Improving national data collection systems from voluntary counselling and testing centres in Kenya

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Problem Voluntary counselling and testing (VCT) data from the registered sites in Kenya have been fraught with challenges, leading to insufficient statistics in the national office for planning purposes. An exercise was carried out to determine the barriers to the flow of data in VCT sites in Kenya.

Approach A record-based survey was conducted at 332 VCT sites in Kenya. Data from on-site records were compared with those in the national office. The exercise was conducted in 2004 between 5 September and 15 October.

Local setting All registered VCT sites in Kenya.

Relevant changes After the exercise, various measures to enhance VCT data collection and reporting were implemented. They include the provision of a uniform data collection and reporting tool to all the districts in the country, the strengthening of a feedback mechanism to update provinces and districts on their reporting status and increased support to the data component of the national quality assurance for VCT.

Lessons learned Periodical field visits by the national officials to offer on-the-job training about data management to data collectors and to address data quality issues can dramatically improve the quality and completeness of VCT reports. The perceived relevance of the data and the data collection process to those working at the sites is the critical factor for data quality and timeliness of reporting.


Introduction

The Government of Kenya, with other stakeholders, developed a national HIV/AIDS strategic plan1 that identifies strategies to alleviate the spread of HIV/AIDS whose prevalence is estimated at 6.7%.2 One of the key strategies since 2001 has been the establishment of voluntary counselling and testing (VCT) services, which have spread rapidly throughout the country.3,4 Early in 2001 a common national VCT data collection form was piloted by stakeholders and adopted for national usage.5

VCT sites are all registered with the national AIDS and sexually transmitted infection (STI) control programme (NASCOP) and supervised annually, during which time the quality of the on-site laboratory and counselling room records are assessed. Registered sites, whether governmental or nongovernmental, are issued with a unique site code, based on both province and district.1,5 All sites make monthly returns to their district AIDS and STI coordinator (DASCO), and are issued with free test kits from the government in return for data. In theory the returns are passed up a chain for final collation at NASCOP. At the time of this exercise, there were 332 registered sites.

Many of the donor-supported sites follow a parallel reporting system where data are channelled through their internal mechanism to their main offices. Key among the donor sites are the Centers for Disease Control and the Liverpool VCT (an independent nongovernmental organization in Kenya), which represent fewer than 30% of the sites but around 90% of their data are available in NASCOP.

In Kenya, the national VCT programme uses four models that are integrated, stand-alone, community-based and mobile.3,5 The integrated sites are located within the grounds of a health facility, whereas stand-alone sites are usually not associated with medical institutions. VCTs in the community-based approach are integrated into other social services or are implemented as the core activity, whereas the mobile approach provides outreach to remote or hard-to-reach areas.

A comprehensive national database is crucial for government planning and budgeting purposes, including the sourcing of test kits, training of VCT counsellors and counsellor supervisors, and the planning of treatment programmes. VCTs have a potential to integrate family planning and other services as well...
as to provide a point of entry into the health-care system for people who are found to be HIV positive. Owing to the rapid increase of VCT sites in Kenya, there has been a challenge with regard to data collection and management. NASCOP has not been able to receive proper and up-to-date data about the client flow at these sites, posing a challenge to the national VCT database. We therefore set out to determine the completeness of the on-site records, follow up missing data for the national VCT database and determine the barriers to the flow of data in VCT sites in Kenya.

### Methodology
In this exercise, we used an evaluative operations research approach that was non-experimental. In our sample, all registered sites were surveyed quarterly for missing data. We adopted a record-based quantitative survey and a semi-structured interview of key informants to explore opinions about the causes of delays in data handling. All registered sites were surveyed for missing data. Interviews were conducted with key informants, such as counsellors, DASCOs and provincial AIDS and STI coordinators (PASCOs) at sites where delays in data submission were identified.

Two teams of four members were selected and worked simultaneously in different provinces collecting data between 5 September 2004 and 15 October 2004. There was a short training session for data collectors before the start of the exercise; this included how to survey the opinions of key informants with regard to delayed submission of reports, completion of the quarterly reports and the new data collection tool. The role of the data collector entailed collecting missing data from the logbooks, pre-testing a new data collection tool and surveying opinions among key informants with regard to delayed submission of data reports. Collection of data was, firstly, through visiting the PASCO and DASCO offices for any relevant VCT reports from registered sites recognized by NASCOP. Failure to get up-to-date records in these offices led the teams to visit the affected sites. Data were collated from September 2001 (shortly after the scale-up of VCT began) until the second quarter of 2004. For the sites with missing data in the central database (monthly and quarterly) or those with reports that did not disaggregate their data by gender, the teams manually extracted this information from the on-site logbooks and client forms. Data were analysed using simple descriptive statistics in Microsoft Excel.

### Results
Of the existing 332 sites officially registered in the second quarter of 2004, 298 (89.76%) had some missing records and their statistics were updated through this exercise. All the sites had completed client forms and logbooks, which were used to retrieve the missing data. In the event of a shortage in the required VCT stationery, the sites improvised a data collection tool. Existing data at the beginning of the survey showed 193 959 client records in the national database for the period between the second quarter of 2001 and the second quarter of 2004. On-site records revealed a further 220 944 records. After the exercise there were more than twice as many HIV

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**Table 1. Annual VCT aggregate in NASCOP before and after the data collection exercise**

| Year | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total |
|------|-------|---------|-------|-------|---------|-------|-------|---------|-------|-------|---------|-------|-------|---------|-------|-------|
| 2001 | 1393  | 1397    | 2790  | 143   | 322     | 465   | 17    |         |       |       |         |       |       |         |       |       |
| 2002 | 9694  | 8457    | 18151 | 1475  | 1922    | 3397  | 19    |         |       |       |         |       |       |         |       |       |
| 2003 | 8301  | 7060    | 15361 | 1332  | 1600    | 2932  | –     |         |       |       |         |       |       |         |       |       |
| 2004 | 11 518| 11 032  | 22 550| 740   | 1573    | 2313  | 10    |         |       |       |         |       |       |         |       |       |

NASCOP, national AIDS and STI control programme; VCT, voluntary counselling and testing.

a Before, refers to VCT data available in NASCOP before the data collection exercise.
b After, refers to VCT data retrieved during the exercise.
c Difference, refers to the difference between before and after the exercise.
Amélioration des systèmes de collecte des données à partir des centres de conseil et de dépistage volontaire du VIH au Kenya

**Problématique** Le recueil de données à partir des sites de conseil et de dépistage agréés du Kenya s’effectue très difficilement, d’où une insuffisance des statistiques réunies au niveau national à des fins de la planification. Un exercice a été pratiqué pour identifier les obstacles s’opposant à la circulation des données au niveau des sites de conseil et de dépistage volontaire kényans. Les données tirées des dossiers ont été comparées avec celles dont dispose le Bureau national des statistiques. L’exercice a été réalisé en 2004, du 5 septembre au 15 octobre.

**Contexte local** Tous les sites de conseil et de dépistage volontaire agréés du Kenya.

**Modifications intéressantes apportées** A l’issue de l’exercice, diverses mesures visant à améliorer la collecte et la transmission des données par ces sites ont été mises en place. Parmi ces mesures, figuraient l’introduction d’un outil de collecte et de transmission homogènes des données dans tous les districts du pays, le renforcement du mécanisme d’information en retour, destiné à renseigner les provinces et les districts sur leur situation en matière de notification, et l’apport d’un soutien accru à la composante Qualité des données système national d’assurance de la qualité s’appliquant au conseil et au dépistage volontaire du VIH.

**Enseignements tirés** Il est possible d’améliorer considérablement la qualité et la complétude des notifications transmises par les centres de conseil et de dépistage en délégant périodiquement des spécialistes nationaux dans ces centres afin de former sur place les personnes chargées de recueillir les informations à la gestion.
Resumen

Mejora de los sistemas nacionales de recogida de datos a partir de los centros de asesoramiento y pruebas voluntarias en Kenia

Problema Los datos sobre el asesoramiento y pruebas voluntarias (APV) obtenidos en los centros registrados en Kenia presentan muchas deficiencias, lo que impide que la oficina nacional disponga de estadísticas suficientes a efectos de planificación. Se emprendió un trabajo para determinar los factores que obstaculizaban el flujo de los datos en los centros de APV en Kenia.

Métodos Se llevó a cabo un estudio de los registros de 332 centros de APV de Kenia. Los datos de los registros situ se compararon con los de la oficina nacional. El trabajo se realizó en 2004, entre el 5 de septiembre y el 15 de octubre.

Contexto local Todos los centros de APV registrados en Kenia. Y el 5 de septiembre y el 15 de octubre. Cambios destacables Terminado el trabajo se implantaron diversas medidas para mejorar la recopilación y notificación de los datos de APV. Entre ellas cabe citar el suministro de un instrumento de recogida y notificación de datos uniforme a todos los distritos del país, el refuerzo de un mecanismo de retroinformación para poner al día a las provincias y los distritos acerca de su situación en cuanto a la notificación, y un mayor apoyo al componente de datos del sistema nacional de garantía de la calidad para el APV.

Experiencia adquirida Las visitas periódicas al terreno a cargo de funcionarios nacionales para ofrecer a los encargados de recoger los datos formación en el empleo sobre la gestión de los datos y para operar aspectos de la calidad de los mismos permiten mejorar extraordinariamente la calidad y la completud de los informes sobre el APV. La importancia asignada a los datos y al proceso de recopilación de datos por quienes trabajan en los centros es el factor más decisivo para asegurar la calidad de los datos y la puntualidad de las notificaciones.

References