

## Phase I Report of the ABC Study: Summary of HIV Prevalence and Sexual Behavior Findings

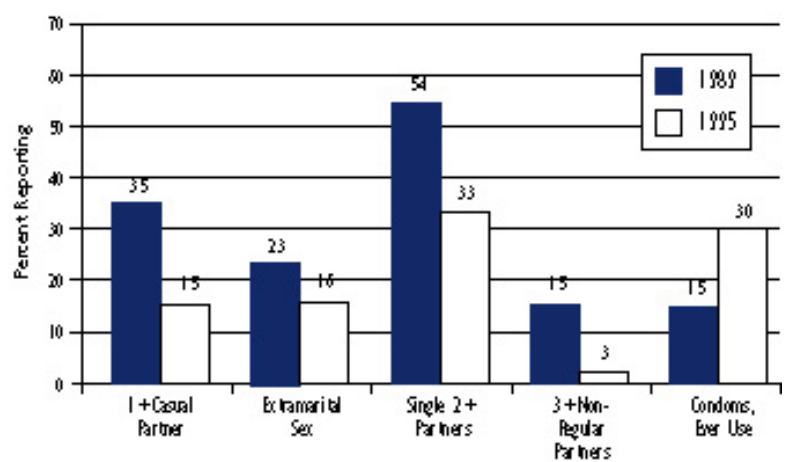
The USAID-supported ABC Study examines how prevention behaviors may have affected HIV prevalence and fertility patterns in three countries where HIV prevalence declined during the 1990s (Uganda, Zambia, Thailand) and in three countries where it appears not to have declined (Cameroon, Kenya, Zimbabwe). The Study's "Phase I" report<sup>1</sup> compares levels and trends of behavioral indicators such as abstinence and age of sexual debut among youth, faithfulness in sexual relationships, multiple sexual partners, and condom use (especially with non-regular partners). These types of behaviors are often referred to collectively as the "ABCs" (for abstinence, being faithful, and condom use) of HIV prevention.<sup>2</sup>

<sup>1</sup>The ABC Study considers such behaviors within the context of HIV prevalence trends in the six countries during the 1990s. Among the declining prevalence countries, the most dramatic reduction occurred in Uganda, where prevalence among pregnant women in the capital city Kampala, for example, fell from about 30% in 1992 to approximately 10% by the end of the decade. While prevalence levels were generally lower, similarly large declines also occurred in other regions of the country (although in 2001 national prevalence may have increased slightly for the first time in a decade). Thailand also experienced a significant decline, especially in high-risk groups among whom the epidemic was concentrated (as opposed to sub-Saharan Africa's typically more generalized epidemics). In addition, there are suggestions of a substantial decrease in prevalence among urban youth in Zambia during the 1990s. Cameroon, Kenya, and Zimbabwe all experienced large increases in HIV prevalence in the 1990s, although prevalence varied considerably among them, ranging from almost 10% in the West African country of Cameroon to about 15% in Kenya (where the epidemic may have recently begun to stabilize) to higher than 30% in the southern African nation of Zimbabwe. The Phase I report relied primarily on representative household survey data, mainly from Demographic and Health Surveys (DHS).

The Phase I report includes the following findings and conclusions:

- In the two sub-Saharan African countries that experienced declines in HIV prevalence during the 1990s (Uganda and Zambia),

Changes in Sexual Behavior Among Men in Uganda, Late 1980s/Early 1990s; GPA Surveys



<sup>1</sup>Bessinger R, Akwara P, Halperin D. Sexual behavior, HIV and fertility trends: A comparative analysis of six countries; Phase I of the ABC Study. Measure Evaluation/USAID, August 2003 (<http://www.cpc.unc.edu/measure/publications/special/special.html>).

<sup>2</sup>USAID Issues Brief, "The ABCs of HIV Prevention ([http://www.usaid.gov/pop\\_health/aids/News/abfactsheet.html](http://www.usaid.gov/pop_health/aids/News/abfactsheet.html)).

Summary Table: Substantial Changes in HIV Prevalence and ABC and Fertility-Related Behavior <sup>3</sup>						
	Uganda	Zambia	Thailand	Cameroon	Kenya	Zimbabwe
<b>HIV prevalence</b> ↓ <sup>a</sup>	√	√	√			
<b>Age of sexual debut</b> ↑	√	√				
<b>Premarital sex</b> ↓	√	√			√ <sup>b</sup>	
<b>Casual sex</b> ↓	√	√	√			
<b>Multiple partners</b> ↓	√	√	√ <sup>c</sup>			
<b>Men with 3+ partners</b> ↓	√	√				
<b>Condom use (non-regular partners)</b> ↑	√	√	√	√	√	√
<b>Condom use (regular partners)</b> ↑						
<b>Contraceptive use</b> ↑	√	√	d		√	√
Notes						
a √ = Substantial declines in HIV prevalence during the 1990s, evident at least among certain key populations						
b Decline among 20- to 24-year-old men, although the level remained high in the late 1990s						
c Represents decline in men paying for sex						
d Contraceptive use in Thailand was already very high by the early 1990s						

increases in all of the ABC behaviors (abstinence/delay of sexual debut, being faithful/partner reduction, and condom use with nonregular partners) occurred. In Thailand, there were substantial reductions in commercial and other non-marital partnerships as well as large increases in condom use for commercial sex. The same multifaceted behavior change is not evident in the three countries that did not experience declines in HIV prevalence, where condom use increased but there was little reported change in abstinence or partner reduction behaviors.

- In Uganda, the country with the earliest and greatest reduction in HIV prevalence, declines in non-regular and multiple sexual partnerships were greatest between the late 1980s - when the rate of new infections (HIV incidence) likely began to drop - and the mid-1990s. Levels of<sup>2</sup>premarital sex also declined during this period along with an increase in the average age at sexual debut throughout the decade. Increases in condom use with non-regular partners occurred throughout the nineties, although levels of condom use were not substantial until the middle of the decade.
- While the trends in sexual behavior within these countries are consistent with trends in HIV prevalence, the differences in patterns of sexual behavior across the five African countries are not sufficient to fully explain differences in HIV prevalence. Other factors such as male circumcision (which is a norm in Cameroon but nearly absent in Zimbabwe) must also be considered.
- While fertility declined in all five sub-Saharan African countries between the late 1980s and late 1990s, the more modest reductions in Uganda and Zambia suggest that the increases in age of sexual debut and declines in non-regular partnerships that occurred there may have had little impact on fertility.

## Sexual Behaviors: Trends and Levels

The report includes the following observations on specific behavioral trends and levels<sup>4</sup>:

**Age of sexual debut.** In Uganda, the median age of sexual debut among young women increased by about one year over the course of the decade. Young women and men in Zambia, especially in urban areas, also postponed sexual debut. The percentage of 15- to 19-year-old urban women reporting ever having sex dropped from 56% to 40% between the early and late 1990s. For urban males, an even sharper decline from 67% to 34% took place between the middle and end of the

<sup>3</sup>Bessinger R, Akwara P, Halperin D. Sexual behavior, HIV and fertility trends: A comparative analysis of six countries; Phase I of the ABC Study. Measure Evaluation/USAID, August 2003 (<http://www.cpc.unc.edu/measure/publications/special/special.html>).

<sup>4</sup>USAID Issues Brief, "The ABCs of HIV Prevention ([http://www.usaid.gov/pop\\_health/aids/News/abcfactsheet.html](http://www.usaid.gov/pop_health/aids/News/abcfactsheet.html)).

<sup>5</sup>In Uganda, most of these changes in sexual behavior, other than increased condom use, occurred during the late 1980s and early 1990s. In Zambia (and Kenya), they occurred in the mid- to late 1990s.

<sup>6</sup>For the five African countries, the Phase I report provides available trend data comparing ABC behaviors from the early 1990s (or late 1980s), mid-nineties, and late nineties. While for some countries data are lacking from the early and mid-1990s, data from later in the decade are available for most indicators from most of the countries. In a number of instances, these later data indicate that relatively high levels of some behaviors (i.e., non-regular sexual partnerships and multiple sexual partnerships among single adults) were present in the late 1990s in the countries that did not have HIV prevalence declines. However, the levels of these behaviors do not necessarily have a direct correlation with levels of HIV prevalence, suggesting that factors other than sexual behavior (such as male circumcision) may also affect HIV prevalence.

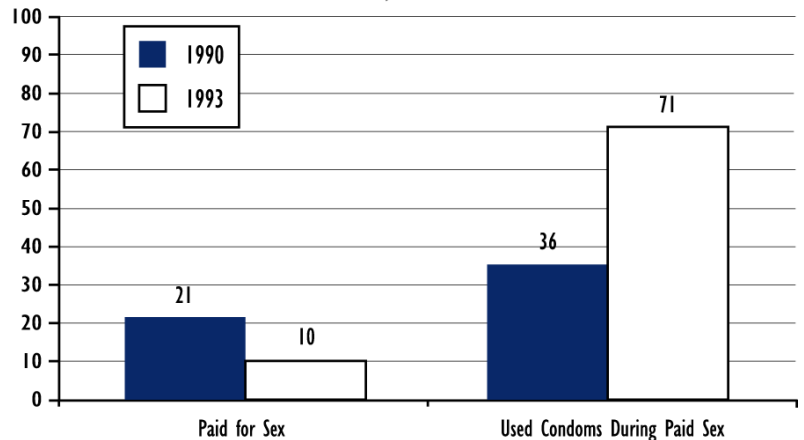
decade. By contrast, the trend data for young men and women in Zimbabwe and women in Cameroon or Kenya (which lack trend data for men) show little evidence of postponed sexual debut.

**Premarital sex.** In Uganda, a large decline in sexual activity among unmarried 15- to 24-year-old females (from 35% to 22%) and males occurred during the first half of the decade (although there was an increase among young women to 27% during the second half of the decade). Data from Zambia indicate a decline (from 39% to 26%) throughout the decade in the percentage of unmarried young women reporting sex within the past year. The percentage of unmarried young men in Zambia reporting sex within the past year dropped sharply from 63% to 24% in the latter half of the decade. In Kenya there was also a decline in sexual activity among unmarried men aged 20-24, but the percentage reporting activity (56%) remained high. At the end of the decade, Cameroon had the highest rates of sexual activity reported by both young unmarried men (58%) and women (52%).

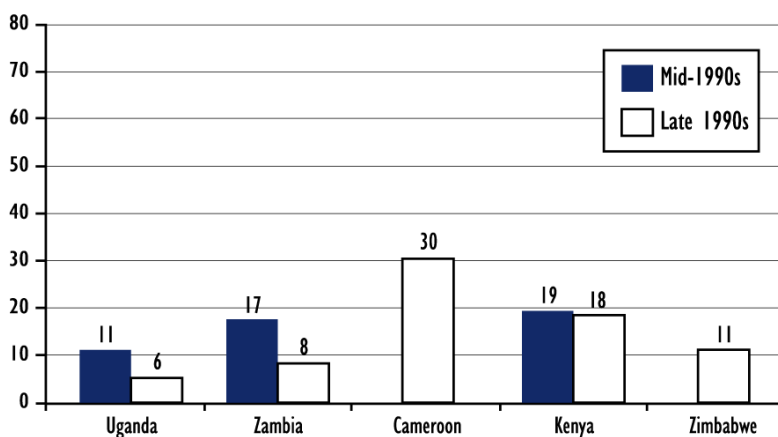
**Non-regular partnerships.** Large declines in nonregular (non-marital/non-cohabiting) partnerships among men and women occurred in the early 1990s in Uganda and in the late nineties in Zambia. Subnational Global Program on AIDS (GPA) survey data from Uganda in the mid-nineties indicated that many fewer men and women reported casual partners than in the late 1980s (15% of men, down from 35%, and 6% of women, down from 16%). The declines in Zambia occurred among adolescents and adults in both urban and rural settings. By the late 1990s, only 29% of Zambian men reported a non-regular partner, compared with 53% in the mid-nineties. Data from Thailand in the early 1990s also indicate there were large declines in the percentage of men reporting non-marital and commercial sex partners (figure 2).

Kenya saw only a small decline in non-regular partnerships among men and virtually no decline among women. Trend data on non-regular partnerships are lacking for Cameroon and Zimbabwe. Among the six countries, however, these two countries had the highest reported rates of such partnerships at the end of the decade - about 60% of men in Cameroon and 40% of men in Zimbabwe reported a non-regular partner in the past year, compared to 35% in Kenya and fewer than 30% in Uganda and Zambia.

Percent of Men Paying for Sex in the Past 12 Months and Who Consistently Used Condoms During Commercial Sex, Thailand, 1990 and 1993



Percent of Sexually Active Single Women Reporting 2+ Sexual Partners in Past 12 Months\*



\*Figures for Uganda and Kenya for the mid-1990s are for the past six months

**Singles with multiple sexual partners.** In Uganda, a large decline - from 54% to 33% (GPA data) - occurred among single men reporting two or more partners in the past year between the late 1980s and mid-nineties. Between the mid- and late nineties in Zambia, the percentage of singles reporting multiple sexual partners in the past year declined from 54% to 30% for men and also fell substantially among women (figure 3).

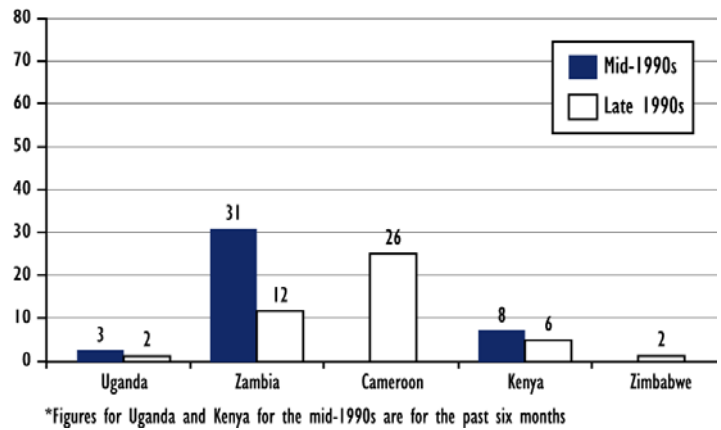
Kenya may also have had a small decline in multiple partnerships among singles, but multiple partnerships remained high (52%) among Kenyan men in the late nineties. At the end of the decade, levels of multiple partnerships among singles were highest in Cameroon. This was true for both single men (68%, compared with roughly 30% for single men in Uganda, Zambia, and Zimbabwe) and single women (figure 3).

**Higher-level multiple partnering among men.** Regarding the important "core transmitter" group of men reporting three or more non-regular partners in the previous year, there was a very large decline in Uganda in the early nineties (figure 1). This figure remained low (2%) at the end of the decade, in striking comparison with Cameroon, Zambia (which nonetheless had a large decline from the mid-nineties), and Kenya, where there was little change (figure 4). No trend data

are available for Cameroon and Zimbabwe, although the former had the highest percentage of men reporting three or more partners at the end of the decade. Zimbabwe, where factors such as lack of circumcision and "dry sex" practices may contribute to HIV transmission, appears to represent an anomalous case, with low levels of men reporting three or more partners. It should be noted, however, that some surveys have found higher levels of multiple partnership in Zimbabwe.

**Condom use with non-regular partners.** Uganda, Zambia, and Zimbabwe all saw substantial increases in reported condom use with non-regular partners in the latter part of the 1990s. At the end of the decade, condom use at last sex with a non-regular partner was highest for women and men in Zimbabwe (43% and 70%, respectively), followed by Uganda (38% and 59%). In Thailand, condom use with commercial sex workers also increased significantly among men paying for sex (figure 2).

Percent of Sexually Active Men Reporting 3+ Non-Marital/Non-Cohabiting Partners in Past 12 Months\*



### Fertility-Related Findings

The report also notes that fertility declined in all five sub-Saharan African countries between the late 1980s and late 1990s, with steep declines occurring in Kenya, Zimbabwe, and Cameroon. The more modest reductions in Uganda and Zambia indicate that the increases in age of sexual debut and declines in non-regular partnerships that occurred may have had little impact on fertility. While condom use with non-regular partners increased in all countries, it remains very low (below 4% in all countries) among regular (marital or cohabiting) partners. The impact of condom use on fertility was thus likely to be minimal. At the end of the nineties, use of modern contraceptives was highest in Zimbabwe and Kenya (58% and 32%, respectively), moderate in Zambia and Uganda (23% and 18%), and low in Cameroon (7%). The greatest increase in contraceptive use during the nineties occurred in Uganda (up from 3% in 1989), though it remained low among 15- to 24-year-old women.

Phase II of the ABC Study is exploring the various contextual, sociocultural, and programmatic factors that appear to be associated with the trends in sexual behavior described in the Phase I report. The final ABC Study report is due to be issued by late 2004.