The "ABCs" of HIV Prevention:

Report of a USAID Technical Meeting On Behavior Change Approaches To Primary Prevention of HIV/AIDS

U.S. Agency for
International Development

"ABC" Experts Technical Meeting
Washington, D.C. | September 17, 2002

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Introduction

On September 17, 2002, the U.S. Agency for International Development (USAID) hosted a technical meeting in Washington, D.C., to consider behavior change approaches to HIV/AIDS prevention, sometimes referred to as the "ABCs" of primary prevention. More than 130 HIV/AIDS and reproductive health experts shared research findings and lessons learned. The participants included representatives and researchers from UNAIDS, the World Health Organization, UNICEF, the United Nations Population Fund, the U.S. Centers for Disease Control and Prevention, the Bill & Melinda Gates Foundation, USAID cooperating agencies, and U.S. and European universities.

As Connie Carrino, Director of USAID's Office of HIV/AIDS, noted in her opening remarks, analyzing sexual behaviors and behavioral changes — such as the "**ABC**" approaches of **A**bstinence/delay of sexual debut, **B**eing faithful/partner reduction, and **C**ondom use — is key to understanding and combating sexual transmission of HIV. The meeting's objective was not to make new decisions or pursue consensus about ABC approaches but to examine what we know about what works from empirical evidence, reach a better understanding of why successful interventions work, and consider how to further use and apply that knowledge and understanding.

This report summarizes the meeting's presentations and discussions.

Panel 1: What's the Data?

Epidemiological Overview: David Wilson of the University of Zimbabwe introduced his presentation with a quotation from the survey literature: "Many men and women said they were limiting sexual activity to one partner as a way to avoid infection, but only a minority … said they had begun using condoms with those partners." Wilson suggested that this wording implied an inherent bias on the part of many researchers and public health officials, i.e., that monogamy/partner reduction is not as valid a behavioral change as adoption of condom use. He also noted "There is plenty in the data to bother everyone!"

He then noted the regional variations in adult HIV prevalence reported from sub-Saharan Africa, as indicated by seroprevalence testing among pregnant women in urban settings. Seroprevalence in this group generally remains below 10 percent in West African countries, ranges from about 15 to 25 percent in East Africa, and approaches or exceeds 30 percent in Southern Africa. He then pointed out the inverse association between these regional variations and levels of male circumcision, i.e., relatively low HIV/high circumcision in West Africa, typically intermediate levels of each in East Africa, and high HIV/low circumcision in Southern Africa (*figure 1*).

Wilson then turned to "promising trends" regarding ABC behaviors and HIV prevalence in Uganda and probably Zambia during the 1990s. In Uganda, HIV prevalence dropped during the decade from more than 30 percent in many research populations to the 5 to 10 percent range. The decline in prevalence was especially marked among youth *(figure 2)*. This decline followed significant increases in abstinence or deferring initial sexual activity among Ugandan youth. Deferred sexual debut is vital not only for avoiding immediate risks but is also predictive of lower levels of future high-risk sexual behaviors and increased protective practices. Being faithful/partner reduction behaviors also increased sharply in Uganda *(figure 3)*. While condom use also increased, national estimates of "ever use" remained below 20 percent.

In Zambia, there appears to have been some reduction in HIV prevalence among urban youth from the mid- to late 1990s, although the surveillance data are not as clear-cut as for Uganda. However, clear and positive changes in all three of the ABC behaviors have been reported by Demographic and Health Surveys (DHS), and a significant decline in casual sex occurred among both men and women between 1996 and 1999 *(figure 4)*.

HIV Seroprevalence for Pregnant Women, 1985–2000, and Estimated Male Circumcision Rates, Selected Urban Areas of Africa

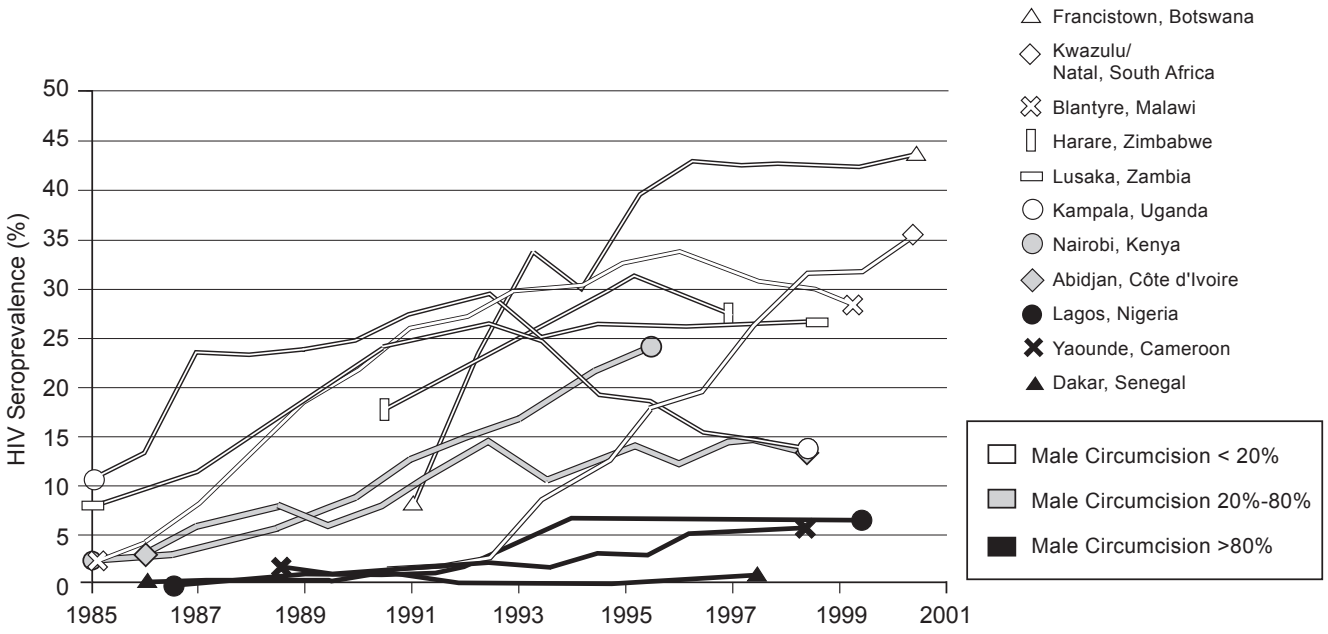

Figure 1. Adaptation of D. Wilson slide. Source: U.S. Census Bureau HIV/AIDS Surveillance Data Base 2000; Halperin DT, Bailey RC. Male circumcision and HIV infection: 10 years and counting. *Lancet* 1999 354;9192:1813-5.

HIV Prevalence Among Pregnant Ugandan Women, Age 15–19 1991–2000

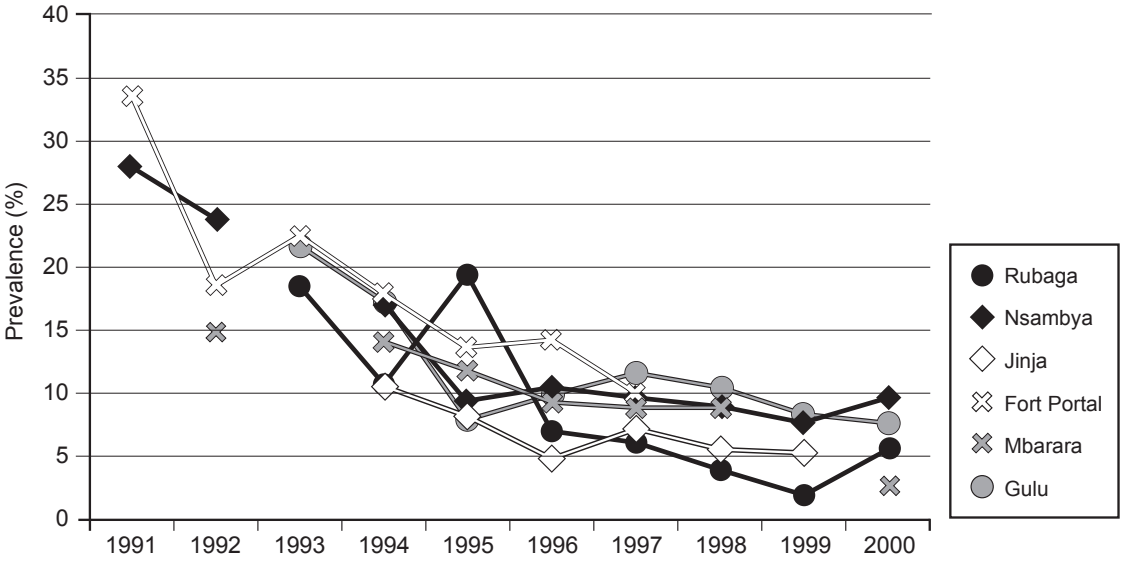

Figure 2. Source: HIV/AIDS Surveillance Report, STD/AIDS Control Programme, Ministry of Health, Uganda, June 2000.

Implications and conclusions to draw from Uganda's experience include in particular the importance of partner reduction, which has not occurred in other African countries to the extent it did in Uganda. Partner reduction by adult males has the added benefit of protecting young women, for whom safe adolescent behaviors are indicators of probable safe adult behaviors. Rates of condom use, and increases in them, have been similar across a number of other African countries, suggesting that condoms may not be the primary intervention for reducing HIV prevalence in generalized high-prevalence epidemics spread largely by heterosexual transmission. They remain essential, however, in interventions targeted to high-risk groups.

The lessons from Uganda and Zambia, as well as other "success story" countries such as Senegal, Thailand, and Cambodia, suggest that revitalized and balanced ABC approaches might be implemented in the form of "A" interventions promoting sexual deferral to younger, sexually inexperienced youth; "B" interventions promoting partner reduction to sexually experienced youth and the general adult population; and "C" interventions promot-

Ugandan Males Reporting Casual Sex in Past Year, 1989–1995

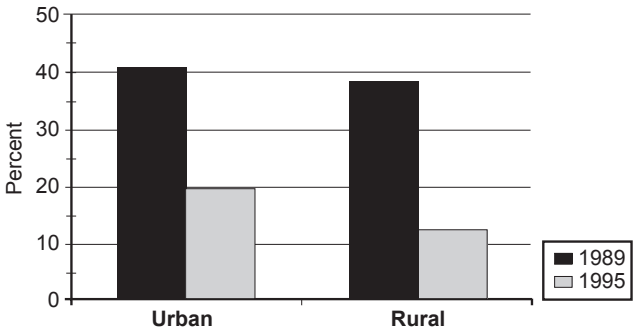

Figure 3. Source: Global Programme on AIDS, Geneva.

Nonregular Partners in Zambia, 1996–1999, Population Services International Study

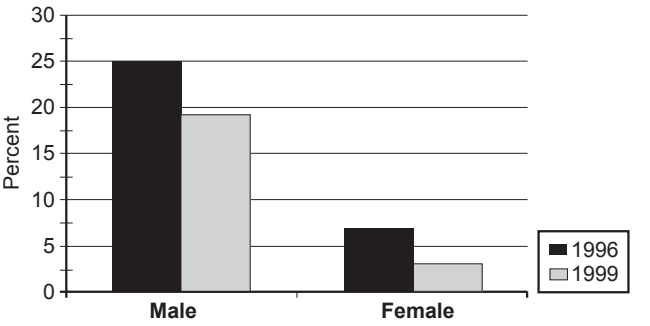

Figure 4. Source: Agha S. Declines in Casual Sex in Lusaka, Zambia: 1996-1999. *AIDS* 2002; 16:291-93.

ing condoms, with enhanced STI services, to highly sexually active youth and adults, especially sex workers. Outside of Africa, "D" interventions, which address the high risk of injection drug use, must be added. Interventions need to respond to the most critical aspects of HIV transmission dynamics with epidemiologically sound strategies that take into account culture, context, and community values as well as "state-of-the-art" high-tech approaches. Wilson noted the irony that an age-old traditional practice, male circumcision, has probably so far prevented more HIV infections in Africa than all the Western-derived interventions combined.

Uganda/DHS Analysis: Rand Stoneburner of Cambridge University presented a closer look at the evidence for the role of behavior change in the decline of HIV prevalence in Uganda. The decline in prevalence documented in groups such as pregnant women, draftees, secondary school students, blood donors, STD clinic attendees, and clients of voluntary counseling and testing (VCT) clinics should put doubts about Uganda's success to rest — this success is not overstated. A decline, by as much as 80 percent among youth and young adults, in new HIV infections during the late 1980s and early 1990s fits with models of the epidemiological dynamics of HIV, which require a decline in incidence (new infections) in the years preceding a decline in prevalence. (HIV prevalence in Uganda began declining in 1991 or 1992.) Such a drop-off in incidence in turn suggests a preceding process of behavioral change to avoid risk of infection. In the case of Uganda, this behavioral change primarily took the form of partner reduction. While condom use and delay of sexual debut also increased, the in-country data and comparisons with mid-1990s DHS data from Kenya, Malawi, and Zambia suggest that the unique factor in Uganda was the steep decline in multiple sexual relationships *(figures 5 and 6)*. In comparison with these countries, Uganda at the time was also unique in the extent to which personal communication networks (*figure 7*) and knowing people who had AIDS were the sources of knowledge and acknowledgement of the disease. This factor also appears to relate to the reported lower levels of stigma in Uganda than in other African countries. As the acceptance of partner reduction in Uganda occurred before interventions such as condom promotion, social marketing, and VCT were implemented, the country's success appears to have taken root from the behavior changes motivated by this communication-based, community-level response to the epidemic.

UNAIDS Multisite Study Analysis: Bertran Auvert of the University of Paris reported on the UNAIDS study examining the heterogeneity of the HIV epidemic in sub-Saharan Africa, a key to a better understanding of effective prevention. The study modeled the spread of infection in Cotonou, Benin; Yaounde, Cameroon; Kisumu, Kenya; and Ndola, Zambia. Benin and Cameroon are countries with relatively low HIV prevalence, while the Kenya and Zambia sites have high prevalence. The study created models of heterosexual HIV transmission based on the role of various factors such as spousal and nonspousal partnerships, age at first sex, condom use, genital herpes and other sexually transmitted infections, and viral substrains of HIV, and varied the models from baseline assumptions within reasonable ranges. Statistical analyses of data from the study sites were quite consistent with the models and found that the impacts of different factors can be highly variable but

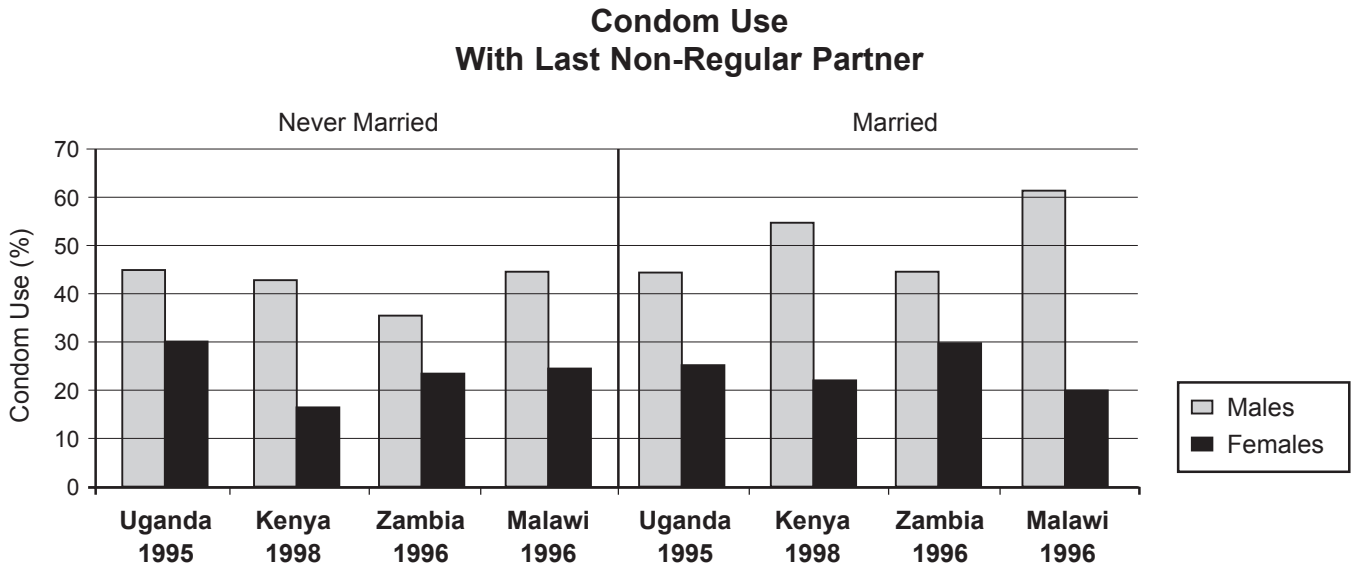

Figure 5. Demographic and Health Surveys.

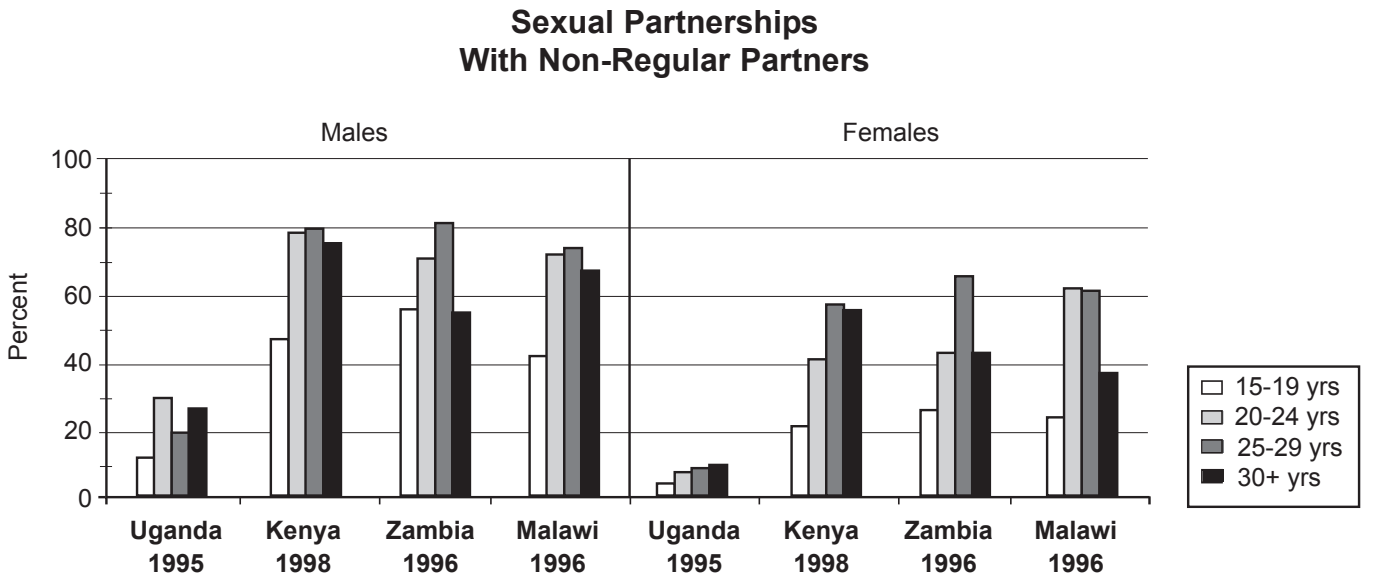

Figure 6. Demographic and Health Surveys.

that number of lifetime partners and male circumcision in particular had very important impacts *(figure 8)*. The interplay of these factors was also evident. In Yaounde, male study subjects averaged 10 lifetime partners, compared with five reported from the three other sites. With nearly universal male circumcision, however, HIV prevalence remained relatively low. HIV prevalence was lowest in Cotonou, which combined nearly universal male circumcision with a lower number of lifetime partners. Kisumu and Ndola, with lower numbers of lifetime partners but much lower rates of circumcision, had HIV prevalence figures five to six times higher than Yaounde and Cotonou. Such findings, brought about by progress in epidemiology and improved understanding and models, illustrate the complexity of the dynamics of the epidemic and also highlight number of lifetime partners and male circumcision as key factors for understanding the heterogeneity of the epidemic in Africa.

UNAIDS Data/Perspectives: Michel Carael of UNAIDS began by presenting data showing the proportions of 15- to 19-year-old women in sub-Saharan African countries who have had sexual intercourse and

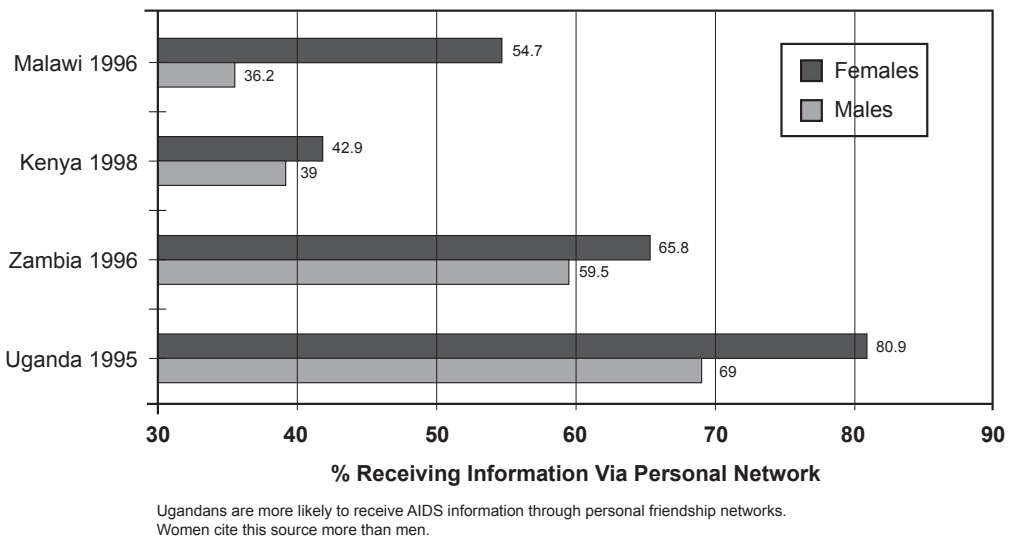

Figure 7. Demographic and Health Surveys.

Heterogeneity of HIV in Sub-Saharan Africa
UNAIDS Multicenter Study *(selected findings)*

	Cotonou (Benin)	Yaoundé (Cameroon)	Kisumu (Kenya)	Ndola (Zambia)
Exposure				
Age at first sex (M/F)	18.5/18.4	17.3/17.1	16.3/15.9	17.7/17.0
Age at first marriage (M/F)	28.1/22.0	29.0/23.1	25.0/19.2	25.5/19.0
Age difference between partners	4 (1-7)	4 (1-7)	3 (1-6)	4 (2-7)
Number of lifetime partners (M/F)	5/2	10/3	5/2	5/2
Contact with sex workers (%)	4	12	3	6
Transmission				
Condom use (F) (%)	11	16	20	24
Male circumcision (%)	99	99	29	9
Results				
HIV (%) (M/F)	3.9/4.0	4.4/8.4	21.1/31.6	25.4/35.1
HSV-2 (%) (M/F)	13.9/33.4	29.1/55.4	36.9/72.4	39.7/60.1

Figure 8. Source: *AIDS*, Vol 15, Supplement 4, August 2001.

the positive relationship between young age at sexual debut and increased number of premarital sexual partners (*figure 9*). In addition to predicting an increased number of sexual partners, early sexual debut is associated with a lower level of condom use and increased STD risk. Factors that influence age at sexual debut include parent-child communications, marriage patterns, and the larger sexual culture.

To sustain preventive behaviors — such as delayed sexual debut — by youth, UNAIDS advocates a mix of mutually reinforcing approaches including youth-friendly services, sexual health education, and social mobilization. Meeting the needs of both youth who are sexually active and youth who are not sexually active requires comprehensive, multipronged **ABCD** (for delay) approaches. Abstinence promotion needs to recognize that sexuality is healthy and natural and define abstinence as "nonengagement in penetrative sexual intercourse." In advocating faithfulness, the need for mutual monogamy must be emphasized. Condom promotion involves issues of informed choice, empowerment, environment, and supply and demand. Efforts to promote delayed sexual activity also need to help young people develop the capacity to make informed decisions about their sexual health, including pregnancy and HIV/STD prevention.

Measurement of the outcomes of interventions in these areas has tended to focus on condoms ("C"), neglecting "A" and "B." The set of core indicators developed by the U.N. General Assembly Special Session on HIV/AIDS includes the percentage of young people reporting condom use with nonregular sex partners, and the methodology for collecting data to measure this indicator will also provide information for measuring levels of and trends in abstinence and faithfulness/partner reduction behaviors. Measurement difficulties will remain in attempting to understand why behavior changes occur or do not occur, as quantitative data do not comprehensively measure the underlying elements that drive these changes.

Summary of Panel Presentations and Discussion: Helen Weiss of the London School of Hygiene and Tropical Medicine summarized main points from the panel presentations. She mentioned the global diversity of HIV/AIDS; the need for targeted interventions, especially with high-risk groups (such as sex workers) as opposed to the general population; the importance of "low-tech" approaches; the need for multisectoral approaches involving governments, nongovernmental organizations, community groups, etc.; the need to understand why changes in behavior take place; the low use of condoms, despite ABC approaches; the risks to married women in "faithful" relationships if husbands do not remain faithful; condom use within marriage; approaches to youth; the recent recognition of the importance of genital herpes in HIV infection; and the issue of the trustworthiness of responses to questions about behavior change — can we believe them?

Audience comments and discussion of the panel presentations followed. Topics included:

Possible biases in the reporting of behavior change and changing social norms. Panelist Michel Carael noted that some types of questions and surveys appear more valid than others. Reports of age at sexual debut are regarded as quite solid, while data gathered by school questionnaires are less valid. UNAIDS tries to triangulate and find a middle way between believing all findings and none of them by using biomarkers or observable related data (such as STD rates) to complement reports of behavior change.

Whether delayed sexual debut itself causes reductions in number of sexual partners or if a third factor might be at work. Panelist Michel Carael said that data from six countries on three continents indicate that early behavior patterns anticipate later patterns and that early sexual debut anticipates later increased levels of risk behavior. Biological or psychosocial characteristics, such as early puberty or intensity of emotional attachment, may be involved. Those who have a late sexual debut may invest more emotion in relationships. It is not clear how to modify behaviors related to sexual debut. A comment from the audience noted the important effect of more "distal" contextual factors such as family and peer relationships on youth behaviors. These social antecedents may be the "drivers" underlying both early sexual debut and the higher risk factors associated with early debut. It may also be simple common sense that with later sexual debut, people have a shorter period of exposure and fewer sexual partners before marriage. It was also observed that early sexual debut of girls often occurs under duress or threat of violence.

"High-tech" vs. "low-tech" behavior change intervention. "Low-tech" does not necessarily mean simple. Local environment is an important determining factor. Studies of Uganda, for example, need to look at the combination of approaches. The role of mass media should not be overlooked. Interpersonal communication may act as a catalyst for individuals to absorb mass media messages. Panelist David Wilson observed that mass media was part of a constellation of political and communal factors at work.

New data from Uganda. Further data from the Rakai study in Uganda are turning out to be more complex than anticipated. In particular, there is evidence of changes in ABC behaviors from previous years along the lines of less "A" and "B" and thus an increase in risky behaviors, apparently related to increased condom promotion. The latter has evidently resulted in both greater (but generally inconsistent) condom use and lower risk perception. In other words, condom promotion may inadvertently be resulting in increased behavioral "disinhibition."

The "fear factor." Panelist Rand Stoneburner observed that some youth in South Africa are now abstaining from sex because they are scared and said that he felt fear also played an important role in keeping Thai men out of commercial sex establishments, especially after the HIV prevalence rates among sex workers were publicized *(figure 10)*. It was also pointed out that the fear factor had a role in changing risk behaviors among gay men in San Francisco.

The lack of references to Latin American and Caribbean countries in the presentations. Daniel Halperin of USAID responded to this audience comment by noting the stabilization of the HIV epidemic in the Dominican Republic and findings of declining HIV prevalence in girls in their

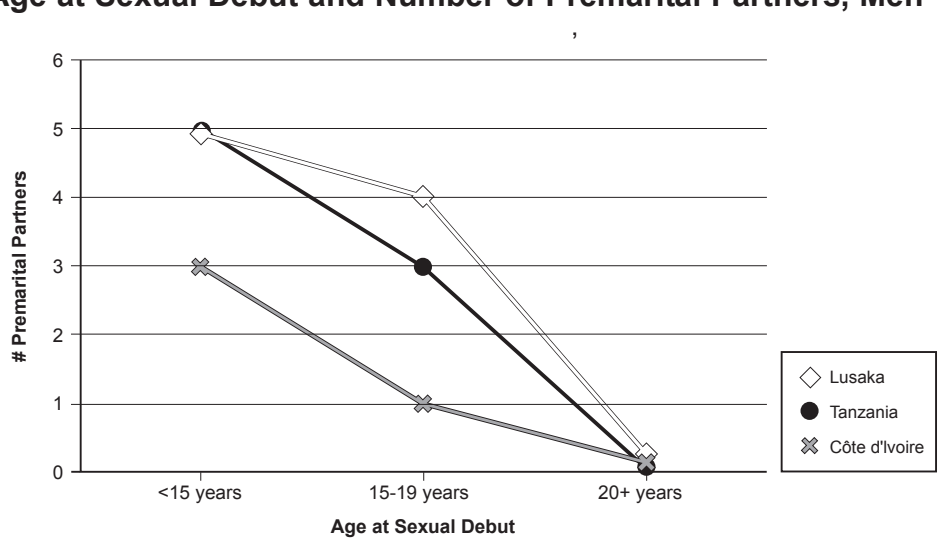

Figure 9. Source: UNAIDS report, 11/16/01.

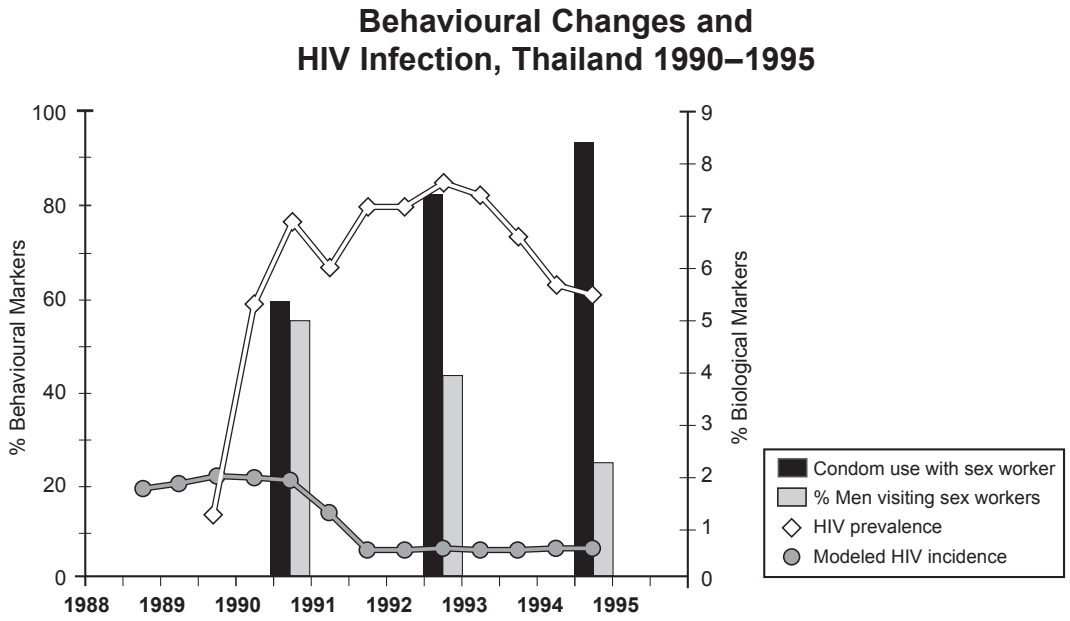

Figure 10. Source: Stoneburner R. and Daniel Low-Beer. "Epidemiological elements associated with HIV declines and behavior change in Uganda: Yet another look at the evidence."

late teens and fewer partners and visits to commercial sex workers reported by men. The country has used targeted promotions more along the Thai model ("100 percent" condom policy) than the Ugandan model, although, similarly to the latter, surveys have found significant evidence of increased "B" behaviors as well.

Panel 2: Data and Programmatic Implications

Family Health International (FHI) and Behavioral Surveillance Survey (BSS) Data and Program Implications: Carol Larivee of FHI/IMPACT reported on behavior change communication (BCC) programming in Nigeria and Cambodia. BCC programming underlies comprehensive prevention, care, and support programming. In Nigeria's Anambra State (one of West Africa's largest population centers with a population of 2 million and an increase in HIV prevalence from 0.4 to 6.5 percent between 1991 and 2001), BCC programming developed a strategy using in-country literature, epidemiological information, data on transport workers from the 2000 BSS, formative audience research that asked why people act the way they do, and in-depth assessment that identified risk behaviors, risk settings, and social networks. These sources indicated that programming needed to target a mobile population that had high levels of sexual networking, early sexual debut, self-treatment for STIs, and HIV stigma and denial, but low levels of open discussion of sex and sexuality issues. The resulting "Join the Race for a Healthy Future" campaign addressed these issues by tailoring its programming to these local circumstances and communicating different messages to different audiences — i.e., condoms and partner reduction for transport and sex workers; partner reduction and delayed sexual debut for students; and delayed sexual debut, stigma and discrimination reduction, and fidelity for church attenders. Multiple organizations (including local/state governments, faith-based organizations, unions, women's groups, advocacy projects, and health care providers) participated in the campaign and used multiple communication channels (mass print and broadcast media, billboards, outreach, peer education, pulpits, social networks, and community events) to communicate these messages to the audiences.

In Cambodia, a BCC program targeted high-risk populations (sex workers and members of the uniformed services) and the general population in the late 1990s. Interventions for high-risk groups included outreach to sex workers to promote condoms; "100 percent" condom policy; condom social marketing; sex worker mobilization; peer education for sex workers and uniformed service members; and STI and VCT services. For the general population, interventions included mass media campaigns, condom social marketing, STI and VCT services, and HIV/STI education in schools. By 1999–2000, condom use by sex workers had increased, visits to sex workers by uniformed service members had decreased, and HIV and STI rates in sex workers had decreased.

The Nigeria and Cambodia examples demonstrate how BCC programming can tailor a mix of messages to local

situations and specific target populations. Message design should be based on local data and information, and messages and programs should be carefully targeted.

Youth Perspective/Data: Bob Magnani of Tulane University School of Public Health and Tropical Medicine started by observing there has been "a bit of a disconnect" between the HIV/AIDS research community and the youth research community. There is evidence, however, that youth populations have been pivotal to declines in HIV prevalence in sub-Saharan African countries. In addition to indications of delayed sexual debut and partner reduction, recent data from South Africa show that declines in HIV prevalence among youth may also be associated with increases in condom use.

There are two bodies of research relevant to understanding the role of youth — research into the contextual determinants of sexual behaviors and research into the effectiveness of interventions. Contextual influences such as peer behaviors and family relationships are important influences on some behaviors, including sexual debut. Beyond sexual debut, however, individual factors such as knowledge and attitudes become more important in influencing behaviors such as single or multiple partnering and condom use. Programmatic interventions are effective in improving knowledge and attitudes; behaviorally, they seem to have less effect on delaying sexual activity than on partner reduction and use of contraceptive and other reproductive health services. The effects on these behaviors appear to be modest, short-term, and transitory.

It is important to recognize special circumstances related to youth sexuality, including sexual violence/rape as part of sexual debut; age differences between partners; and sexual exchange behaviors (exchanges of gifts or favors as opposed to monetary exchange in commercial sex). Indicators to measure context of first sex, the extent of violence and rape at first sex, and sexual mixing and exchange behaviors are needed. Age differences between marital partners, which may leave young wives with low status and little power for self-protection, and the "condom conundrum" (in which the condom prevents infections but may also prevent a desired outcome such as first pregnancy) are other special circumstances pertaining to youth.

USAID-Uganda Experience: Elizabeth Marum of CDC reviewed how Uganda implemented ABC and other activities and the role of donor and USAID support. Abstinence and faithfulness/partner reduction were often covered in combination through the "zero grazing" concept. Free and social marketing condoms were promoted and distributed, and public debate and family discussions arising from controversies over these activities were secondary benefits. There was also a community emphasis on **"D"** for delayed sexual activity — this message seemed to get through to young people better than abstinence. With financially independent married women more likely to report abstaining from sex, the **ABC … Delay** continuum was extended to **"EF": E**mpowerment of women through **F**inancial independence.

Beyond ABC activities, Uganda also delivered care, provided testing, involved people who had HIV/AIDS in service delivery, and engaged in advocacy and stigma reduction activities. Donor support covered 70 percent of Uganda's prevention and care activities and amounted to $180 million from 1989 to 1998, or an estimated $1.80 per adult per year. USAID's activities were distinguished by support for recurrent costs and salaries of front-line workers; limited budgets for overhead, administration, capacity building, workshops, and meetings; early support for care and VCT programs; grants to in-country organizations, which empowered local groups; and support for innovative, "unproven" interventions. Lessons learned from the USAID experience include the importance of involving faith-based organizations; the need to compensate front-line workers and provide workers who have HIV/AIDS with the best care available; and the need to support recurrent costs and salaries over capacity building, training, and one-time expenses. In addition, Marum underscored the need to use performance-based funding mechanisms that emphasize service provision and show evidence of impact rather than funding mechanisms that reward administration and other non-service activities.

Faith-Based Perspectives: Dorothy Brewster Lee of Christian Connections for International Health began by noting that faith-based perspectives previously could not offer a lot of data but that the evidence of the continuing spread of HIV/AIDS suggests that the world has more experience with what has not worked than with what has. In Cameroon, where faith-based organizations (FBOs) were marginalized because they would not support condoms, HIV infections among pregnant women continue to increase. Interventions that have proven effective in Europe and North America should not be stamped into African settings without consideration for indigenous culture, including views of recreational or casual sex — it is worth noting that many African countries have higher rates than the United States of under-15-year-olds who have not had sex. HIV prevention approaches have generally failed to provide fair and balanced recognition to abstinence and faithfulness. Instead, the reports and strategies of UNAIDS and other international organizations give condoms much more attention and emphasis.

Faith-based organizations can be especially important partners of international organizations in rural areas of sub-Saharan Africa, where they are already providing health and educational services. African FBOs are engaging in "South-to-South" exchange to become fuller partners in HIV prevention. In Malawi, the Presbyterian Church has pledged its commitment and will observe World AIDS Day through prayer and offerings. Studies of the effects and good practices of FBOs are needed, and the faith-based community appeals to the research community to study these matters. Resources are also desperately needed — four ministers in Malawi who can reach 350,000 youth have declared their commitment to addressing HIV/AIDS but have only one computer among them. The FBO movement can be a major partner in HIV/AIDS prevention and will continue to work on this problem, whether it is accepted as a partner or not.

Summary of Panel Presentations and Discussion: Vinand Nantulya of Harvard University was first asked to describe Uganda's response to the earliest signs of the emerging AIDS epidemic. When his village in Mbale district was confronted in 1982 with an unknown, horrible, incurable, and fatal disease, initial reactions included excitement, pandemonium, and paralysis. An evolution occurred, however, as the community learned the causes of the disease and how to avoid risk and maximize the opportunity to live. The community communicated internally from the very start, as fears of curses, witchcraft, and cancers gave way to the realization that this was an infectious disease transmitted through sex that affected not only "bad people" but everybody. Following this realization came a locally driven, or endogenous, common-sense, community approach — if a young person had not yet begun to have sex, then he or she should wait. If a young person had just begun to have sex, then he or she should stop. If a person was already sexually active, he or she should adopt the faithfulness/partner reduction practice of "zero grazing." As Uganda developed national strategies and approaches, official messages were in concord with the early endogenous messages. This concordance made national success possible, while purely externally driven, or exogenous, interventions such as condom promotion would not have been accepted nearly as well. The community-level response, in which communities assessed their risk and devised their own risk reduction strategies, was vital to Uganda's national success, especially in the late 1980s and early '90s, the important early years of responding to the epidemic.

Neill McKee of Johns Hopkins University/Center for Communication Programs then summarized points from the panel presentations and Dr. Nantulya's account:

- Behavior change communication underlies prevention, care, and support, and uses local sources of information to tailor approaches to specific groups and audiences.

- HIV/AIDS researchers and programs can learn from youth researchers and programs about approaches that work best for specific youth ABC behaviors, both before and after initiation of sexual activity. In addition to contextual factors, youth-related issues include coercion or violence at first sex, age and status differences between partners, and the "condom conundrum."

- The Uganda experience included, in addition to ABC, "C" for care, compensation, and controversy; "D" for delay; elements of "E" and "F" in empowering women financially; "G" for getting tested and greater involvement of people with HIV/AIDS; and "I" for innovation in unproven initiatives.

- The FBO community feels there has been too much emphasis on social marketing of condoms — where are "A" and "B"? FBOs should be included in the strategies of looking at and encouraging local initiatives.

- Uganda's early response demonstrated the importance of locally driven community-based approaches in facilitating behavior change.

Discussion of the panel presentations focused on:

The varying degrees of emphasis given the individual "A," "B," and "C" approaches. Sometimes it appears that only lip service is given to the abstinence and "be faithful" approaches, but this may be an issue of insufficient resources. Abstinence and condom interventions have been employed with young people more than "B" approaches of fidelity/partner reduction, which may be perceived as "too complicated" for youth populations. Yet the epidemiological outcomes, as evidenced in the data from Uganda, Zambia, and other countries, appear to be most significant with use of the "B" approach. However, some argue that fidelity/partner reduction may be a "tougher sell" to youth, who tend to have multiple, but not concurrent, sexual partners (serial monogamy) and for whom "zero grazing" may be less applicable. Panelist Vinand Nantulya reiterated that in Uganda condom promotion was an exogenous intervention that followed the earlier endogenous (locally driven) "AB" approaches.

What constitutes "consistent" condom use? Some studies have used condom use with last three partners as a criterion. Panelist Elizabeth Marum noted that while there is a lot of evidence for the protective effects of consistent condom use, consistent use with nonregular partners was only 12 percent in Kenya, while inconsistent use was more than 40 percent.

Faith-based organizations and the ABC approaches. There is a need to avoid being judgmental toward groups that do not adhere to ABC approaches. At the same time, faith-based organizations should try not to disparage condoms even if they do not support them. Panelist Dorothy Brewster Lee said that FBOs did not mean to discourage condom use in targeted high-risk populations but to encourage delayed sexual activity in the more general youth population. She also noted that many Christian FBOs are increasingly taking the approach of being less concerned with how people might have contracted HIV infection than with seeing them as people who need care.

HIV testing. Panelist Elizabeth Marum noted that testing of married couples and premarital couples was on the rise in Uganda and provided a positive experience for couples to talk about sex within marriage. It was also noted that couple testing in faith-based settings in Kenya discovered that more than 20 percent of couples were HIV-discordant. Working with such couples could be a fruitful area for FBOs. Panelist Dorothy Brewster Lee reported that churches and mission hospitals in Malawi were engaged in mother-to-child transmission prevention activities, including a curriculum to motivate women to get tested. Couple ministries and women's guilds were also working in this regard.

Female empowerment in Uganda. Panelist Elizabeth Marum noted that the hiring of women with HIV infection by Ugandan AIDS care and prevention organizations coincided with the efforts of other programs to help women advance in commercial enterprises or pursue income through homegrown activities. Panelist Vinand Nantulya noted that the government at the time was deliberately trying to empower women through use of quotas to ensure substantial female representation in the legislative and executive branches of government as well as in their own women's caucuses and other political forums.

Synopsis of Panel Presentations

Daniel Halperin of USAID reiterated that today's meeting was not looking for answers but rather for questions to pursue as we consider the programmatic implications of ABC approaches. The morning's panel presentations and discussions included the following themes:

The potential advantages of ABC approaches: There is room at the ABC table for all points of view — Uganda welcomed many people to the table with no litmus test. While some of the ABC approaches carry historical, political, and moral baggage (which at times has produced lecturing as the main form of communication), one take-home message has been that, as in Uganda, Senegal, and other places, it is possible to discuss everything from condom promotion to religious group participation at the same table.

Data: There are no absolute quantitative certainties, even in physical science. In the social sciences — including the measurement of HIV-related behavior change —- data-checking and triangulation are necessary to reach a certain level of "ethnographic confidence" that desired outcomes are occurring.

Uganda: We have "ethnographic confidence" that something significant happened in Uganda in terms of messages and community-based, norm-altering behavior changes. It is hard to know exactly what the role was of more "distal" factors such as political will, but the data on seroincidence and resulting prevalence decline indicate that something of a large magnitude took place in the more direct "proximal" factors of ABC behavior changes. The main one appears to be related to partner reduction in the late 1980s, although changes in age at sexual debut and increased condom use with nonregular partners were also important. Distal factors alone are not sufficient — fundamental behavior changes are needed for prevalence to actually come down. The 1995 Uganda Demographic and Health Survey findings attest to the importance of these changes, as 89 percent of men reported they had changed their behavior to avoid AIDS, with most of them adopting faithfulness to one partner and other partner-related changes. DHS and other UNAIDS data from many other countries indicate the strength of "B" messages, especially when they are part of a community-based indigenous response for changes in personal behavior and the underlying social norms.

Halperin's synopsis concluded with some discussion of:

- Fear-based interventions — These seem to be most effective when a specified behavioral response to the fear is also presented as an option.

- The "zero grazing" message— In Uganda, did that translate into perfect monogamy, or perhaps function more as part of an overall norm-changing encouragement to have fewer partners? Perhaps it doesn't matter so much, as these are matters of degree, as opposed to the absolutes of never, only, or always. And it's important to note that much of the zero-grazing effort was directed at older men, who often had much younger female partners.

- Stigma — How to carry out ABC interventions without increasing AIDS-related stigma? HIV/AIDS is relatively less stigmatized in Uganda than in other countries, showing that is possible to promote ABC interventions and not raise stigma at the same time.

- Youth and condoms — Studies in a number of countries, such as South Africa and Jamaica, have found that youth are more likely to use condoms for pregnancy than HIV.

- "Mass communication" — Uganda again provided an endogenous example when early in the epidemic the president traveled the country to address villages and communities, usually with only a megaphone in hand.

Break-Out and Report Back Sessions

Topic: What have we learned about the impact of "A" and "B" interventions on HIV incidence and prevalence? What do the existing data tell us?

Conclusions:

Partner reduction is a big message to take forward and the main "take-home" message. We need greater complementarity and synergy among the "A," "B," and "C" approaches. We need to avoid mixed messages while providing clear targeted messages to different groups according to different phases and levels of the epidemic.

We need to improve survey instruments and data and do a better job in attributing cause and effect and analyzing program inputs. There is much ambiguity in the available data. This hinders the ability to determine the effectiveness of "A" and "B" interventions. We must look at overcoming this by identifying weaknesses and improving our survey instruments. All data are worth analyzing, as reasonable comparisons can be made across data sets.

Low-prevalence and emerging epidemic countries need to be cautious of focusing only on high-risk target groups. National-level warning messages for general populations are also needed. Although it is imperative to target high-risk groups, there is an important need to combine both targeted and national approaches. When implementing interventions targeted at marginalized populations, care must be taken to avoid stigmatization.

Topic: What are the relative advantages and disadvantages of condom interventions targeted at high-risk populations versus those targeted at the general population?

Conclusions:

Never do "C" without "A" and "B." We cannot do "C" without "A" and "B" and must keep all three in mind, even if we cannot operationalize all three equally. We should not favor one approach over another, but instead combine them as appropriate, given program intentions, country values, and needs. Condom promotion strategies depend on the stage of the epidemic. There are places where targeting high-risk groups makes most sense, and other cases where there should be a combination. Targeting is often challenging given stigma, marginalization, and lack of organization. Approaches should be based on the cultural context as well as the state of the epidemic. This is also true for the mixed use of "A," "B," and "C" messages.

We need to balance public health impact with how we distribute condoms to individuals. Targeted distribution is necessary, especially when few condoms are available. The availability of condoms is a major constraint to successful condom promotion in some places. Condoms should be placed in more strategic locations (bars, etc.) and not just clinics. There have been experiments where condoms were placed next to beds in high-risk settings. Many of these condoms were used.

We need to confront and answer questions about the pro's and con's of condom promotion. General condom promotion can increase and normalize discussion of sex. It can be a vehicle to opening up discussion of sex, as in Thailand, or it can be an enticement to risk-taking behavior. This is a question that warrants further exploration. What effect or impact do general promotion campaigns have on youth who are not sexually active? For youth who have not yet thought about sex, condom promotion can be an enticement. Condoms are associated with high-risk groups, so their use has become stigmatized in some places. There is also a strong belief that condoms break.

Topic: How can we effectively implement all three ("A," "B," and "C") interventions to maximize total impact (i.e., how to avoid messages that might negate or contradict one another)?

Conclusions:

"ABC+" means no missed opportunities with an emphasis on skills and empowerment. ABC behaviors and target audiences can be segmented without denigrating any of them. Target populations and behaviors need to be identified. "A" has been defined by different people to mean delay among youth, postpartum abstinence, "revirginization" (secondary abstinence), nonpenetrative sex (abstaining from sexual behaviors that can result in HIV transmission or pregnancy), and abstinence among divorced or other unmarried adults. "B" includes being faithful, reducing the number of partners, and being careful in partner selection. "C" is particularly important when not practicing "A" and "B" behaviors. The conditions of condom use might vary with marital or extramarital sex partners. The same agent does not need to disseminate the same message. Different messages need to be shaped for different providers and clients. There has to be guidance and skills building in choosing and correctly using ABC behaviors.

We need to see the ABCs as reinforcing one another and to know when to use what message with whom. Messages should not be pitted against one another (such as "Condoms don't work," or suggesting "It's OK to have as many partners as you want, whenever you want, as long as you use a condom"). The goal should be informed choice for all ABC behavior changes. People can understand complex messages and should be treated as intelligent individuals who can decide for themselves what to do. Following the cafeteria approach, facts (e.g., HIV is an infectious disease) should be laid out for individuals who should then be presented with a range of prevention options. The goal should be framed as avoiding HIV infection by choosing one or more of the options. More research is needed on what people will choose from an ABC "menu."

ABC behaviors need to become embodied in the development of new social norms or the revitalization of traditional norms. This requires an enabling environment and individual empowerment, as well as moral and informed decisionmaking capabilities. We need to make "A," "B," and "C" into social norms, learn how they affect individual decisions, and encourage informed choice for individual behavior change. This often involves issues of morals and values. It also requires knowing and presenting a complete and honest picture of the epidemiological data related to various interventions.

Topic: How can we operationalize the promotion of "B" (fidelity and/or partner reduction)?

Conclusions:

There is no one formula for operationalizing "B." We need to consider the setting and socioeconomic environments; look at norms, values, and sexual behavior in context; and draw on lessons learned. We need to know the current practices and sexual ethnography of the culture. Uganda's early "A" and "B" responses were natural once AIDS was identified as a deadly STD. The president (who was a foe of family planning) said condoms were not the answer and instead called for a return to family values, delaying sex until marriage, and "zero grazing" (fidelity/partner reduction).

We cannot operationalize "B" without the full range of "A," "C," "D," etc., options. Schools and faith-based organizations can be partners in operationalizing "B." In partnering with a faith-based organization, it is important to understand its core values. Operationalizing "B" might also be linked to voluntary counseling and testing services where they are available. Operationalizing "B" for youth must take into account their serial monogamy pattern of sexual behavior.

We need to focus on men. "B" messages need to be aimed at both married and single men and consider why they have multiple partners and who their partners are. Behavior change options include partner reduction in conjunction with condom use and remaining faithful within marriage. Gender issues impact upon sexual values and behaviors. Issues for women include self-esteem, choice, coercion, and violence.

We need to work toward creating new or revitalized social norms that increase understanding and assessment of personal and community risks. "B" can be promoted through individual self-risk assessment with a presentation of the full range of prevention options. An individual can then choose his or her own most appropriate option. Implementing self-risk assessment depends on the setting. In Uganda, HIV/AIDS was very visible and concrete. In other places, it remains more abstract. Community discussion can reduce the distance between the epidemic and the individual and move toward accepting "B" as a community norm. Fear of other STDs can be a motivation. Self-risk assessment can be a challenge in low-prevalence countries and communities, where fear-based messages will not be as effective.

"B" must be defined and its behaviors (faithfulness, partner reduction) disaggregated. It has several messages — be faithful to current partner, reduce number of partners, and also be careful whom you choose as partners.

A clear definition is also needed to develop indicators and instruments for measuring the different "B" behavioral changes. Choice of partner also plays a role in "B".

Topic: How can we effectively monitor and evaluate ABC behavior change programs?

Conclusions:

The monitoring and evaluation tools are there, but we need to bring them together. Measurements of quality can be borrowed from family planning and other fields. Behavioral Surveillance Surveys (BSS) and Demographic and Health Surveys (DHS) are available tools for measuring behavioral change, but they must be put together in a different way, with better links to routinely collected data. Designs should link broad-based "core" surveys (such as BSS and DHS), more specific extended multiround surveys, operations research, and monitoring and evaluation.

Monitoring and evaluation needs to track the effects of broader contextual factors. Many outside factors that may or may not be related to the subject of a survey can contribute to behavior change and render evaluations inaccurate or ineffective. Only looking at HIV/AIDS can miss, for example, family planning and other interventions taking place. Environmental conditions such as famine and war or "critical incidents" that occur during survey intervals can affect risk behaviors and consequently HIV rates. In Uganda, for example, the death of a pop star from AIDS may have had a major impact on behavior. We should also be cautious of lumping people into broad categories such as "youth," some of whom are also parents, ex-soldiers, and/or heads of households.

We need more work on "why," in addition to "what." It is often difficult to pinpoint the exact causes of behavior change. We often know what happened on the individual or population level, but not why it happened. We need theory-driven tools to understand what we are seeing in the data and what the implications are for programming.

Final Wrap-Up and Discussion

Jim Shelton of USAID and **Edward Green of Harvard** identifed some areas of consensus that had emerged during the meeting's presentations and discussions:

1.) There is clearly a need for a balance of "A," "B," and "C" interventions.

2.) Interventions need to be targeted for better efficiency and because of crucial differences among different populations.

3.) Other country examples should also be studied. Senegal achieved Uganda-like behavior change with a balanced ABC program even in a low-prevalence setting. User-friendly STI services and outreach to sex workers have been key in other settings, such as Jamaica.

4.) Partner reduction emerges as probably the most important element of ABC, at least in generalized epidemics. Delayed sexual debut as part of "A" is also very important, especially for young women, as is targeted condom promotion for sex workers and people engaging in casual sexual encounters.

5.) The nature of the epidemic is also a major factor. In Southeast Asia, HIV/AIDS is still largely confined to high-risk populations, among whom condom use is relatively easy to implement. In many African countries, the epidemic is more generalized and thus requires an appropriate mix of "A," "B," and "C" approaches.

To conclude the meeting, Connie Carrino welcomed USAID Assistant Administrator Dr. Anne Peterson. Dr. Peterson noted that a balanced ABC approach to prevention sets aside history and politics in the interest of what is right from a public health perspective. It also helps clarify the different yet complementary roles of program partners in overcoming the epidemic. USAID would like to continue working with this balanced approach, with special attention to monitoring and evaluation. Carrino added that there is a need to look beyond Uganda and sexual transmission to other areas of prevention, care, and treatment.

Appendix

Meeting Agenda

8:30 – 8:40	**Welcome & Introduction**
	. . . . . .Connie Carrino, Director, USAID Office of HIV/AIDS
	Panel 1: What's the Data?
8:40 – 9:45	**Epidemiological Overview**
	. . . . . .David Wilson, University of Zimbabwe
9:00 – 9:15	**Uganda/DHS Analysis**
	. . . . . .Rand Stoneburner, Cambridge University
9:15 – 9:30	**UNAIDS Multi-Site Study Analysis**
	. . . . . .Bertran Auvert, University of Paris
9:30 – 9:45	**UNAIDS Data/Perspectives**
	. . . . . .Michel Carael, UNAIDS
9:45 – 10:30	**Questions & Discussion**
	. . . . . .Helen Weiss, London School of Hygiene and Tropical Medicine . . . . . .Norman Hearst, University of California-San Francisco
10:30 -11:00	**Coffee Break**
	Panel 2: Data and Programmatic Implications
11:00 – 11:15	**FHI and BSS Data and Program Implications**
	. . . . . .Carol Larivee, Family Health International/IMPACT
11:15 – 11:30	**Youth Perspective/Data**
	. . . . . .Bob Magnani, Tulane University
11:30 – 11:45	**USAID-Uganda ABC Experience**
	. . . . . .Elizabeth Marum, Centers for Disease Control and Prevention
11:45 – 12:00	**Faith-Based Perspectives**
	. . . . . .Dorothy Brewster Lee, Christian Connections for Int'l Health
12:00 – 12:45	**Questions & Discussion**
	. . . . . .Vinand Nantulya, Harvard University . . . . . .Neill McKee, Johns Hopkins Univ. Center for Comm. Programs
12:45 – 1:30	**Lunch**
1:30 – 1:45	**Synopsis of AM Sessions/Introduction to Break-Out Sessions**
	. . . . . .Daniel Halperin, USAID

Break-Out Sessions A-E:

A) What have we learned about the impact of A and B interventions on HIV incidence and prevalence? What does the existing data tell us?

. . . . . .Steven Hodgins, USAID-Zambia
. . . . . .Peter McDermott, UNICEF/USAID

B) Although existing data suggests that targeted condom interventions (focused on higher-risk populations) are more effective than more dispersed/general population approaches, why is this strategy often still not as understood or adopted in the field?

. . . . . .Malcolm Potts, University of California-Berkeley
. . . . . .Josh Volle, FHI/IMPACT

C) How could we effectively implement all three (A, B, and C) interventions to maximize total impact? (I.e., how to avoid messages that might negate or contradict one another?)

. . . . . .Douglas Huber, Management Sciences for Health
. . . . . .Jeff Spieler, USAID

D) How can we operationalize the promotion of "B" (fidelity and/or partner reduction)?

. . . . . .Ray Martin, Christian Connections for International Health
. . . . . .Hally Mahler, YOUTHNET

E) How can we effectively monitor and evaluate ABC behavior change programs?

. . . . . .Robert Kelly, Population Services International/AIDSMARK
. . . . . .Sohail Agha, Abt Associates

3:00 – 3:15 **Coffee Break**

3:15 – 3:45 **Reporting Back of Key Themes from the Break-Out Groups**

. . . . . .Jim Shelton, USAID, moderator
. . . . . .Edward Green, Harvard University, discussant

3:45 – 4:30 **Final Wrap-Up and Open Discussion**

. . . . . .Connie Carrino, Director, USAID Office of HIV/AIDS

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