

100 numbers were then produced from this sampling base, each phone number having the same probability of being selected.

The following eligibility criteria were used: age 18 or older; resident of Côte d'Ivoire; main user of the phone line; able to speak in one of the languages used by the survey team (see below); verbal consent to take part. The aim was to recruit 1,000 people. The questionnaire included questions on the respondent's sociodemographic characteristics, whether he/she had more than one mobile phone subscription, and his/her knowledge and experience of HIV screening.

When this pilot survey got the go-ahead in early 2013, we were unable to find a service provider in Abidjan equipped with a complete computer-assisted telephone interviewing (CATI) platform and with experience of random telephone surveys. We therefore decided to conduct the survey from France. After a call for tenders, the Paris-based company Ipsos Observer was selected.

II. Survey implementation

While most of the population speak French in Côte d'Ivoire, the interviewers were required to speak at least one vernacular language. Five interviewers currently living in France but born and raised in Côte d'Ivoire were recruited. They were joined by a sixth experienced interviewer who had worked at Ipsos for many years. The languages spoken by the team were: Anyin, Baoulé, Bété, Dan, Dida, Dyula, Ebrié, English, French, Guere, Maninka and Senufo. The questionnaires were written in French and the interviewers translated them in real time, as necessary.

The survey took place between 3 and 21 June 2013 at times that varied from one day to the next (between 9 a.m. and 9 p.m. French time, i.e. 7 a.m. and 7 p.m. Ivoirian time). When contacted for the first time, respondents were told when the interviewer would call back to administer the questionnaire. Interviews were conducted using CATI software.

Batches of 100 phone numbers were called in succession until at least 1,000 completed questionnaires were obtained. All the batches of called numbers were fully followed up, and a number was called at least 15 times before it was deemed unusable.

Table 1 shows the breakdown of calls using the categories proposed by Guilbert et al. (2011). In all, 2,700 numbers were called in accordance with the survey protocol (base used), of which 1,291 were unassigned at the time of the survey (technically unusable), and 150 did not correspond to the eligibility criteria (Table 1). The base usable for the study thus comprised 1,259 eligible contacted individuals, among whom 82 refused to take part and 93 could not be reached again (up to 15 attempts) after an appointment had been made (execution failure). No respondents dropped out in the course of the interview.

Table 1. Breakdown of calls in the DOD-CI survey (Côte d’Ivoire) and of the “mobile subscribers” sample of the KABP 2010 survey (France)

	KABP 2010		DOD-CI2013	
	Number	%	Number	%
Base used	26,268	100.0	2,700	100.0
Technically unusable (unassigned numbers)	10,030	38.2	1,291	47.8
Unusable for the study (out of scope, survey impossible)	2,592	9.9	150	5.6
Usable base	13,646		1,259	
Refusal	2,737	10.4	82	3.0
Execution failure	5,902	22.5	93	3.4
Took part in survey	5,007	19.1	1,084	40.1
Refusal rate (usable base)		20.1		6.5
Execution failure rate (usable base)		43.3		7.4
Participation rate (usable base)		36.7		86.1
Mean numbers called per questionnaire completed	5.2		2.5	
Mean interview duration (minutes)	38		7	
Survey selection	Household member		Main subscriber	
<p>Note: The KABP 2010 survey had two samples (landlines and mobiles). Only data from the mobile sample are presented here. Sources: Ipsos Observer for the mobile sample of the KABP 2010 survey, with the authorization of the survey clients; DOD-CI and DHS.</p>				

In all, 1,084 questionnaires were completed: 923 in French (85.1 %), 77 in Dyula (7.1%), 75 in a mixture of vernacular Ivorian French and Nouchi (6.9%),⁽⁴⁾ six in Baoulé, and one each in Anyin, Maninka and English (0.1%). The distribution of respondents by telephone operator corresponds to the distribution determined at national level by ATCI (table not shown).

As we have no knowledge of others survey conducted in West Africa based on samples obtained by random digit dialling, we decided to compare the call consumption table with that of the KABP 2010 survey (knowledge, attitudes, beliefs and practices about HIV/AIDS) conducted in France and which had two samples: a landline sample and a mobile subscriber sample. The comparison in Table 1 concerns the mobile sample only.

A similar sampling method was used for both surveys. The main differences concern the selection of respondents (a household member for KABP, the main subscriber for DOD-CI) and the questionnaire administration time (38 and 7 minutes, respectively).

The proportion of “technically unusable” numbers is of a similar order of magnitude in both surveys (48% for DOD-CI and 38% for KABP). The proportion that were “unusable for the study” was somewhat higher for KABP (10% versus 6%) due to slightly more restrictive selection criteria.

(4) Nouchi is a mixture of French and several Ivorian languages that appeared in the 1970s.

The refusal rate in DOD-CI (7% of the usable base) is much lower than that of KABP (20%). Several factors explain this difference: shorter questionnaire; the rarity of telephone marketing surveys in Côte d'Ivoire compared with France where subscribers are regularly solicited; the two-stage selection process in the KABP which provided more opportunities to refuse (at both household and individual levels).

The execution failure rate is also lower in DOD-CI (7% versus 43% of the usable base) due to a much larger number of missed appointments in the KABP survey (76% of execution failures were due to a missed appointment before the household member selection stage, 22% to a missed appointment after this stage and 2% to respondents who hung up before the end of the questionnaire).

In all, 2.5 numbers were called for each completed questionnaire in DOD-CI, versus 5.2 in KABP.

III. Sample weighting and survey population

Out of 1,084 completed questionnaires, four were excluded from the analyses due to missing data on the main sociodemographic characteristics.

We calculated a statistical weight proportional to the inverse of each respondent's probability of inclusion (i.e. inversely proportional to the number of subscriptions held). Taking account of this weighting, almost half of the mobile subscribers (47.1 %) have two or more phone numbers. The mean number per mobile phone subscriber is 1.7 (2.1 without weighting). This result is not surprising in Côte d'Ivoire, where many people have two or three numbers (generally with different operators).

As the most recent general census in Côte d'Ivoire dates back to 1998, we preferred to compare our sample structure with that of the latest Demographic and Health Survey (DHS) conducted in 2011-2012 (Table 2), taking account of its sampling plan (two-stage stratified sample design). As the DHS records mobile phone ownership at household level, we also determined the structure of persons aged 18 or over living in a household with at least one mobile phone. All computations were made using the R statistical software and the "survey" package.

Men are over-represented in the DOD-CI sample. Weighting reduces the proportion of men by 5 percentage points (from 69.1% to 64.1%) because men have more phone numbers, on average, than women (1.8 and 1.4, respectively). The proportion of women with a mobile phone is probably also smaller. Respondents aged 25-34 are over-represented and those aged 50+ are under-represented.

The population of the DOD-CI sample has a higher mean level of education than that of DHS 2011-2012; persons with a secondary or higher level of

Table 2. Sociodemographic characteristics of respondents aged 18 and above (DOD-CI and DHS 2011-2012)

	DOD-CI raw ^(a)	DOD-CI weighted ^(b)	DHS 2011-2012 (households with mobile phones)	DHS 2011-2012 (all households)
Sex (%)				
Female	30.9	35.9	49.8	50.4
Male	69.1	64.1	50.2	49.6
Age group (%)				
Age 18-24	25.8	27.9	24.9	23.8
Age 25-34	37.9	37.6	30.9	29.6
Age 35-49	24.6	22.6	25.2	25.0
Age 50+	11.7	11.9	19.0	21.6
Level of education (%)				
None	27.8	31.7	58.2	61.8
Primary	19.8	20.4	23.2	22.0
Secondary	38.0	36.4	15.5	13.6
Higher education	14.4	11.5	3.1	2.6
Major region (%)				
Abidjan (city)	46.6	46.3	25.2	22.0
Grand Centre	20.1	20.9	30.4	30.7
Grand Nord	7.9	7.6	11.5	13.2
Grand Ouest	10.8	10.9	17.6	19.7
South (excluding Abidjan)	14.6	14.3	15.3	14.4
Place of residence (%)				
Rural	11.9	12.1	46.5	52.1
Urban	88.1	87.9	53.5	47.9
Sample size	1,080	1,080	21,740	25,731
(a) not taking account of subscribers with more than one number.				
(b) taking account of subscribers with more than one number.				
<i>Sources:</i> DOD-CI and DHS.				

education are largely over-represented, and those with no schooling are under-represented. This is the case for both men and women (table not shown).

The question about place of residence was problematic. The administrative subdivisions of Côte d'Ivoire have changed since 1998 and we did not have an up-to-date directory of localities. The country is divided between a communal sector (112 urban communes and 85 rural ones) and a non-communal sector (rural). Respondents were asked where they live. If their place of residence was one of the 197 communes, this information was recorded. If they lived outside the communal sector, they were recorded as living in a rural area.

Only 15 individuals out of 1,080 (1.4%) reported not living in a one of these 197 communes, so the non-communal sector was severely under-

represented. Some respondents probably gave the name of the commune closest to their home, even if they were not official residents of that commune. Exact addresses were not recorded (in rural areas especially); in any case, even when such addresses exist, they are not always known by the local population. The proportion of mobile phone owners is also smaller in rural areas: 75.3% of adults aged 18 or over lived in a household with a phone, versus 94.4% in urban areas (DHS).

Last, the DHS survey zones were selected with a sampling probability proportional to the number of households in the last census, thus reproducing the structure by region and place of residence in 1998. Yet Côte d'Ivoire has seen major population movements since 1998, notably as a result of successive political crises.

IV. Screening indicators

Four questions were the same in the DOD-CI and DHS 2011-2012 questionnaires: “Have you ever heard of an illness called AIDS?” “Do you know of a place where people can go to get tested for the AIDS virus?” “Have you ever been tested to see if you have the AIDS virus?” “Have you been tested to see if you have the AIDS virus in the last 12 months and did you get the results of the test?”

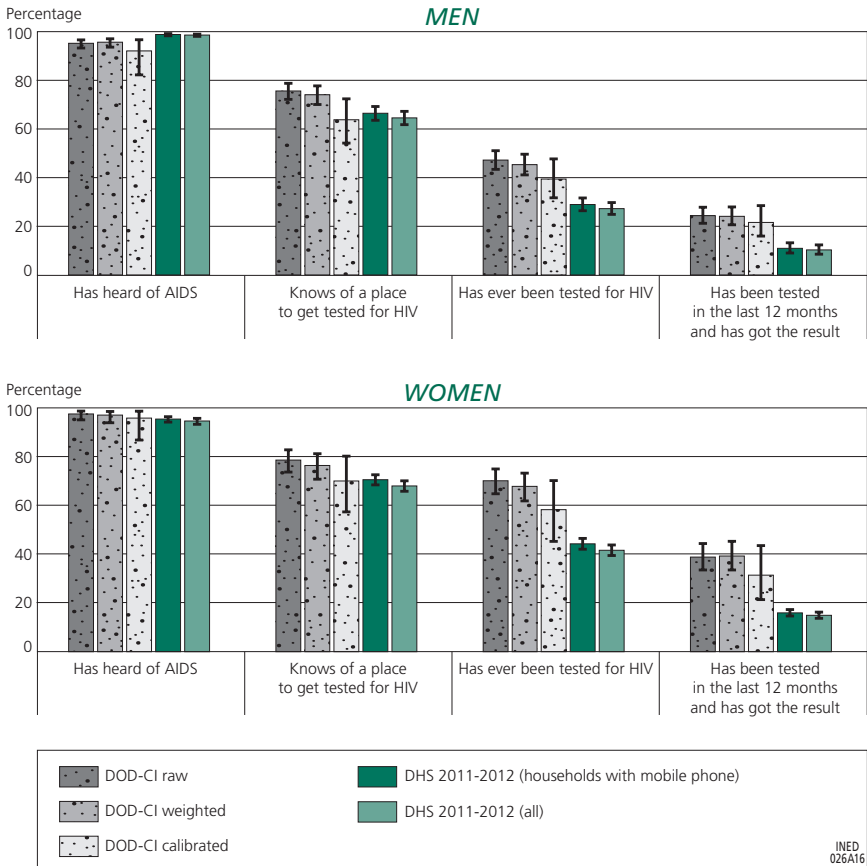
Figure 1 shows these four indicators by sex among the 18-49 age group as measured in the two surveys.⁽⁵⁾ For the comparison, we also calibrated the DOD-CI sample to the structure by sex, age group, educational level, place of residence and major region of the DHS survey. Due to the large distortion between the two samples, the weights obtained range from 0.5 to 550.

Practically everyone in the population (94.8% to 98.6%) has already heard of HIV/AIDS. For the three other indicators, the raw and weighted DOD-CI indicators are systematically higher than those of the DHS. These differences can be explained by the different timing of the two surveys (conducted 18 months apart), the structural differences of the two samples and the mode of administration (telephone versus face-to-face, position of the question in the questionnaire), although the relative weight of each reason cannot be determined.

Apart from the differences of level, the inter-group differences (sex, age group, educational level, place of residence) observed between the two surveys are equivalent for these four indicators (tables not shown). The same differences by age group are observed in both surveys: for men, the screening rate increases with age, while for women it peaks at ages 25-34. In both surveys, screening increases with level of education and is higher in urban areas.

(5) These indicators were measured among persons aged 15-49 in DHS and among the over-18s in DOD-CI.

Figure 1. Main indicators of HIV screening by sex, (comparison of DOD-CI and DHS 2011-2012), individuals aged 18-49



Notes: The segments indicate the 95% confidence intervals.

DOD-CI raw: Not taking account of subscribers with more than one number.

DOD-CI weighted: Taking account of subscribers with more than one number.

DOD-CI calibrated: With post-stratification on structure by age, sex, educational level, place and region of residence of DHS 2011-2012.

Sources: DOD-CI and DHS.

V. Limitations of the pilot survey

From a technical viewpoint, the pilot survey went ahead smoothly, with very few disconnection problems during interviews and good sound quality of calls. The refusal rate was quite low compared to similar surveys conducted in France.

In terms of representativeness, the sample obtained is younger, more urban and more masculine than the population reached by DHS 2011-2012 used for comparison. While the various screening indicators are higher in the DOD-CI

sample than in the DHS, the differences observed by sex, age or level of education in the two surveys are comparable.

However, certain limitations need to be overcome before a new, larger-scale survey can be conducted.

The primary limitation is the fact that only mobile phone subscribers were interviewed, resulting in non-negligible selection bias with regard to place of residence, region, sex or educational level. It is important to also reach persons who are not subscribers themselves but who live in a household with a mobile phone. According to DHS 2011-2012, 85% of adults aged 15 and above lived in a household with a mobile phone (96% in urban areas, 75% in rural areas).

In addition, the method used to obtain information on place of residence in the pilot survey was problematic, and some rural-dwellers were probably recorded as urban-dwellers. An up-to-date directory of localities is needed. Such a directory is currently being prepared by the Côte d'Ivoire National Institute of Statistics on the basis of the mapping work performed for the 2014 general census of population and housing (RGPH), so this problem should no longer arise for future surveys.

The survey coverage could also be improved by narrowing the age range of respondents. The DHS 2011-2012 shows that the proportion of individuals living in a household with a mobile phone is around 88% at ages 15-40, falling to 84% at ages 40-49, 79% at ages 50-59 and 70% or less after age 60 (table not shown). If the survey topic so permits, it might be judicious to set an age limit of 50 or 60 years for eligible respondents.

The pilot survey sample was constructed on the basis of the numbering plan dated 30 June 2011, so did not take account of the ABP blocks assigned after that date. It is important to use a recent numbering plan.

Coverage could be improved by extending the calls over a longer period of the day, and by increasing the number of repeat calls to a number that does not reply before deciding it is unusable.

The question of sample post-stratification is essential. An accurate and recent data source is needed, giving the population structure by age, sex, place of residence and region. The 2014 census, whose initial findings were published at the end of 2015, will provide the elements needed for calibration.

Despite the limitations discussed above, this pilot survey shows that it would be perfectly feasible to conduct a larger scale national survey in Côte d'Ivoire using a sample of randomly generated mobile phone numbers.

REFERENCES

- BECK François, GAUTIER Arnaud, GUIGNARD Romain, RICHARD Jean-Baptiste, 2013, "Méthode d'enquête du Baromètre santé 2010", in Beck François, Richard Jean-Baptiste (eds.), *Les comportements de santé des jeunes : analyses du Baromètre santé 2010*, Paris, INPES, pp. 27-50.
- CHÉNEAU-LOQUAY Annie, 2010, "L'Afrique au seuil de la révolution des télécommunications. Les grandes tendances de la diffusion des TIC", *Afrique contemporaine*, 234(2), pp. 93-112.
- DÉGLISE Carole, SUGGS Suzanne, ODERMATT Peter, 2012, "SMS for disease control in developing countries: A systematic review of mobile health applications", *Journal of Telemedicine and Telecare*, 18(5), pp. 273-281.
- DEMOMBYNES Gabriel, GUBBINS Paul, ROMEO Alessandro, 2013, "Challenges and opportunities of mobile phone-based data collection: Evidence from South Sudan", World Bank, Policy Research Working Paper, 6321, 33 p.
- GUILBERT Philippe, BELTZER Nathalie, GAUTIER Arnaud, WARSZAWSKI Josianne, RIANDEY Benoît, 2011, "Pour de nouveaux indicateurs de qualité des enquêtes téléphoniques par sondage aléatoire", *Revue d'épidémiologie et de santé publique*, 59(2), pp. 91-96.
- HUÉ Goore Bi, 2013, "18 723 755 abonnés identifiés sur plus de 19,6 millions", *Fraternité Matin*, Abidjan, pp. 19-21.
- INSTITUT NATIONAL DE LA STATISTIQUE, ICF INTERNATIONAL, 2012, *Enquête démographique et de santé et à indicateurs multiples de Côte d'Ivoire 2011-2012*, Calverton, INS, ICF International, 589 p.
- INTERNATIONAL TELECOMMUNICATIONS UNION (ITU), 2013, *Statistics*, <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>, accessed 18 February 2014.
- KARANJA Sarah, MBUAGBAW Lawrence, RITVO Paul, LAW Judith, KYOBUTUNGI Catherine et al., 2011, "A workshop report on HIV mHealth synergy and strategy meeting to review emerging evidence-based mHealth interventions and develop a framework for scale-up of these interventions", *The Pan African Medical Journal*, 10, p. 37.
- SOMMEN Cécile, BELTZER Nathalie, 2012, "Évolution dans les enquêtes par téléphone : plan de sondage issu de lignes fixes et mobiles et conséquences sur le calcul des poids de sondage", *X^e journées de méthodologie statistique de l'Insee*, Paris, 12 p.
- TOMLINSON Mark, SOLOMON Wesley, SINGH Yages, DOHERTY Tanya, CHOPRA Mickey et al., 2009, "The use of mobile phones as a data collection tool: A report from a household survey in South Africa", *BMC Medical Informatics and Decision Making*, 9(51), 8 p.

Joseph LARMARANGE, Ouattara KASSOUM, Élise KAKOU, Yves FRADIER, Lazare SIKA, Christine DANIEL, DOD-CI ANRS 12 287 group • FEASIBILITY AND REPRESENTATIVENESS OF A RANDOM SAMPLE MOBILE PHONE SURVEY IN CÔTE D'IVOIRE

This short paper presents the results of an exploratory pilot survey on HIV-AIDS screening (DOD-CI) conducted in Côte d'Ivoire to test the feasibility and representativeness of a national general population survey based on a random sample of mobile phone numbers. The refusal rate was low, and below the levels habitually observed for similar surveys conducted in France. In terms of representativeness, the sample obtained was younger, more urban and more masculine than the population in general. Four HIV-AIDS screening indicators were compared with those obtained in the Demographic and Health survey (DHS) conducted in 2011-2012. Owing to differences in selection biases affecting the two surveys, the indicators were higher than those observed in the DHS 2011-2012. However, the differences observed by sex, age group, level of education and place of residence were similar. This confirms the feasibility of applying such an approach for a national survey in Côte d'Ivoire, providing that several adjustments are made, such as including non-subscribers living in the same household as a mobile phone subscriber.

Joseph LARMARANGE, Ouattara KASSOUM, Élise KAKOU, Yves FRADIER, Lazare SIKA, Christine DANIEL, le groupe DOD-CI ANRS 12 287 • FAISABILITÉ ET REPRÉSENTATIVITÉ D'UNE ENQUÊTE TÉLÉPHONIQUE AVEC ÉCHANTILLONNAGE ALÉATOIRE DE LIGNES MOBILES EN CÔTE D'IVOIRE

Cet article présente les résultats d'une enquête exploratoire pilote sur le dépistage du VIH/sida (DOD-CI) visant à tester la faisabilité et la représentativité d'une enquête nationale en population générale en Côte d'Ivoire à partir d'un échantillon aléatoire de numéros de téléphones portables. Les refus ont été peu nombreux et inférieurs à ce qui est habituellement observé dans des enquêtes similaires en France. En termes de représentativité, l'échantillon obtenu s'avère être plus jeune, plus urbain et plus masculin. Nous avons comparé quatre indicateurs de dépistage du VIH/sida avec l'Enquête démographique et de santé (EDS) réalisée en 2011-2012. Du fait de biais de sélection différents dans les deux enquêtes, les indicateurs étaient plus élevés que ceux observés dans l'EDS 2011-2012. Cependant, les différentiels observés par sexe, groupe d'âges, niveau d'instruction et milieu de résidence étaient similaires. Il paraît dès lors envisageable de réaliser une enquête nationale en Côte d'Ivoire selon cette approche, en opérant plusieurs ajustements, dont la prise en compte des non-abonnés à des téléphones mobiles résidant dans le même ménage qu'un abonné.

Joseph LARMARANGE, Ouattara KASSOUM, Élise KAKOU, Yves FRADIER, Lazare SIKA, Christine DANIEL, el grupo DOD-CI ANRS 12 287 • VIABILIDAD Y REPRESENTATIVIDAD DE UNA ENCUESTA TELEFÓNICA CON SONDEO ALEATORIO DE LÍNEAS MÓVILES EN LA COSTA DE MARFIL

Este artículo presenta los resultados de una encuesta piloto exploratoria sobre la detección del VIH-Sida (DOD-CI). Su objetivo es comprobar la viabilidad y representatividad de una encuesta nacional en el seno de la población general en la Costa de Marfil, a partir de una muestra aleatoria de números de teléfonos móviles. Los rechazos han sido poco numerosos e inferiores a lo que se observa habitualmente en encuestas similares realizadas en Francia. Por lo que toca a la representatividad, la muestra obtenida aparece más joven, más urbana y más masculina. Hemos comparado cuatro indicadores de detección del VIH-Sida con la Encuesta demográfica y sanitaria (EDS) de 2011-2012. Dado que los sesgos de selección difieren en las dos encuestas, los indicadores son más elevados en la nuestra. Sin embargo, las diferencias observadas según el sexo, el grupo de edad, el nivel de instrucción y la zona de residencia son similares. Así pues, parece posible realizar una encuesta nacional en la Costa de Marfil con este método, siempre que se hagan ciertos ajustes, entre ellos el de tener en cuenta a los no abonados a teléfonos móviles que residen en el mismo hogar que un abonado.

Keywords: Telephone survey, representativeness, feasibility, sampling, mobile phone, Côte d'Ivoire.

Translated by Catriona Dutreuilh.