Social and medical survey of HIV infected patients from sub-Saharan Africa, in hospitals in the Paris area (Ile-de-France), 2002

Florence Lot (f.lot@invs.sante.fr), Christine Larsen, Nadia Valin, Pascal Gouëzel, Thierry Blanchon, and Anne Laporte, Institut de Veille Sanitaire, Saint-Maurice, France

In the context of a declining incidence of AIDS in France (1) the observed rise in cases of AIDS from 1999 onwards in immigrants from sub-Saharan Africa has prompted a descriptive survey of HIV infected patients from this region receiving treatment in hospitals in Ile-de-France (Paris and its suburban districts) (2). This study, carried out by the Institut de Veille Sanitaire (InVS) in the first half of 2002, described the social and demographic characteristics of these patients, including their living conditions, the circumstances surrounding their diagnosis with HIV, and subsequent medical treatment.

Sixteen hospitals in Ile-de-France that had a substantial number of current patients from sub-Saharan Africa took part in the study. All patients originating from sub-Saharan Africa who were HIV positive, aged 18 or over, and attended outpatient, day hospital or inpatient services at the hospitals during the course of the study (a period of a few days) were asked to take part. After consent was obtained, brief medical particulars (clinical disease stage, whether receiving antiretroviral therapy, regularity of medical checkups) were collected. On the basis of an anonymous questionnaire, patients were interviewed to obtain social and demographic information (age, sex, country of birth, nationality, level of education), their living conditions (profession, income, type of accommodation, family situation, whether they had health insurance, legal status of residence in France, the circumstances of their arrival in France (date and reasons), and information about their HIV infection (date and circumstances of screening, mode of infection, and likely country of infection).
A cluster analysis of the data (using COREM, SPAD 4.01) was carried out to characterise patients according to selected social and demographic factors. To identify independent variables associated with arrival in France since 1999, a backward multivariable logistic regression analysis was carried out (using SAS-V8) on the variables found to be significant by the univariate analysis.

Results

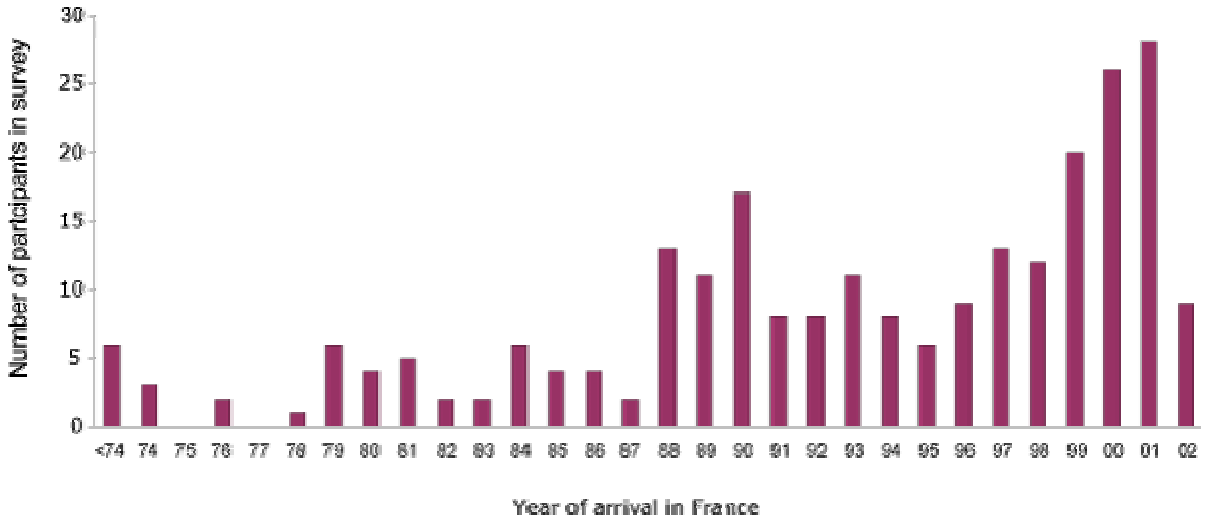
Of the 278 patients approached to take part in the study, 250 were interviewed. Of these patients, 64% were women and the median age was 36 years. Most patients were from the Ivory Coast, the Democratic Republic of Congo, Cameroon, the Congo (capital: Brazzaville), Mali and Senegal.
The distribution of patients as a function of their date of arrival in France was as follows (figure):

Until 1987, fewer than seven patients arrived in France every year. In total, 19% of respondents arrived between 1957 and 1987

Between 1988 and 1998, between six and 13 patients arrived each year (except in 1990), or a total of 47% of respondents in this period

Since 1999, the number of patients arriving in France has risen year on year. Thirty-four percent of respondents arrived in France in this period

Figure. HIV-positive survey participants by year of arrival in France



The principal reasons for migration to France were: to join family (34%), to study or find work (33%), political reasons (12%) and medical reasons (10%). At the time of the study, 47% of respondents were unemployed and 76% had a monthly income lower than the minimum wage. Most (52%) had no permanent accommodation. Six percent of respondents were not covered by the usual national health insurance and 18% declared they were illegal immigrants.

Ninety-one percent of respondents were diagnosed with HIV in France. The time between arrival in France and diagnosis of HIV infection was lower for patients who arrived in the late 90s than for patients who arrived in the 80s. Among patients who arrived in France in 2001 and 2002, diagnosis had taken place before arrival. The most frequent reason for seeking screening was presence of symptoms, in 46% of cases. At the time of the study, 34% of respondents had AIDS.

The cluster analysis identified three main patient profiles as a factor of the date of arrival in France (Table 1).

Table 1. Classification of survey participants, grouped by time period of arrival in France

Group 1 (n = 93)		**Group 2 (n = 77)**		**Group 3 (n = 80)**	
Women	**95%**	HIV diagnosis in France	**92%**	Difficulties with accommodation	**85%**
Clinical disease stage A	**77%**	Aged 36 years or above	**81%**	No job	**80%**

Aged less than 36 years	**75%**	Clinical disease stage B or C	**79%**	Arrival during or after 1999	**79%**
Stable accommodation	**72%**	Covered by national insurance	**77%**	Infected in Africa	**69%**
Arrival in France between 1988 and 1998	**71%**	Men	**74%**	Mode of infection declared to be unknown	**63%**
Arrival in France to join family	**60%**	Place of infection unknown or in France	**46%**	Diagnosed because symptomatic	**59%**
Heterosexual mode of infection	**57%**	In work	**71%**	Receiving emergency state medical aid or not covered	**59%**
Diagnosed with HIV during a pregnancy	**54%**	Diagnosed because symptomatic	**64%**	Clinical disease stage C	**45%**
In receipt of a form of national health insurance (CMU)	**48%**	Mode of infection declared to be unknown	**64%**	Came to France because of illness	**28%**
Born in Ivory Coast	**32%**	Came to France for study or work	**58%**	Diagnosed HIV positive before arrival in France	**26%**
		Arrived before 1987	**53%**	Illegal immigrant	**26%**
		Born in Senegal or Mali	**39%**	Born in Cameroon	**20%**
		No education	**32%**		
		Income more than 990 Euros per month	**19%**		

Group one consisted mainly of women who arrived in France between 1988 and 1998 to join family, and who were diagnosed with HIV during a pregnancy. Group two consisted mainly of men who arrived in France before 1987, who were employed, had national insurance, and whose screening for HIV was prompted by the development of symptoms. Group three included patients who had arrived in France during or after 1999, who were not covered by national insurance or who were receiving emergency state medical aid and who were often living in

very precarious conditions.
Multivariate analysis (table 2) showed that compared with patients who arrived in France before 1998, patients arriving during or after 1999 were younger (less than 36 years), were more likely to have been infected in Africa than in France and had more often come to France for medical reasons, and more often were vulnerably housed with no certainty of social security assistance.

Table 2. Independent factors associated with arrival in France of HIV positive sub-Saharan Africans arriving during or after 1999 participating in the survey. Multi-variable analysis.

		Adjusted odds ratio	Confidence Interval (95%)
Age	< 36	1	
	> 36	0.3	0.1-0.8
Reason why came to France			
	To join family	1	
	Medical	15.1	2.8-81.2
Place of infection			
	In France	1	
	In Africa	27.2	7.3-101.9
	Unknown	6.5	1.6-25.3
National insurance status			
	National insurance	1	
	Other form of state sickness cover	16.4	4.2-64.2
	Emergency state medical aid	44.4	9.3-212.4
	Not covered	67.4	10.1-451.5
Accommodation			
	Stable	1	
	Precarious	4.6	1.8-11.8

Discussion and conclusion
French immigration data (3) shows an increase in migration from sub-Saharan Africa over recent years, which is consistent with the large proportion (34%) of patients in this study who arrived in France after 1999. This increase has parallels, in terms of country of origin and sex of the patient, with the recent increase in the number of AIDS cases in France in people originally from sub-Saharan Africa.
The results also show that a proportion of the AIDS cases diagnosed in France since 1999 among sub-Saharan Africans were among those living in France for many years (having arrived in the 80s and 90s).

The study population is not representative of the whole HIV infected population from sub-Saharan Africa living in France as the people included are those that were receiving medical care. Problems accessing state medical provision in France seem to have been partly resolved among the group participating in this study, but could recur following changes in eligibility rules for state medical aid. In contrast, the precarious socio-economic status of these people remains worrying and is a major block to accessing screening and satisfactory medical treatment.

Based on this evidence, the following recommendations for tackling the problem amongst sub-Saharan Africans living in France could be considered:

- run an information campaign and a prevention campaign targeted at the sub-Saharan Africa community, especially at community level
- promote early screening and diagnosis of HIV infection, especially in men
- reinforce advice, prevention and screening processes for women, especially in gynaecological or obstetric follow-up appointments
- campaign against racial discrimination in job seeking and in applying for council housing
- aid access to medical help by adapting social security payments, universal medical insurance, state medical aid, etc

References:

1. AIDS situation in France. Data from 31 December 2002 (http://www.invs.sante.fr/publications/default.htm).
2. Lot F, Larsen C, Valin N, Gouëzel P, Blanchon T, Laporte A. Parcours sociomédical des personnes originaires d'Afrique subsaharienne atteintes par le VIH, prises en charge dans les hôpitaux d'Ile-de-France, BEH 2004; 5:17-20. (http://www.invs.sante.fr/beh/)
3. Ministère de l'intérieur. Les titres de sèjour des ètrangers en France en 1999, 2000, 2001, 2002. (http://www.interieur.gouv.fr)