EDITORIAL

Translated from *Rev Prescr* **May 2004; 24 (250): 379-380**

Adherence to antiretroviral treatment in Africa: cost is the main obstacle

Good adherence is crucial if antiretroviral therapy is to be useful, both for individuals and for society. Many experts have taken the view that good adherence is impossible in the context of Africa. Recent assessments of the Senegalese and Ivory Coast antiretroviral access programmes give an interesting insight into treatment adherence in this setting (1,2).

Senegal: a survey of adherence in a pragmatic pilot project. **The prevalence of HIV infection in Senegal is relatively low (estimated at below 2%) and seems to have stabilised (1). The antiretroviral access programme in this country was designed as an expanding "pilot" programme integrated into the existing health care system; it was initially limited to 50 patients managed in three Dakar hospitals (a)(1). The patients were recruited by an "eligibility committee" on the basis of anonymous medical and social records, which were used to determine whether, and how much, each patient could contribute to the cost of treatment (1). In April 2002, the number of patients managed in this way had risen to 450 (1).**

Adherence was studied for 24 months, between November 1999 and October 2001, by monthly interview conducted by the dispensing pharmacist (b). The results concern 158 patients included in the programme at the time, 80 of whom participated in two clinical trials (1). This corresponds to 2389 patient-months of follow-up.

Good adherence. **Estimated mean monthly adherence was 91% during the 24-month study period (c)(1). Overall, the patients said they took their entire dose during 69% of months.**

Cost was the main determinant. Mean adherence rose from 83% in 1999 to 90% in 2000 following a substantial reduction in the patients' contribution to the cost of treatment. Financial difficulties were the leading cause of treatment interruption in 1999, but fell to fifth place in 2000. Adherence was even better in a trial in which treatment was dispensed free of charge (97%, versus 87% elsewhere) (1).

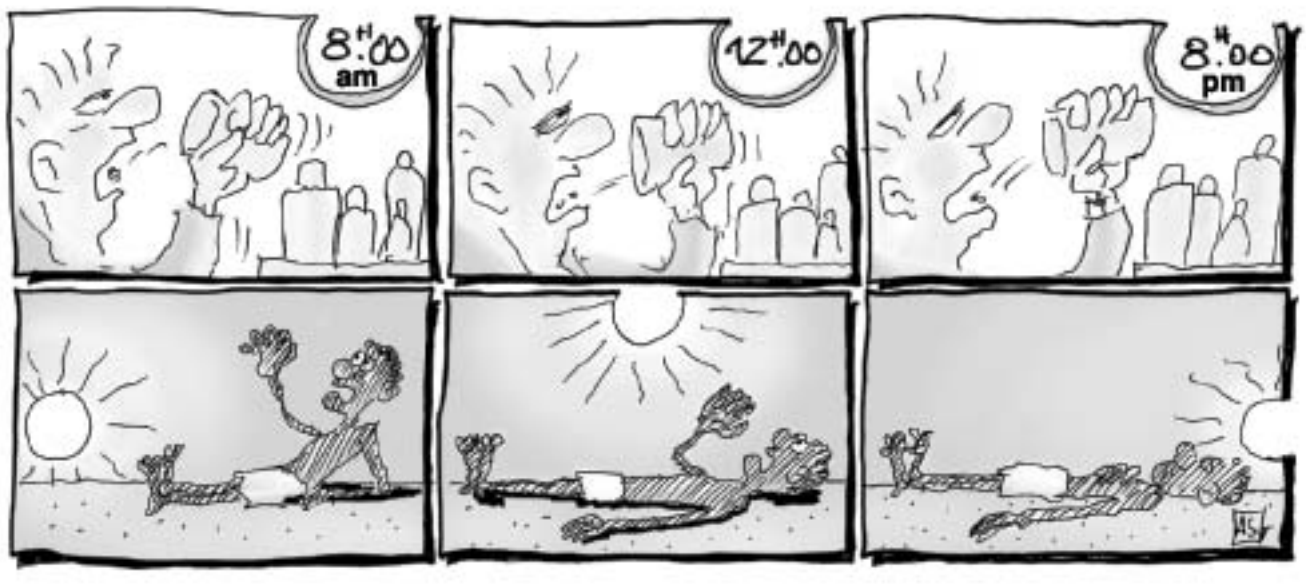
Adherence also varied with the type of three-drug regimen prescribed: regimens including a non nucleoside reverse transcriptase inhibitor were followed more closely than those including an HIV protease inhibitor.

The main reasons cited for treatment interruption during the two-year study period were travel obligations (26% of cases); adverse effects or other health problems (17%), financial dif- ►►

a- The Senegalese antiretroviral access initiative, in partnership with various research institutions, was the subject of a continuous medical, economic, behavioural and social evaluation from 1998 to 2002 (ref 1).

b- The quantitative estimation was based on patients' responses to questions about the number of missed doses in the previous month and the number of tablets returned. It took into account the amounts of each component of the three-drug regimens that patients said they had taken (ref 1).

c- Adherence was estimated from reports covering the 30 days before each treatment was dispensed (ref 1).



EDITORIAL

ficulties (13%), and forgetfulness (13%) (1). Difficulties in obtaining the drugs, owing to incompatibilities between the health care professionals' and patients' timetable, were mentioned in 7% of cases. No interruption in supply was reported (1).

Another part of this study showed that viral load was significantly higher among the least adherent patients (1).

The authors of the report recognised that the experimental study design encouraged adherence among participants as did other factors including the moderate size of the study, and the involvement of doctors, pharmacists and social workers

Ivory Coast: variable adherence. The prevalence of HIV infection is high in Ivory Coast. By extrapolation from surveys of pregnant women, it has been estimated that more than 10% of the population aged 15 to 49 years is infected (2). Ivory Coast was one of the first countries chosen in 1997 by UNAIDS for an antiretroviral access initiative (**d**)(2). The programme, launched in August 1998, was intended to include 4000 patients receiving subsidised treatment, chosen by an advisory board and managed by the public health care system. Eight centres in Abidjan were authorised to prescribe and dispense antiretroviral drugs. About 1000 patients had been treated by late 2000 (2).

Determinants of adherence were analysed (2,3). The most obvious difficulties were in obtaining antiretroviral drugs, owing to recurrent supply interruption (management problems), complex or slow funding procedures; and a generic boycott by prescribers in 2000 (2,3). During supply interruption, prescribers were not offered guidance on whether to interrupt treatment temporarily or to prescribe the available components of the three-drug regimens.

Subsidies, initially granted for two-drug regimens and preferentially to members of patient associations, proved inadequate when the switch was made to three-drug regimens in 1999; this obliged patients to interrupt a treatment that, although subsidised, was not free of charge (2,3).

According to the authors of the study, good communication between patients and the nursing team (important for the promotion of adherence to treatment) were undermined by a lack of time and insufficient training. The planned psychosocial support was also deficient. The tendency to select patients who were "likely to adhere to their treatment" in effect meant that only those who could afford it were treated (3).

The authors noted that those patients who had had to struggle longest and hardest to obtain antiretroviral treatment were most likely to stick closely to their treatment protocol (3).

The main obstacle to adherence is an economic one. The example of Ivory Coast clearly shows the problems associated with starting an antiretroviral access programme that meets the twin conditions required for good adherence, namely availability and psychosocial support; but it suggests that the "privileged" patients who gain access to treatment are highly motivated (**e**).

In Senegal, where drugs were available at an affordable price, and where patients were managed by highly professional and motivated medical and social teams, the rate of adherence was close to that commonly seen in the northern hemisphere. Similar adherence rates have been reported in other regions of Africa (4).

Therefore, the notion that African patients are unable to adhere to antiretroviral treatment is clearly false. Cost is the main obstacle to broader access to treatment. This had already been established for tuberculosis, another disease with a lengthy and complex treatment (5).

d- The UNAIDS antiretroviral access initiative, which included Uganda, Vietnam and Chile, was based on a general plan which each country was free to implement as they saw fit. The Ivory Coast programme was evaluated between 1999 and 2001 by the French national AIDS research agency (ANRS), in partnership with the Centers for Diseases Control and Prevention (for the clinical data) (ref 2).

e- Prior selection of patients likely to adhere to treatment on the basis of social or individual factors is illusory; there are few reliable predictors of poor adherence (ref 2,6).

Selected references from Prescrire's document watch.

1- Desclaux A et al. "L'initiative sénégalaise d'accès aux médicaments antirétroviraux" Agence nationale de recherches sur le sida, Paris 2002: 260 pages.
2- Msellati P et al. "L'accès aux traitements du VIH/sida en Côte d'Ivoire. Évaluation de l'Initiative Onusida/ministère de la Santé publique" Agence nationale de recherches sur le sida, Paris 2001: 327 pages.
3- Delaunay K and Vidal L "Le sujet de l'Observance. L'expérience de l'accès aux traitements antirétroviraux de l'infection au VIH en Côte d'Ivoire" *Sciences sociales et santé* 2002; **20** (2): 5-38.
4- Oransky I ''African patients adhere well to anti-HIV regimens'' *Lancet* 2003; **362**: 882.
5- Castro A and Farmer P "Violence structurelle, mondialisation et tuberculose multirésistante". In: "Cultures et médicaments" *Anthropologie et Sociétés* 2003; **27** (2): 23-40.
6- "Observance''. In: Delfraissy JF et al. "Prise en charge des personnes infectées par le VIH - Rapport 2002'': 75-82.