

## **Changing Epidemiology of HIV In Ghana: Any Influence of the War in Neighboring La Cote D'Ivoire?**

Civil war and conflict situations lead to mass migration and exodus of people, diversion of services and commerce. Increased cross-border trade has been found to be associated with rapid spread of infections such as HIV/AIDS. The need for greater surveillance during war and other conflict situations cannot be overemphasized.

Ghana in West Africa has not been spread the global HIV/AIDS pandemic. At an estimated adult seroprevalence of 3.6% however, it has been relatively less hit compared with its neighbors, Togo, Burkina Faso and La Cote D' Ivoire, all of whom have adult prevalence rates of greater than 5.0%, 6.0% and 10% respectively. Any situation that increased cross-border activities between Ghana and its neighbors was therefore likely to adversely affect the HIV situation in Ghana.

In West Africa, Côte d'Ivoire is the country most severely affected by HIV/AIDS due to poverty, cultural practices, migration and inadequate access to information. Adult seroprevalence is 10.8% (UNAIDS 1999). The country is recovering from a period of instability. Civil war broke out in September 2002, preceded by the migration of people in July. The Port of Abidjan in La Cote D'Ivoire had for many years been the port of call for ships and trucks with goods to and from that country and other landlocked countries in West Africa - Mali, Burkina Faso, and Niger. The war led to the diversion of commerce to the Port of Tema in Ghana and increased the use of the transnational highway between Ghana and Burkina Faso to the north. Access to the northern parts of La Cote D'Ivoire during the war was only possible through Navrongo in the north of Ghana. Revenue to the government of Ghana through port taxes, levies and road tolls tripled during the period of the Ivorian war, compared to the same period in 2001. The war also led to the return to the country of migrant Ghanaians who were domiciled in La Cote D'Ivoire, taking advantage of that country's relatively better economy. That a substantial number of commercial sex workers in La Cote D' Ivoire prior to the outbreak of the war were Ghana is well documented.

It is against this background that we analyzed the 2002 HIV sentinel report for Ghana. Data for the survey were collected from September 2002 to January 2003. Twenty-four sentinel sites, including four border towns were surveyed. The target were pregnant women attending antenatal for the very first time in the on-going pregnancy. The objectives of the survey were to obtain information on the prevalence of the HIV in the sentinel sites and to provide information to monitor trends and for evaluating the national response to the epidemic. Consecutive sampling method was used till the desired sample size per site had been achieved.

The overall mean prevalence for the country increased from 2.9% in 2001 to 5.1% in 2002. The mean absolute increase in prevalence across the sites was 0.4%. All sites recorded absolute increases in prevalence except for five sites where declines were recorded. The highest absolute increase in prevalence was recorded in Tema (4.0%) and Navrongo (2.7%). The two other border towns surveyed were Bawku to the Togo border and Eikwe, close to La Cote D'Ivoire. Absolute increase in both towns was 0.2%, with Bawku at a prevalence of 3.8% and Eikwe at 6.0%. Tema at 6.5% and Navrongo (5.1%) have joined Eikwe in being among the six towns with highest HIV prevalence in Ghana.

The mass migration of people, especially pre-infected pregnant women might have contributed to the sharp increases observed in Tema and Navrongo in Ghana's sentinel survey for 2002. Detailed sociodemographic variables, which is not collected in Ghana's sentinel survey, would have proven invaluable in better understanding the causes of such sharp increases. Civil war and conflict may be altering the epidemiology of HIV in West Africa. Surveillance system should be strengthened and made dynamic to response to such situations.