

# The impact of AIDS on the economy of families in Côte d'Ivoire: Changes in consumption among AIDS-affected households

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## Editor's note:

The survey analysed below by Nathalie Béchu was part of a larger study of 600 households in Burundi and Haiti as well as Côte d'Ivoire. Households were selected into the sample after being identified by one of three index health facilities as containing an adult with AIDS. At least one adult in the survey households was ill with AIDS and had charge of one or more children. The objective was to analyse the changes in the living conditions of these households as the illness progressed and when the ill person died.

From among the 200 households studied in Côte d'Ivoire, 120 were followed over a period of 20 months, and 107 households were followed through to the end of the study period. So the data below derive from 107 households. Beginning seven and a half months after they were first recruited, the households were interviewed six times at two-month intervals.

Household size varied from two to 16 people, with an average of 6.3 people (though the average dropped from 6.6 to 5.9 from beginning to end of the project). Eighty-seven households were in urban areas and 20 in semi-rural, and 62 of those who were ill were men; 45, women. Eighty-three of those who were ill were still living by the end of the survey period, and 24 had died.

The survey was part of a research programme coordinated by the Centre International d'Enfance and cofinanced by the Agence Nationale de Recherche sur le SIDA and the French Ministry of Cooperation and Development. ORSTROM and the University of Côte d'Ivoire collaborated in the study. This edited extract is from the full paper.

## Section One: Introduction

Our initial hypotheses were that:

- the difficult situation that households in Côte d'Ivoire face in the context of economic crisis and a critical shortage of health care, aggravated by the wide-ranging effects that AIDS could potentially have on household

budgets, could presage major upheavals in the normal consumption patterns of households affected by the epidemic

- the spread of the illness may well be the root cause of a substantial and rapid rise in expenditures on health care and of a simultaneous decline in other expenditures, these effects arising both from the need to rebalance the family budget because of an increase in health care expenditures and from the fact that the household's sources of income diminish.

So how do these hypotheses stand up to an analysis of the results of the survey of the 107 households in Côte d'Ivoire?

### Section Two: Comparison with consumption choices made by other Côte d'Ivoire households

The consumption data obtained from the 107 households were compared with the results of a study conducted in Yopougon, the second largest district in Abidjan, in May 1992 and based on a large sample of 2,064 households.

#### 2.1 Current consumption compared to the general population

The households monitored within this survey were mostly in the middle or lower social categories. Theirs is essentially the consumption of subsistence. It is dominated by expenditures on food and accommodation, respectively, or 32 per cent and 8.3 per cent of all expenditures recorded over the period. Other expenditures linked to basic necessities also make up a substantial part of the budget, with total basic expenditures accounting on average for more than half of total expenditures (53.4 per cent). Other current and exceptional expenditures account for 38.2 per cent of total consumption.

These figures are very similar to results obtained from an independent survey of the consumption patterns of the population of Yopougon. There, basic expenditures accounted for 56.1 per cent of total household expenditures, and other current and exceptional expenditures (other than health) accounted for 38.2 per cent. This latter figure compares with 36 per cent in our survey if expenditures on the health of people other than the person with AIDS (2.2 per cent) are excluded.

Although the structure of consumption of the two population groups is similar, their levels of consumption are very different. The average monthly expenditure of Yopougon households reaches CFA franc 131,381 whereas it is less than half that in our survey (FCFA 65,368). This difference reflects the fact that incomes in our households were only half as high. This can be confirmed by comparing the occupations of the heads of households; they are often more stable in the households studied during the Yopougon survey.

#### 2.2 Expenditure on health

The main difference between the structures of consumption of these two populations – one consisting of families affected by AIDS, the other more

representative of the general population – is to be found in the size of the budget devoted to health.

The proportion of household budgets spent on health care is almost double in households in which there are people with AIDS (10.6 per cent compared with 5.6 per cent in the Yopougon households). Furthermore, health costs specific to the person with AIDS account for almost 80 per cent of the health budget item, that is, 8.4 per cent of total consumption. On the other hand, the budget share given over to the health care of other members of the household is lower in these households. This is probably due to the high level of expenditures incurred in looking after the person with AIDS. In households affected by AIDS, health care costs for other members of the household account for only 2.2 per cent of total expenditures; this is much less than the expenditures spent by Yopougon households under this heading (5.6 per cent).

In households where there is a person with AIDS, apart from the risk of the virus being transmitted because – as so frequently happens – the illness is not identified, particularly by spouses, the risk of other household members picking up the infection may be increased by reductions in the consumption of medical goods and services. In households with the most seriously ill people (i.e., where the person with AIDS died before the monitoring was completed) that patient's health expenditures accounted on average for 15 per cent of total expenditures compared to only 1.5 per cent spent by other members of the household.

These figures appear to support the hypothesis that an increase in health expenditures, together with an imbalance in those expenditures in favour of the person who is HIV-positive, is one of the main effects that the illness has on the pattern of household consumption. However, this analysis derives solely from a study of average consumption throughout the monitoring process. So the question remains – what direction are these expenditures taking?

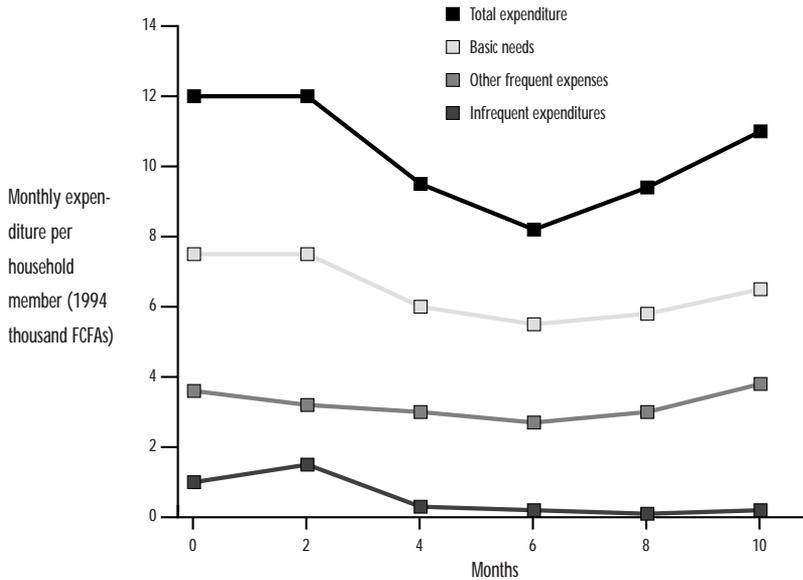
### **Section Three: Reduction in consumption by households affected by AIDS**

The impact of AIDS on a household's expenditures depended a great deal on how sick the AIDS patient became during the course of the study. In the households in which the AIDS patient remained relatively free of symptoms, per capita consumption remained stable over time. But in the 29 households where the AIDS patient either died or moved away, per capita consumption first dropped, then appeared to recover partially (see figure 1).

#### **3.1 A substantial fall in consumption during the first few months of the monitoring process**

Examination of expenditures over the whole sample predictably revealed a substantial fall in average consumption per household member during the first year after AIDS was diagnosed. The average monthly consumption of monitored

**Figure 1. The impact of adult illness on per capita household expenditure, Côte d'Ivoire**



Source: Author's calculations.

households fell by a third between the first and fourth rounds of the survey and by 16 per cent over the whole monitoring period.

Grouping expenditures under broad consumption headings (basic expenditures, other current expenditures, exceptional expenditures, and the patient's health expenditures) reveals a general decline in consumption up to the fourth round. But there are considerable differences in the movements of these various expenditures.

### 3.2 A substantial decline in health expenditures and a temporary fall in current consumption on other than basic needs

The biggest reductions relate to

- a the monthly consumption of health care by the person with AIDS, which fell by almost a half between the first and fourth rounds, and
- b current expenditures (other than the consumption of bare necessities), which declined by 42 per cent during the same period.

Although the fall in current expenditures affects the trend in general consumption (on average they account for more than 28 per cent of total consumption), it is the fall in health expenditures that seems to reflect a real change in the pattern of consumption. Apart from a rapid decline in average monthly expenditures on health (a fall of one-half between the first and

third rounds and of 41 per cent over the whole period), the fall in this budgetary item is also explained by a major decline in the number of people with AIDS consuming health care (through hospitalisation, consultations with practitioners of modern and traditional medicine, home care, and modern and traditional medication).

By way of illustration, whereas more than 95 per cent of those with AIDS and living at home were health care consumers during the first rounds, only 55 per cent were still doing so after 10 months; what is more, 29 had already died or had left their homes. The number of AIDS-related health care consumers therefore fell by more than half (from 99 individuals down to 43) during the monitoring period.

Although there is a striking fall in the consumption of medical goods and services of all types, this is particularly true of modern medicine: the percentage of patients living at home and having modern medicine consultations fell by almost 60 per cent between the beginning and the end of the survey, and the consumption of 'bio-medicinal treatments' dropped by almost half.

By contrast, there were very few cases of hospitalisation. In fact, not one person with AIDS was hospitalised during the last four months of the survey. Moreover, these falls were not compensated for by increased consumption of traditional medicine: in fact, consultations with traditional medical practitioners fell by more than a third, and the consumption of traditional medicines fell by 30 per cent.

These findings conflict sharply with the hypothesis that the consumption of care rises as the illness becomes more serious. They appear to reflect a degree of disinterest among persons with AIDS in the provision of care that cannot cure them. After the initial period when the illness is identified and there is frequent recourse to health care, most seem to distance themselves gradually from the structures of modern care – and, to a lesser extent, from traditional medicine – by cutting back on hospitalisation and medical consultations and the consumption of medicine. During the first six months of the monitoring exercise, the consumption of health care represented on average almost 12.6 per cent of households' current expenditures; during the last two months, it accounted for only 3.8 per cent.

However, the fall in average consumption of health care on its own fails to explain the overall decline in expenditures, because health care for the person with AIDS accounts on average for no more than 8.4 per cent of total expenditures for the entire period of the survey.

3.3 A gradual decline in the consumption of basic necessities is often linked to changes in the composition of the household and to the death of the person with AIDS

The fall in overall consumption also extended to basic needs, such as food, energy (water, oil, electricity, wood, and coal), accommodation, hygiene, and maintenance. During the course of the survey, this budget heading fell on aver-

age by almost a quarter, thereby pulling total expenditures down, since it accounted on average for more than half (53.4 per cent) of total expenditure. However, the fall in consumption of basic necessities was not uniform. It mainly affected households where a person with AIDS died or moved away. In the latter case, the fall was 30 per cent, compared with an average of 22 per cent in other households.

This decline is particularly disturbing because the budget item that underwent the biggest reduction in households where a person died of AIDS is food (minus 40 per cent between the beginning and the end of the survey). When combined with a major reduction in the health care expenditures of other household members, this fall in basic consumption represents a major crisis in these households, involving a change in their consumption choices, including the meeting of vital needs. Falling consumption appears to be mainly linked to the crisis brought about by the AIDS death. Changes in per capita consumption are insignificant in households where there are no instances of an AIDS death.

The fall in consumption expenditures during the first few months following detection of the illness and the beginning of medical care is substantial in most AIDS-affected households, but is especially so in households where the person with AIDS dies. However, a general upturn in consumption is observed after a few months.

#### 3.4 An upturn in consumption at the end of the monitoring exercise: A temporary effect?

There was an upturn in consumption during the last two rounds (+25.4 per cent on average). Does this denote a return to earlier consumption habits after the shock caused by diagnosis of the illness and the reductions imposed on consumption choices? Or is it rather a question of a half-hearted or temporary upturn in expenditure?

Although it did not climb back to its original level, the recovery in overall consumption was very marked in respect to those current expenditures that were not linked to the meeting of basic needs. During the last two rounds, this expenditure item more than doubled for most households. By contrast, those monthly expenditures that were linked to basic necessities (i.e., food, hygiene, accommodation, water, gas, oil and electricity, and wood and coal) and to the health costs of the person with AIDS fell throughout the monitoring exercise, on average by 24 per cent and 76 per cent, respectively, in all households.

But nonbasic current expenditures, which declined sharply during the first few months of monitoring (minus 42 per cent between the first and fourth rounds), were actually higher at the end of the period than when the monitoring began (+16 per cent on average).

The upturn was largely associated with an increase in expenditures on clothing (+136 per cent during the last four months) and even more with an upturn in consumption linked to education, where, after falling away sharply

in previous months, the total amount climbed back to the level it had achieved during the first round.

But the important point is that the upturn in these two expenditure items is mainly explained in terms of timing. It was not a fundamental change in consumption choices, nor was it a return to the initial situation. It was because the school year was commencing and households with children of school age faced expenditures that could not be reduced. So the upturn in average consumption noted at the end of the monitoring process did not really point to any refund confidence on the part of these households, but was rather a 'period effect' involving only a temporary increase in consumption.

3.5 Was there nevertheless a more durable, if still inadequate, 'upturn' in households confronting an AIDS death?

The relative upturn in consumption toward the end did not enable households coping with an AIDS death to return to their earlier levels of consumption. In households where the person with AIDS died or moved away, average global consumption fell by as much as 44 per cent despite the upturn observed at the end of the period. So the decrease in health expenditures made possible by a death (or departure) did not really prompt a return to a level of consumption comparable to the earlier level. The reason was to be found in more fundamental cutbacks on current expenditures incurred at the beginning of the monitoring, partly introduced to pay for the health costs of the person with AIDS. Nor was the upturn in these households toward the end sufficient to reestablish the average level of expenditure per individual.

In households where the person with AIDS was still living at home at the end of the survey, per capita consumption actually increased by a quarter during the exercise thanks to a rise of almost 40 per cent during the last four months. But in contrast, individual expenditures in households where that person died or moved away fell by 10 per cent over the whole period.

What seems to happen is that households where the person with AIDS has died tend to revise consumption habits that were disrupted by the death. They do this by limiting exceptional expenditures, including funeral expenses. For example, of the 24 households in question, only 19 committed funds to the organisation of funeral and other related ceremonies. Surveys in Zaire and Haiti show how funeral expenses there can represent more than 80 per cent of average annual per capita income and put a considerable strain on household budgets. In the monitored households of Côte d'Ivoire, however, they did not make any substantial contribution toward increasing expenditures.

So the presence of AIDS does have an effect on the basic consumption patterns of households, but the modification that it causes is not always sustained and varies from one household to the next. In all observed households, AIDS plays a key role in changes in household consumption.

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