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THE ROLES OF BEHAVIOR CHANGE COMMUNICATION AND MASS MEDIA

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Nigeria faces a high burden of AIDS, with more than three million people already infected with HIV (1). Other than a slight decrease from 5.8% in 2001 to 5.0% in 2003, the country's HIV seroprevalence rate has increased progressively since the first case was officially disclosed in 1986 (2,3). The epidemiologic pattern of HIV infection— with sexual behavior, use of contaminated skin-piercing instruments, and mother-to-child transmission as the principal modes of transmission— clearly indicates that behavior modification is central to HIV prevention. The current absence of curative immunological, pharmacological, and related medical interventions against HIV/AIDS makes behavioral interventions more critical than for many other diseases of public health importance. To ensure maximum impact, behavioral interventions must be examined critically and avenues for strengthening them within national programs and community initiatives must be continuously sought.

Evidence from the successful experience of Uganda indicates that appropriate sexual behavior modification can produce a positive impact equivalent to that of a vaccine, with an effectiveness of 80% (4,5). Following their review of the decline of HIV in Thailand, Zambia, and the gay community

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in the United States, Stoneburner and Low-Beer argued that Uganda is not unique and that successful experiences share several basic elements—“the continuum of communication, behavior change, and care” (6). These success stories stimulate interest in ensuring that HIV-related communication programs are sound in concept and produce the desired behavior changes that will halt the spread of HIV and eventually reverse its impact at the population level.

THE NEED FOR BEHAVIOR CHANGE COMMUNICATION

Since HIV/AIDS first emerged globally, the role of behavior change has been recognized as critical to the control of the pandemic. The phrase “education is the only vaccine against AIDS” was commonly aired during the early years to control the epidemic (7). Against this background, considerable efforts and energy were devoted to implementing communication programs to educate people about HIV transmission modes and prevention strategies. The underlying assumption of these early activities was that improving people’s knowledge about the infection and disease would lead to avoidance of risky behaviors. According to the information, education, and communication (IEC) model, “clear information presented in an appropriate format and language would persuade those at risk to protect themselves from the virus” (8). Despite over two decades of communication efforts, however, HIV rates have continued to rise globally. It has become increasingly clear that improved knowledge and education do not always lead to positive behavioral changes.

Human behavior is complex, and behavior change, under any circumstance, can be difficult to achieve and maintain. Prochaska and DiClemente have proposed a behavior change model with five distinct stages; this model emphasizes that behavior change is a process rather than a single event, with relapse possible at any point in that process (9). The nature of HIV infection particularly makes behavior change a great challenge. On the one hand, the risky behaviors associated with HIV transmission largely involve sexual acts—and often people’s deepest, most intimate feelings. On the other hand, the actions sought by HIV/AIDS control efforts are mainly in the realm of primary prevention and while high-risk behaviors can increase the chances of transmission, they do not always lead to infection. The long incubation period of the virus, with symptoms often appearing many years after initial infection, may also lower the motivation for at-risk individuals to change their behavior. These scenarios present critical challenges in HIV communication and highlight the need for more focused efforts on behavior change, which must go well beyond the basic education and materials dissemination that have been the hallmark of many HIV-related IEC programs.

IEC activities—the first generation of HIV communication interventions—have continuously occupied a central place in HIV prevention efforts (10). With the urgent impulse to “do something and anything” to reduce the ravaging effects of HIV/AIDS, particularly in the first decade of the epidemic, HIV prevention programs pursued such goals as reaching a specified number of people with information and distributing a specific number of condoms, with little attention paid to the ultimate effectiveness of such activities in actually preventing HIV transmission. Scant attention was given to establishing a

strong scientific rationale for HIV communication programs and activities. Thus, the use of behavior change models in designing HIV communication programs took some time to evolve and to occur within the context of HIV prevention activities.

Over the years, it has become clear that while IEC programs have resulted in improved knowledge about HIV/AIDS, they have often failed to produce behavior change. As the U.S. Centers for Disease Control and Prevention has noted, “IEC campaigns are often better at imparting knowledge and information than they are at inspiring behavior change” (11). In sub-Saharan Africa, for example, the level of AIDS awareness has increased significantly over the years, with more than 90% of people in the worst affected countries reporting awareness of the virus (8,12). There is little evidence to suggest, however, a concomitant decrease in HIV-related risk behaviors in most countries on the subcontinent. The awareness achieved is usually shallow and includes neither accurate knowledge nor the development of the skills needed to protect individuals from infection. In 2003 the National Demographic and Health Survey (NDHS) showed wide gaps between awareness and correct knowledge of HIV transmission and the appropriate methods of prevention (13).

The results of similar surveys across many African countries have revealed that awareness and knowledge of HIV/AIDS “correlate only loosely with behavior or perception of risk” (12). This realization has increasingly led to the conclusion that awareness, while an essential prerequisite for changing behavior, is insufficient. Thus, the emphasis in HIV/AIDS communication efforts, globally, is increasingly shifting from IEC to behavior change communication (BCC), which has been described as a second-generation HIV communication intervention (10). This programmatic evolution parallels the general development in the health communication field, with the current period noted to be the “era of strategic behavior change communication, founded on behavioral science models” (14).

Some confusion may exist about how BCC differs from IEC. Whereas IEC largely focuses on improved awareness and knowledge, the primary goal of BCC is sustained behavior change. In practice, IEC has often resulted in the production and dissemination of communication materials, while BCC has been used to establish communication that is strategic and integrated into entire programs (15). BCC also has the advantage of being rooted in behavior change models developed in the field of social psychology. BCC has been defined as, “an interactive process with communities (as integrated with an overall program) to develop messages and approaches using a variety of communication channels to develop positive behaviors; promote and sustain individual, community and societal behaviors change; and maintain appropriate behavior” (15).

In the context of HIV/AIDS prevention and control, BCC entails the use of communication approaches and tools to foster positive change in behavior as well as improve knowledge and attitudes about HIV and other sexually transmitted infections. BCC aims to empower individuals and communities to make informed choices about their health and well-being and to act on them. Behavior change approaches recognize that presenting facts alone does not ensure behavior change and that change may take some time to occur. Behavior change interventions are, thus, designed to accommodate the stage of

behavior adoption of an individual or group and to cultivate the skills needed to enable and sustain change.

In the context of HIV prevention, BCC programs aim to (15,16):

- increase knowledge about HIV/AIDS and raise awareness of personal risk factors;
- teach vulnerable individuals the skills needed to reduce risky behaviors;
- motivate individuals to adopt and continue safer behaviors;
- increase the use of appropriate HIV prevention and care services by both infected and uninfected persons;
- reduce the fear and stigmatization often associated with HIV/AIDS;
- increase acceptance and ownership of HIV/AIDS programs by the community; and
- advocate to mobilize and increase resources for HIV/AIDS prevention and care programs at community and government levels.

Behavior change models vary widely. Few of these, however, were developed specifically for HIV prevention. One of the best known is the AIDS risk reduction model, which draws its principal constructs from a number of older theories, including the health belief model, the social cognitive theory, and the diffusion of innovation theory (17). A 2005 Nigerian study has proposed an integrated model for addressing HIV/AIDS in sub-Saharan Africa (18). Within the social context of Africa, the model was based on the convergence of three existing theories — social learning, diffusion of innovation, and social networks.

Regardless of whether they were specifically developed for HIV/AIDS, such theories can play valuable roles as frameworks for studying and understanding human behavior as it relates to the epidemic. While each type of behavior is unique, only a limited number of theoretical variables serve as the determinant of any given behavior (19). Appropriate use of existing behavior change theories enable us to understand these variables and their roles in behavior prediction, and thus to identify the determinants of specific behaviors. In so doing, the theories provide us with valuable tools for effective behavior change and become pivotal in the design, implementation, and evaluation of HIV-related BCC activities. Because discussions on individual theories are beyond the scope of this chapter, Table 15-1 presents several common behavior change theories with examples of their applications in the HIV/AIDS field.

Some experts have argued that the current theories and models may not provide an adequate foundation on which to develop interventions (8,20,21) and may be particularly unsuitable in sub-Saharan Africa and the developing world (22). Others have argued that the existing theories are adequate and no new theories are needed; rather, what is needed “is for investigators and interventionists to better understand and correctly utilize existing empirically supported behavioral theories in developing and evaluating behavior change interventions” (19). Overall, there is consensus that well-designed and targeted theory-based behavior change interventions can succeed in achieving desired health-related goals (23), and evidence is growing that these interventions are effective in the area of HIV/AIDS prevention and control (19,24).

Table 15-1. Overview of Most Frequently Used Theories of Human Behavior

Level	Theory of Model	Behavioral Determinants	Examples of Program Application
Individual	Health Belief Model	<ul style="list-style-type: none"> • Perceived susceptibility • Perceived severity • Perceived benefits and barriers • Cues to action 	<ul style="list-style-type: none"> • Increase level of risk perception • Influence beliefs of severity • Assess and influence beliefs about the benefits of behavior change and the barriers to that change
	Theory of Reasoned Action*	<ul style="list-style-type: none"> • Attitudes • Subjective norms • Behavioral Intentions 	<ul style="list-style-type: none"> • Assess and influence attitudes • Assess and influence norms in the social group • Assess and influence behavioral intentions
	Social Cognitive Theory Social Learning Theory	<ul style="list-style-type: none"> • Outcome expectancies • Self-efficacy 	<ul style="list-style-type: none"> • Sexual communication, need for social support to reinforce behavior change • Modeling of safer behavior
	Stages of Change	<ul style="list-style-type: none"> • Pre-contemplative • Contemplative • Preparation • Action • Maintenance 	<ul style="list-style-type: none"> • Assess and influence outcome expectations and norms, as well as perceived risk • Assess and influence self-efficacy and intentions • Assess and influence self-efficacy, intentions, and outcome expectations • Assess and influence outcome expectations and norms • Assess and influence norms and self-efficacy
	AIDS Risk Reduction Model	<ul style="list-style-type: none"> • Labeling • Commitment • Enactment and maintenance 	<ul style="list-style-type: none"> • Assess and influence risk perception, aversive emotions, and knowledge • Assess and influence perceptions of enjoyment, self-efficacy, and risk reduction • Assess and influence communication, informal networking, formal help-seeking
Social and Community	Diffusion of Innovation	<ul style="list-style-type: none"> • Change agent • Communication channels • Context 	<ul style="list-style-type: none"> • Determine who the influential people are in the community • Determine the most effective means to spread information, including community leaders • Assess the types of social networks in the community
	Social Influences	<ul style="list-style-type: none"> • Context of social interactions • Social norms • Social rewards and punishments 	<ul style="list-style-type: none"> • Equip young people with social skills, including peer pressure resistance skills • Assess and influence social norms
	Social Network Theory	<ul style="list-style-type: none"> • Social networks • Social support 	<ul style="list-style-type: none"> • Assess the composition of social networks • Assess and develop social supports
	Theory of Gender and Power	<ul style="list-style-type: none"> • Social sexual norms and power dynamics 	<ul style="list-style-type: none"> • Address the social structure of gender relations
	Empowerment	<ul style="list-style-type: none"> • Community organization • Community building 	<ul style="list-style-type: none"> • Assess community priorities • Assess key activities of the community and facilitate alliance building
	Social Ecological Model for Health Promotion	<ul style="list-style-type: none"> • Intra-personal (knowledge, attitudes, risk perception) • Social, organizational, and cultural (social networks) • Political factors (regulation) 	<ul style="list-style-type: none"> • Increase knowledge and skills development and influence risk perception • Community organizing mass media • Advocacy
	Socioeconomic and Environmental Factors	<ul style="list-style-type: none"> • Policy • Resources and living conditions • Access to prevention 	<ul style="list-style-type: none"> • Advocacy and community organizing • Social services • Increase access to prevention tools, such as condoms

*A more recent theory of planned behavior is an update of the theory of reasoned action. It was developed by one of the authors of the theory of reasoned action to account for behaviors that are subject to forces beyond the individual's control.

Source: King R. *Sexual Behaviour Change for HIV: Where Have Theories Taken Us?* UNAIDS/99.27E. Geneva: UNAIDS, 1999.

MAKING BCC COUNT IN HIV/AIDS PREVENTION

Behavior change is a complex process motivated by multiple factors, including an awareness of the need to change, an understanding of the benefits of such change, a belief in one's ability to put the required skills into practice in different settings, and confidence in one's ability to maintain new behavior in light of changing circumstances. To be successful, BCC must move people from awareness to action by instilling the belief that desired outcomes will be obtained by changing behavior and by increasing individuals' sense of control over their own behavior. BCC must go beyond an informational or purely cognitive approach to one that combines both informational and emotional appeals. In this regard, the following elements have been identified as being crucial to the success of HIV-related BCC messages and activities (7):

- **The rational element, based on knowledge:** People need to know the basic facts about transmission—how the virus is and is not transmitted, how likely they are to become infected, and what they can do to avoid infection.
- **The emotional element, based on the intensity of attitudes or feelings:** Individuals need to feel an intense and personal vulnerability to the virus in order to develop an emotional commitment to the behaviors needed to avoid it.
- **The practical element, based on personal skills in the new behavior:** People need to be competent in practicing the new behavior and be confident in their ability to do so. They need a sense of self-efficacy to adopt new, health-protective behaviors.
- **The interpersonal element, or social networks:** People need to associate with and be supported by their significant others (such as family members and peer groups) whose knowledge, emotions, and skills can reinforce healthy changes.
- **The structural element, or the social, economic, legal, and technological context in which behavior takes place:** People need to have access to necessary supplies and services (such as condoms and voluntary counseling and testing facilities), and to live in an environment where safer behaviors are accepted and promoted while risky behaviors are discouraged.

Based on its analysis of the techniques employed by successful BCC activities, the U.S. Centers for Disease Control and Prevention has identified best practices in mounting innovative behavior change interventions (11). Successful interventions tend to:

- **Be personalized:** Individually targeted action works best, and in the case of successful large-scale public health projects, the public messages are reinforced interpersonally and in concert with other services and sectors.
- **Be emotionally compelling:** Successful programs go beyond simply providing information to also creating an emotional stake that motivates individuals and people to act positively.
- **Make extensive use of role models:** Role models motivate individuals to change their behaviors by providing concrete examples of behaviors that can be emulated, increasing their confidence in

their ability to change their behaviors, persuading them of the positive benefits of change, and showing them how to change;

- **Demonstrate sensitivity to social and cultural norms and expectations:** To make sense and be useful to target populations, information must be easily integrated into the target audience's social expectations, norms, and values, as well as their political and economic circumstances. The information must also be applicable to their daily lives.
- **Recognize the environment's unique impediments and facilitating factors:** Successful BCC activities recognize the environmental variables that can impede or facilitate the desired behavior change.

Entertainment-Education Strategies

The entertainment-education—also known as “enter-educate” or “edutainment”—approach has been identified as one that most effectively combines these “best practices” elements by disseminating information through the media in a combination of entertainment and education (11). These approaches can be adopted by various entertainment modalities, ranging from professional to amateur street theater, from cartoons and comics to professional acting and drama performances, and from film and popular music to radio and television soap operas.

Entertainment-education is both popular and effective as it focuses on emotional as well as cognitive factors that influence behavior, and is closely aligned with the customs, norms, and narrative forms that the target audiences find familiar. This approach uses role models extensively in line with the social learning theory (25); creates “good” models, “bad” models, and models that transit from bad behaviors and values to good behaviors and values; and shows the consequences of various choices and actions. As indicated in the literature, modeling is often the best way to teach complex behavior (26). Entertainment-education strategies are also based on the idea that self-efficacy will lead to expected results.

The approach fits well in the “entertainment for education” purpose of storytelling, songs, and other community-based activities that are indigenous to Africa. The approach has been used successfully in many reproductive health programs in sub-Saharan Africa as evidenced from evaluation studies. Several notable examples include the “Soul City” television serial in South Africa (8), the “*Twende Na Wakati*” radio drama program in Tanzania (11), and “Choices,” a song about sexual responsibility performed by Nigerian music stars King Sunny Ade and Onyeka Onwenu (27). The entertainment-education approach has also been shown to be cost-effective, with an enduring effect (28). Piotrow and colleagues have summarized the strength of the entertainment-education approach in their “nine Ps of enter-educate”—pervasive, popular, personal, participatory, passionate, persuasive, practical, profitable, and proven effective (28). The slogan “sing and the world sings with you; lecture and you lecture alone” aptly summarizes the essence of the entertainment-education approach (28).

The Power of the Mass Media

The mass media—consisting of print outlets, such as newspapers and magazines, and broadcast outlets, such as radio and television—have important roles to play in BCC. While some controversy has arisen about the effectiveness of mass media in public health campaigns aimed at producing healthier behavior (29), the mass media clearly have the capacity to inform and educate people. At the very least, they can provide the foundation for possible behavior change. They can also affect people’s perception of social norms, which in turn support people’s efforts to change behavior. The media can also play a powerful advocacy role for policies that support sustainable behavior change at the population level. Furthermore, radio and television are important channels for enter-educate approaches such as soap opera and drama series, which are powerful catalysts for behavior change.

The positive impact of the mass media on risk perception, self-efficacy, and other behavioral predictors as well as HIV/AIDS risk behavior has been documented (29,30). As Rogers noted with regard to the growing use of mass communication strategies in health information dissemination, new communication technologies facilitate health information exchange and optimize decision-making (31). The trend in the HIV/AIDS communication field, globally and nationally, is toward the increasing involvement of the media in control efforts.

Findings from the NDHS attest to the importance of the mass media in the Nigerian HIV/AIDS field. The 1999 survey found that the most frequently quoted source of AIDS information was the radio (72.1% of men and 45.6% of women), followed by television (39.8% of men and 46.6% of women), and newspapers (25.4% of men and 9.3% of women).

The National HIV/AIDS and Reproductive Health Survey, conducted in 2003, showed that most Nigerians consider all forms of mass media acceptable for reaching the populace with information about HIV/AIDS and family planning (32). Radio was the most accepted (89.3%), followed by television (82.3%), and the print media (79.8%). The survey also found that most Nigerians listen to the radio regularly, with 50.4% indicating that they listen every day or almost every day; another 18.9% listen at least once a week. Twenty-eight percent watch television every day or almost every day and 12.9% watch television at least once a week.

Thus, the media habits of Nigerians are such that a good proportion can be reached through well-packaged mass media programs, particularly radio programs. The success recorded with the use of mass media techniques in family planning in Nigeria (33–35) lends credence for their use in HIV/AIDS control, as well as for other health and social development activities.

HIV/AIDS COMMUNICATION EFFORTS IN NIGERIA

In general, Nigeria has had a fluctuating experience in its HIV/AIDS response, particularly with regard to communication activities. While the early phase of the epidemic witnessed a predictably slow response, Nigeria was awakened from its state of disbelief about the presence of the virus in the country by the late Olikoye Ransome-Kuti, then the federal health minister, who took many positive steps to

encourage a systematic national response. These steps included the public announcement of the death of his brother, Fela Anikulapo-Kuti, a Nigerian musician of considerable national and international fame, as a result of AIDS, and the establishment of a framework for a national HIV/AIDS response from 1986 to 1993. With the change in government in 1993, the nation experienced reductions in the pace and scale of HIV communication activities. Since the country’s return to democracy in 1999, the HIV/AIDS response in the country has received a considerable boost and has enjoyed the highest political support in the country. The following section discusses trends in HIV/AIDS communication in Nigeria and associated achievements.

1986–1993

The early epidemic in Nigeria was marked by efforts to establish the institutional framework necessary for prevention efforts and to provide information to the people about HIV/AIDS. While the government initiated the National AIDS Prevention and Control Program (NACP) in 1988, the general attitude of the population and the civil society was one of cynicism and disbelief regarding the disease. In 1989, the federal government set up a multidisciplinary national AIDS committee, which inspired creation by the states of their various AIDS committees. That year also witnessed the development of a three-year Medium-Term Plan (1990–1992) for the prevention and control of HIV/AIDS, which included plans to educate Nigerians about the disease. The government, under the leadership of General Ibrahim Babangida, launched a “National War against HIV/AIDS” in 1991. Financial resources were provided and program efforts received greater impetus as part of this national initiative. In 1992, the NACP and the National Sexually Transmitted Disease Program merged to become the National AIDS and STDs Control Program (NASCP), housed in the Department of Primary Health Care and Disease Control of the Federal Ministry of Health. A second Medium-Term Plan (1993–1997) was developed; it focused on preventing sexual transmission of HIV through behavioral change interventions and the case management of sexually transmitted infections.

Thus, the era witnessed substantial efforts in laying the structural foundations for a national programmatic response to HIV/AIDS, including BCC activities. One of the major achievements of that period in HIV communication was the production of a national documentary on HIV/AIDS titled “Dawn of Reality.” The documentary, which featured interviews from many leading national HIV/AIDS experts, also involved people infected with the virus. The scope of distribution of the film for IEC purposes was fairly small, but the airing of the film on national television reached a far larger audience. In general, government-initiated activities dominated the HIV communication landscape in that era with considerable support from the World Health Organization. Unfortunately, no evaluations were conducted to determine the effectiveness and impact of these activities.

1993–1999

The period from 1993 to 1999 was marked by some expansion in the program activity of NASCP, although the government exhibited considerable apathy to large-scale HIV communications, particularly

the use of the national television and radio stations. On the other hand, it was an era marked by the strong emergence of the nongovernmental organizations (NGOs) in HIV/AIDS prevention programs, with the majority of them engaged in information sharing and distribution of educational materials. Considerable attention was focused on the most at-risk groups, including long-distance truck drivers, young people, and sex workers. One of the factors that influenced the increased presence and activities of NGOs in HIV/AIDS communication was the rise in available funds from donor agencies, particularly the United States Agency for International Development (USAID).

The U.S. government held sanctions against Nigeria from 1993 to 1999, a period in which the Nigerian government and its agencies were barred from receiving aid from the U.S. government. Therefore, USAID could only work with NGOs during this period. Through the activities of the Joint United Nations Program on HIV/AIDS (UNAIDS), UN agencies, individually and as group, constituted the major sources of donor support to the Nigerian government during this period. The British Department for International Development also supported a number of community-based HIV/AIDS communication initiatives, particularly in Sagamu (Ogun State) and Gboko (Benue State).

During this period, USAID, through the AIDSTECH project (AIDS Technical Support Project) (1988–1992) and AIDSCAP (AIDS Control and Prevention) Project (1992–1997), implemented by Family Health International (FHI), funded NGOs and NGO networks to conduct a range of communication activities (36,37,38). In 1997, musician Fela Anikulapo-Kuti's death from AIDS brought the reality of the disease to bear on the psyche of many Nigerians for the first time. A review of the efforts by FHI showed limited national impact of the programs (38), while analysis of the national response as a whole showed “insufficient nation wide awareness reflected by weak advocacy and information programs toward general populations and specifically at risk groups—youth and women” (39).

1999–2003

Nigeria's HIV/AIDS response witnessed a significant boost with the inception of the civilian administration in 1999. The level of political commitment, the government's presence, and donor activities and support were unprecedented in the history of the epidemic. The national response broadened from a health-focused approach to a multisectoral one with a coordination structure in place—the National Action Committee on AIDS (NACA) at the federal level, the state action committees on AIDS (SACAs) at the state level, and the local action committees on AIDS (LACAs) at the local level.

The country's first action plan on HIV/AIDS—the HIV/AIDS Emergency Action Plan (HEAP)—was approved in 2001 (40). The plan, which was designed to cover a three-year period, placed a premium on BCC objectives, which included: increasing awareness of the epidemic among the general population and key stakeholders; promoting behavior change in both low- and high-risk populations; empowering communities and individuals to design and initiate community-specific action plans; and ensuring that laws and policies encourage the mitigation of the epidemic.

Both governmental and nongovernmental bodies scaled up the level of educational and communication activities considerably with the implicit aim of facilitating behavioral changes and curbing the

epidemic. While most program designers and implementers still operated within the mindset of IEC—with the primary focus being on giving more presentations, organizing more workshops, and distributing more educational materials—there was an increasing awareness of the need to shift toward BCC. The faith-based community and networks of people living with HIV/AIDS (PLWHAs) emerged as important forces during this era. A stronger attention was also paid to networking and coalition building among NGOs. Programs and NGOs with a focus on a particular vulnerable population—such as armed forces personnel or men having sex with men—also emerged.

The National Policy on HIV/AIDS, developed in 2003, has a stronger focus on communication activities—especially BCC—than the earlier policy. The policy explicitly states the government's commitment to “foster behavior change as the main means of controlling the epidemic.” Moreover, one of its targets is to “improve the behavior and the practice of the general population and high risk groups related to safe sex by 20% by the year 2005 and 50% by the year 2010 (41). Another goal is to “reduce by 25% the percentage of persons openly expressing negative attitudes about persons living with HIV/AIDS by 2005” (41).

Since 1999, most HIV-related BCC activities have taken place in the context of schools and youth-focused settings, faith communities, workplaces, and health facilities.

School-Based Interventions

School-based BCC interventions have been undertaken largely to address risky sexual behaviors and injection drug use among school-based populations. The country has developed and adopted the National Family Life and HIV Education Curriculum, which covers the primary to tertiary levels of education. Its implementation has been poor, however, with a low proportion of secondary schools implementing the curriculum as a result of lack of skilled teachers and an inadequate attention to the issue by state educational authorities. Implementation at the primary school level has been virtually non-existent, while at the tertiary level, the institutional response to HIV/AIDS has been feeble, and awareness of the provision of the national curriculum poor (42). BCC approaches used in educational institutions revolved considerably around in-class instructional approaches coupled with peer education and counseling, training in life skills, extracurricular interactive sessions with guest experts, and enter-educative methods such as drama.

Other Youth-Focused Interventions

Community- and mass media-based BCC approaches have been implemented in various parts of the country. These initiatives complement the school-based approach for the schooling population and provide opportunities to reach the out-of-school population, which has been poorly reached. Community-based programs have been implemented primarily by civil society organizations, with those focused on adolescents playing a leading role. Major BCC approaches included peer education, behavior modeling, sporting activities, and enter-educative approaches such as musical concerts, video shows, and drama. Mass media approaches richly complemented these methods, particularly through the use of adolescent-

focused television drama serials such as “I Need to Know”; radio dramas aimed at improving personal risk perception; customized youth magazines; innovative info-commercials such as “Zip Up,” a multi-media campaign on abstinence; and social marketing of condoms.

Faith-Based Initiatives

The faith community grew considerably in its response to the Nigerian epidemic and engaged in a variety of BCC programs directed not only at prevention but also at care and support for PLWHAs and mitigation of the impact on those affected. Many faith communities and congregations—such as the Redeemed Christian Church of God, the Anglican Communion, and the Catholic Church—have developed HIV/AIDS policy and programs, of which BCC constitutes a significant element. The Interfaith Coalition on HIV/AIDS, a network organization of faith communities, was also engaged in HIV communication activities. The range of approaches adopted by faith communities included innovative use of sermons in churches and mosques, peer-led approaches among young people as well as their gatekeepers, modeling, publications, and enter-educative methods.

Workplace-Based Interventions

Workplace-based BCC activities occurred in a number of establishments within the formal sector of the economy, including the oil and gas, beverage production, and banking industries. Such BCC activities often included peer education, dissemination of information through formal and informal networks, and the use of multimedia communication methods. These were initiated as an integral part of holistic workplace HIV/AIDS interventions with a number of complementary components, including formulation of an HIV/AIDS policy, condom promotion and distribution, voluntary counseling and testing, and the provision of care and support for the affected and the infected.

The Armed Forces Program for AIDS Control (AFPAC) can be viewed as a special type of workplace intervention in Nigeria. The program has a rich BCC component, which includes peer education; social mobilization directed at military personnel within the barracks and “mammy markets” (the adjoining shanty civilian trading posts and living facilities that often spring up to service military personnel); condom promotion and distribution; video recording and distribution of drama production targeted at military personnel and their families; and integration of HIV/AIDS education into sporting events. AFPAC also strategically organizes an annual HIV/AIDS week, during which enter-educative approaches are used to promote behavior changes among military personnel across the Army, Air Force, and Navy.

Within the informal sector, BCC approaches have been targeted mainly at the most-at-risk groups such as sex workers and transport workers. Many such activities have often taken place within the vicinity of their operational base such as junction towns, motor parks, and brothels. BCC approaches with these groups have commonly included peer education, condom promotion and distribution, dramatic skits, and road shows.

Health Facility-Based Interventions

A stronger focus on BCC emerged within health care settings, although a considerable degree of improvement is still needed to maximize effectiveness. Messages related to this focus have included promotion of safe environments and safer practices to reduce the potential for transmitting HIV within health facilities, discouragement of discrimination and stigmatization of PLWHAs, and promotion of quality AIDS-related prevention and care services, such as voluntary counseling and testing and prevention of mother-to-child transmission in the management of pregnant PLWHAs. Approaches included innovative and targeted educational material and message design, interactive learning methods, counseling, and orientation activities to facilitate improved patient-provider interaction and communication.

MASS MEDIA TRENDS IN COMMUNICATING ABOUT THE HIV EPIDEMIC IN NIGERIA

At the initial stage of the HIV/AIDS challenge, the occasional news items on the pandemic in Nigerian mass media tended to focus on stories and issues from developed countries with little or no local relevance. Moreover, most HIV/AIDS stories failed to make the front page in print or lead in electronic media, because editors gave them a lower priority than stories on politics, business, sports, or the economy. On the other hand, many media reports on local events relating to the epidemic bordered more on sensationalizing the issues with such headlines as, “Another AIDS victim is dead” (43); “New killer sexual disease discovered” (44); “Who’s afraid of the big bad AIDS? — Not Nigerian Men” (45); “11 out of 12 AIDS carriers now dead — Medical Director” (46); and “Call girls spread AIDS” (47).

Numerous media reports also bordered on being inaccurate, false, or denying of the reality of the threat that HIV poses to Nigerian society. At other times, media coverage of HIV/AIDS issues in Nigeria was largely limited to government events and activities as well as the reactions on HIV/AIDS from health-focused NGOs, research institutions, and government agencies. The situation has been changing gradually, however, as a recent analysis of mass media reports and activities found a growing media interest in the epidemic and greater involvement of media practitioners in HIV control efforts, particularly communication activities. The use of alternative media strategies—such as street theater, home videos, documentary films, public service announcements, posters, and music—has also increased use.

Content analysis of 2,156 reproductive health articles published in four national print media between 1986 and 1997 showed a greater attention—56%—on sexually transmitted infections, including HIV, than other major reproductive health issues. Most of the reports, however, covered workshops, conferences, and government pronouncements rather than in-depth field reports and analysis of the country’s HIV epidemic. News items rated as the most common type of HIV/AIDS (72% to 82%) reports in various newspapers (48). In general, the media paid little attention to the science and prevention of HIV/AIDS between 1986 and 1997, a period during which the government’s activities and support for HIV prevention were low. Most news coverage on the epidemic in that era related to NGO activities rather than accurate descriptions of HIV/AIDS itself.

Since 2000, mass media in Nigeria have recorded major progress in covering the epidemic. A study of print media from March 2002 to March 2003, for example, indicated increased HIV/AIDS coverage and an improved understanding of key issues involved by journalists. Media reports still overwhelmingly tilt to news, however, while features, editorials, and opinion articles lag behind. An analysis of the publications covered in the study showed that news reports, which generally provide little information on the science and control of HIV/AIDS, constituted 74.5% of media reports, followed by news features (18.1%) and opinion pieces (6.8%); editorials constituted only 0.5% (49). The study also showed that the quality of coverage still left much to be desired; based on objective criteria drawn up by a media NGO, only 3% of articles were considered good, while 85% were rated fair.

Greater participation of the media in HIV/AIDS communication stemmed, perhaps, from the realization that they could exercise considerable influence on the public by increasing people's knowledge, influencing attitudes, and promoting debates on HIV/AIDS through a presentation of factual information about HIV. The recognition that the media could play a central role in creating awareness and understanding of the HIV/AIDS, as well as sensitizing and mobilizing the people against the epidemic, encouraged media practitioners to become more active in the HIV/AIDS communication domain at individual, institutional, and professional levels. The emergence of media-based NGOs in the late 1990s, such as Journalists Against AIDS and Development Communications Network, also added impetus to media-based initiatives against HIV/AIDS in Nigeria.

As mentioned earlier, the death of Fela Anikulapo-Kuti in August 1997 marked a turning point in HIV/AIDS reporting in the country. Fela's death received intense media coverage because it marked the first time a prominent Nigerian was publicly associated with HIV/AIDS, bringing the reality of the epidemic to the doorstep of many Nigerians. Yet, Nigerian mass media failed to fully explore the opportunities offered by Fela's death for educating the population about HIV/AIDS.

Other transient increases in HIV/AIDS reporting followed Fela's death. The most notable were the media coverage of the AIDS "cure" proponents between 2000 and 2001 and the claim of the discovery of an effective treatment by a Nigerian surgeon trained in immunology. In the absence of a coherent response from the authorities, the media were awash with reports that a curative drug had indeed been found in Nigeria. Media outlets in Nigeria continue to feature information about unproven AIDS cures; those marketing "cures" even buy media space regularly to advertise their products.

To improve media coverage and participation in HIV/AIDS control efforts, a number of development partners, including donor agencies and government institutions, have offered or supported training programs for media professionals to improve their HIV/AIDS reporting. Support has also been given for the establishment of media resource centers.

Many organizations have waged media campaigns as a practical way to raise AIDS awareness among people in different regions of Nigeria. Such a campaign differs from an institutionalized approach that is led by media organizations as a core component of media programming. Media-led approaches, which are institutional responses of media organizations themselves, have greater potential than media campaigns to improve features, editorials, opinion pieces, and news reports in the media. Media campaigns,

which tend to be sponsored events or commercial adverts, are more expensive and less sustainable than media-led approaches.

Overall, it can be argued that the Nigerian mass media, much like most population subgroups, has moved through the usual stages of denial, sensationalism, and blame but is now responding more constructively to the HIV/AIDS epidemic. This is in line with the pattern found within the media elsewhere in Africa (50).

THE DIFFERENCE BCC HAS MADE IN THE NIGERIAN EPIDEMIC

While the level and scope of BCC activity have increased with time, particularly during 1999 to 2003, a missing dimension in Nigeria's HIV/AIDS programming landscape remains the systematic and scientifically rigorous evaluation of the impact of such programs. As a result, it is difficult to identify which approaches have worked best in different circumstances, locations, and population groups. The general impact of HIV communication programs at the population level can be broadly assessed, however, through the findings of successive national surveys. The NDHS reports for 1999 (51) and 2003 (13) enable an evaluation of the possible impact of the programs at the population level within these time periods.

In general, the reports showed that the proportion of adults who were aware of AIDS increased from 89.5% to 97.0% for males and from 74.4% to 86.3% for females between 1999 and 2003 (13,51). By 2003, even in the zones with the lowest level of awareness, 75.5% of women (for the North-East region) and more than 90% of males (for South-South region) were aware of the disease (13). For males, knowledge of the role of condoms in HIV prevention also increased, from 29.4% in 1999 to 63.4% in 2003; and for females the rates were 13.8% in 1999 (36) and 44.6% in 2003 (13). Despite the high level of AIDS awareness, in 2003 only 59.8% of males and 42.3% of females knew that both condom use and limiting sex to one uninfected partner protect against HIV transmission. In 2003, misinformation was still shown to be high, using UNAIDS criteria, as only 28% of men and 20.8% of women held no incorrect belief about AIDS.

Assessment of knowledge about preventing mother-to-child transmission of HIV showed only 6.2% of males and 5.2% of females understood that HIV could be transmitted through breastfeeding and that HIV-infected women could reduce the rate of HIV transmission to their babies by taking antiretrovirals during pregnancy (13). HIV-related discrimination also was high, again using UNAIDS criteria, with only 6.6% of males and 3.3% of females having accepting attitudes toward PLWHAs. In essence, the plethora of BCC activities and other HIV communication initiatives in the country before 1999 and between 1999 and 2003 have had only a marginal impact on HIV-related knowledge and behaviors in Nigeria.

The data also showed that HIV-related high-risk behavior remains a challenge in Nigeria. Among married individuals, for example, only 32.2% of females and 50.1% of males used condoms during sex with non-marital partners (32). Among singles, 33.7% of females and 48.7% of males used condoms with their sexual partners. Furthermore, only 7.6% of males and 6.0% of females had ever undergone HIV

testing. Thus, the available data suggest that HIV communication activities in Nigeria may have been largely ineffective in terms of their overall impact on HIV knowledge and preventive behaviors.

While it may be argued that short-term communication efforts—those whose duration lasts less than five years—may ultimately yield quantifiable improvements in behaviors after long-term implementation, and that change may simply be a matter of time, this is not likely to be a sufficient explanation in the Nigerian scenario. Several potential weaknesses in implementing HIV/AIDS communication programs in Nigeria have been identified, including technical weaknesses in the design and implementation of BCC programs, insufficient coverage of programs across the country, and a lack of coordination and poor collaboration among the organizations involved in HIV-related BCC activities in Nigeria.

- **Technical weakness of the programs:** Few organizations involved in HIV interventions in Nigeria, both governmental and nongovernmental, possess the technical expertise for designing theory-based BCC programs. Materials and messages are designed without the benefit of the scientific foundation that would render them more efficacious, and as most BCC-related activities are not based on any particular behavior change theory, their technical quality tends to be dubious. A field study has found that most civil society organizations lack an understanding of how their communication approaches would conceptually lead to behavior change; they simply “hoped” that change would occur (52). The appropriateness of HIV messages that some organizations disseminate also is doubtful, and sometimes groups disseminate conflicting messages (53). The incorporation of inappropriate methods and languages in messages—including the distribution of English-language materials to non-literate audiences—has been reported (52). A lack of skilled human resources for implementing BCC initiatives has been documented at local, state, and federal government agencies (54). Among others, public sector officers charged with responsibility for health education and health promotion activities were found to lack sufficient knowledge about social mobilization, message design, and the use of health educational materials. Prior to 2003, no government department or institution handling HIV prevention communication activities had ever committed a communication strategy or strategic communication plan to print. This was also true of many development partners involved in HIV prevention and other health-related BCC activities in Nigeria (55).
- **Insufficient coverage of programs:** HIV-related BCC activities have been inequitably distributed across the country. Most have been limited to the urban and peri-urban areas, while the rural areas, where approximately two-thirds of Nigerians live, have been largely neglected. Some states have had a comparative over-concentration of donors’ presence, to the disadvantage of other states. There has been no correlation between the number of donor-supported HIV/AIDS projects in any given state and its epidemiologic picture; while some states with low seroprevalence rates have enjoyed a continued influx of donor-supported programs, a number of more affected states lack any such programs.
- **The lack of a coordination framework for BCC activities and a poor level of collaboration among actors:** While increasing efforts have been devoted toward ensuring coordination of

HIV/AIDS responses at the federal level since NACA was created, little BCC coordination was done prior to 2003. At the state and local government levels, the capacity of the SACAs and the LACAs to coordinate effectively remained poor (56). BCC actors and activities had no defined coordination framework and little quality control in terms of disseminated messages. The national oversight of programmatic initiatives was poor, such that many development partners were implementing or supporting various HIV communication activities with little or no consultation with relevant government agencies and no reference to any overall national plan. Little communication and information sharing was taking place between the development partners and actors. Moreover, little attention had been paid to documentation of “best practices.” Similarly, little effort was devoted to monitoring and evaluation activities to clearly document the impact of BCC approaches and activities as part of the national response (39).

Thus, the HIV-related BCC landscape in Nigeria before 2003 was characterized by a large number of programs of dubious quality and effectiveness, poor targeting of activities in terms of geographic and population focus, low national spread and coverage, and poor coordination and collaboration of efforts.

THE FIVE-YEAR NATIONAL HIV/AIDS BEHAVIOR CHANGE COMMUNICATION STRATEGY

To improve the effectiveness of BCC for HIV/AIDS control in Nigeria, several weaknesses and challenges must be addressed. This realization provided the rationale for the development of a five-year framework, the National HIV/AIDS Behavior Change Communication Strategy, from 2004 to 2008. The development process, coordinated by NACA, involved various groups of stakeholders, including government institutions, national NGOs, a PLWHA network, and international development organizations.

Activities that took place in the development of the strategic framework included:

- A review of best practices from across Africa in HIV/AIDS prevention, care, and support to identify successful, innovative, and evidence-based approaches;
- A review of existing national data on geographic distribution, knowledge, attitudes, practices, and behaviors around HIV/AIDS, as well as the national monitoring and evaluation indicators;
- A review of past, current, and future HIV/AIDS activity plans and materials collated from diverse stakeholders; and
- Consensus building about the priority audiences and the approaches appropriate to reaching them, priority programs and benchmarks, and the roles and responsibilities of partners.

The framework aims to facilitate the achievement of the national policy goal of reducing the rate of HIV infection by 25%, thereby reducing the national seroprevalence level from 5.0% in 2003 to 4.4% by 2008. The goal is to attain a coordinated national response for BCC programming that ensures coherent, uniform, evidence-based, community-oriented, and theory-driven interventions from all stakehold-

ers, with a measurable impact produced within the shortest possible time (57). The strategy document seeks to provide a practical and useful strategic instrument for addressing HIV-related BCC issues in Nigeria and to empower all stakeholders in HIV/AIDS control and mitigation activities in the context of a coordinated, comprehensive, audience-responsive, and culturally appropriate BCC program.

The strategy document identified: key issues for HIV/AIDS in Nigeria; a relevant conceptual framework and analysis of most effective strategies to help ensure verifiable impact; a five-year vision and target indicators that must be met to achieve that vision; priority audiences, relevant strategies, and critical interventions; and practical timelines for rolling out the overall strategy to maximize impact.

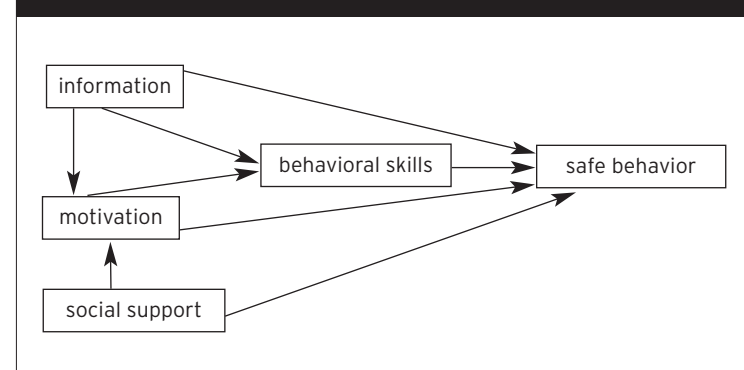
The framework involved the use of two behavioral change theories, selected on the basis of demonstrated effectiveness and relevance to HIV/AIDS interventions in sub-Saharan Africa: the information-motivation-behavioral skills (IMB) model and the extended parallel process model (EPPM). The IMB model facilitates an understanding of the context of behavioral skills, while EPPM provides useful insight in terms of message design and dissemination.

The IMB model has been used as a basis for understanding HIV risk and other reproductive health behaviors across different populations in both developed and developing countries, including young people, university undergraduates, men who have sex with men, and long-distance truck drivers (58–62). Standardized measures of the constructs of the model have been developed and validated for use within a number of diverse populations and for different risk behaviors (63–66). The model holds that HIV prevention information, motivation, and behavioral skills are the fundamental determinants of HIV preventive behaviors (Figure 15-1). The model suggests that well-informed people are not necessarily well motivated to practice prevention and vice versa, but also highlights the existence of a relationship between informational and motivational factors.

The EPPM, on the other hand, focuses on the interplay of “fear” and “efficacy” factors in the context of effectiveness of campaign messages (Figure 15-2). It deals with how fear can be channeled in a positive, protective direction instead of a negative, maladaptive direction (67–69). The EPPM postulates that campaign messages should contain a threat component and an efficacy component. The threat portion makes

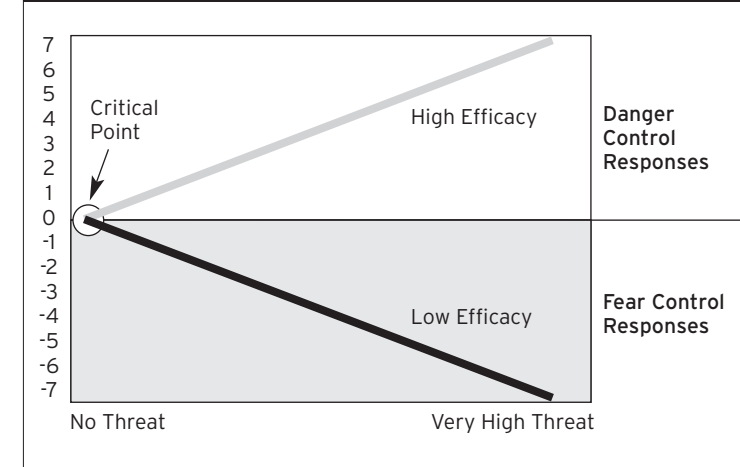
the audience feel vulnerable, and then the efficacy portion convinces individuals that they can perform the recommended response—that is, achieve self-efficacy—and that the recommended response can effectively avert the threat. The EPPM has been applied successfully to HIV risk and preventive behaviors among people of African descent and in sub-Saharan Africa (70–72).

Figure 15-1. Information-Motivation-Behavioral Skills Model



Source: Fisher JD, Fisher WA. The information-motivation-behavioral skills model. In: DiClemente, R, Crosby R, Kegler M, eds. *Emerging Theories in Health Promotion Practice and Research*. San Francisco, CA: Jossey Bass Publishers, 2002:40-70.

Figure 15-2. Extended Parallel Process Model



Source: Adapted from Witte K, Cameron KA, Lapinski MK, Nzyuko S. A theoretically based evaluation of HIV/AIDS prevention campaigns along the trans-Africa highway in Kenya. *J Health Commun*, 1998;4:345-363.

Audience Segmentation and Strategic Activities

Broadly, the strategy document identified five priority audiences based on their overall role in HIV transmission in Nigeria as documented through past research activities and in line with the focus of the National Policy on HIV/AIDS. These include young people, people with high-risk behavior, health care providers, men and women of reproductive age (15 to 49 years old), and PLWHAs. Each of the priority audiences was further segmented

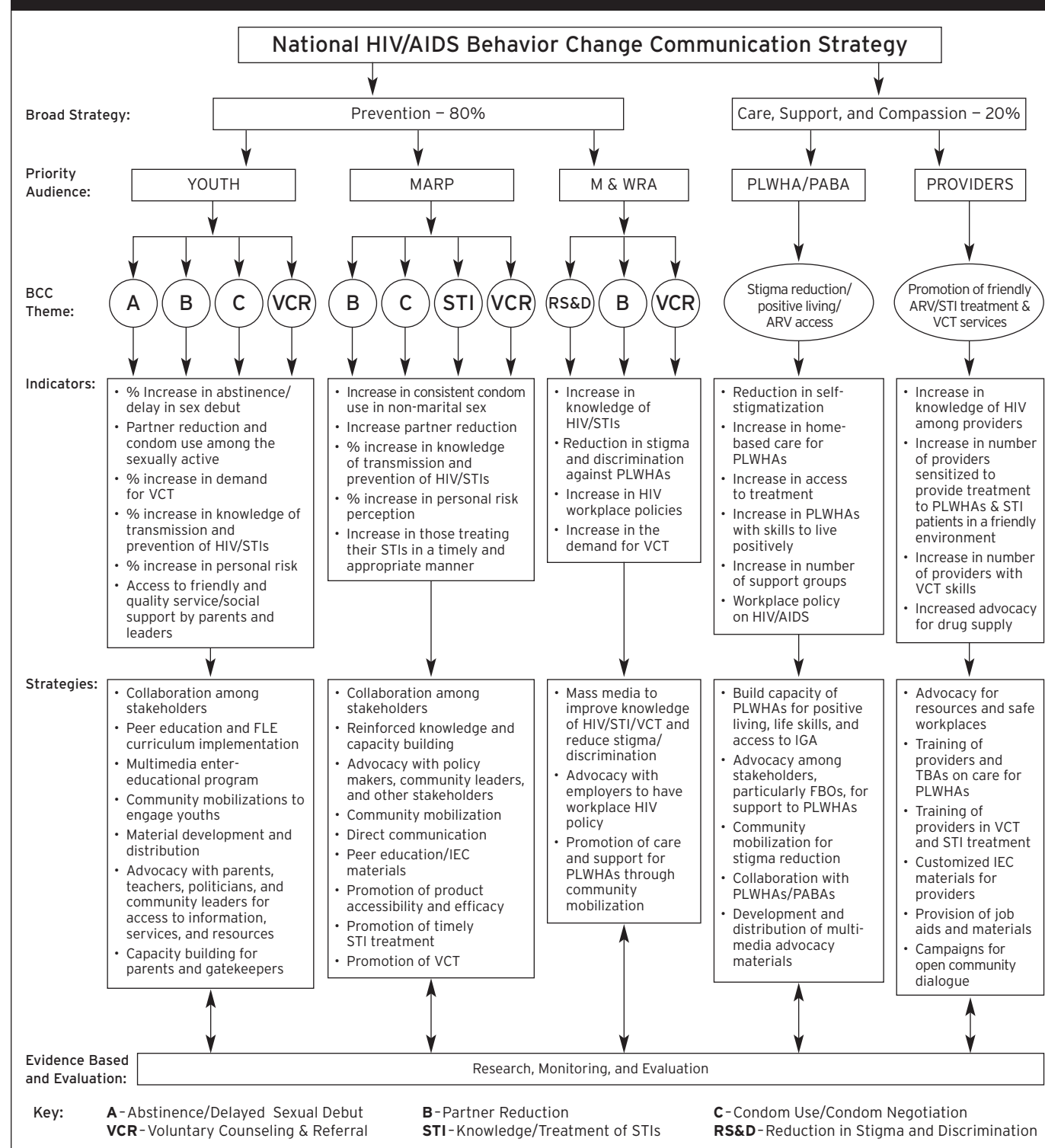
to identify subgroups with clearly different desired behavioral outcomes or situations. Specific objectives, strategic approaches, activities, and related research needs were developed for each priority audience.

While the focus was on primary prevention, in recognition of the importance of the continuum of primary prevention, care, and support to the overall success of HIV prevention efforts, the framework anticipates that 80% of efforts will be devoted to primary prevention, and 20% to other areas (Figure 15-3). The primary prevention activities involved the “ABC” of sexually transmitted infections prevention—Abstinence (delay in sexual initiation); Being faithful (partner reduction); and Condom use (in a correct and consistent manner)—given the proven effectiveness of this approach (73). Other strategic activities indicated in the framework include prevention of mother-to-child transmission; stigma reduction; advocacy among political and community leaders; care, support, and compassion; access to treatment; capacity building; and research, monitoring, and evaluation.

While the framework clearly recognized the differences among the desired behaviors for each priority audience, it also aimed to achieve a holistic approach by recognizing the complementary nature of various strategic activities. For example, as Figure 15-3 shows, for young and single people, abstinence is the major strategic focus, with partner reduction, condom use, and voluntary counseling and referral as complementary approaches. For most-at-risk people, condom use is the main approach, with partner reduction, management of sexually transmitted infections, and voluntary counseling and referral as other strategies. And for men and women of reproductive age, the emphasis is on partner reduction, with voluntary counseling and the reduction of stigmatization as secondary approaches.

The national BCC strategy seeks to use an integrated, multi-channel approach as derived from best practices to provide information, motivation, and behavioral skills building for the various target groups

Figure 15-3. Priority Strategies Indicated for Priority Audiences in the National HIV/AIDS BCC Strategy



Source: National Action Committee on AIDS. *National HIV/AIDS Behavior Change Communication Strategy*. Abuja: National Action Committee on AIDS, 2004.
 Abbreviations: ARV: antiretroviral; FBO: faith-based organization; FLE: family life education; IEC: information, education, and communication; IGA: income-generating activities; MARP: most-at-risk population; PABA: people affected by HIV/AIDS; PLWHA: person living with HIV/AIDS; STI: sexually transmitted infection; TBA: traditional birth attendant; VCT: voluntary counseling and testing

identified. The anticipated use and contribution of the various communication media to impact behavior include:

- Mass media (television, radio, billboards, and print): to build awareness, increase knowledge, promote role models, and influence societal norms.
- Enter-educative approaches: to reinforce awareness and knowledge, clarify misconceptions, desensitize behaviors, and shape societal norms.
- Interpersonal communications: to personalize information, model and practice behavioral skills, and build self-efficacy through skills and confidence-building strategies. Activities that involve significant time, multiple methods, and recurrent sessions with small groups are more effective than others.
- Community mobilization: to sensitize and advocate for societal responses to the HIV epidemic, and to influence policy change to create an enabling environment for sustained behavioral change.

The proposed operational framework corresponds with the existing structure for HIV/AIDS control activities in Nigeria, which is multisectoral in nature and entrusts NACA, the SACAs, and the LACAs with coordination responsibilities. Implementation of specified strategies and activities will be decentralized, resting with the various organizations mandated to address HIV/AIDS while NACA has the coordinating role in the operationalization of the framework.

Overall, the strategic framework is a laudable development as the country's first national document on BCC. While considerable attention has been given to addressing individuals and groups with specific approaches, however, little or no attention has been made to addressing the larger environment. This weakness is one of the major criticisms about the use of psychosocial theories for interventions in the area of sexuality. Most human behaviors, particular sexual behaviors, do not occur in isolation; rather, contextual factors play significant roles in the patterns exhibited. Many experts have underscored the fact that seeking to influence behavior alone is insufficient if the underlying social factors that shape the particular behavior remain unchallenged (74). Change in an individual's behavior is unlikely to be sustainable without some degree of change in the social environment. Thus, significant attention should be paid to the societal context, which the strategic framework has neglected to do thus far. Issues of poverty, gender inequality and inequity, and other related human development conditions must also be addressed for the BCC approaches to achieve their full impact.

Uganda's experience also testifies to the need to address the larger sociocultural and economic context of the disease. The approach in Uganda embraced "ABC" but went beyond it to "D," or Delayed sexual activity, a message young people found to be more acceptable than abstinence. More importantly, the Ugandan approach also included "E" and "F"—Empowerment of women through Financial independence (75).

"Prevention methods such as the 'ABC' approach—Abstinence, Be faithful, and use Condoms—are good but not enough to protect women where gender inequality is pervasive," the executive director of UNAIDS, Peter Piot, noted in his World AIDS Day address in 2004. "We must ensure that women can

choose marriage, to decide when and with whom they have sex, and to successfully negotiate condom use” (76). As UNAIDS, the United Nations Population Fund, and the United Nations Development Fund for Women noted in their joint report, the “triple threat of gender inequality, poverty and HIV/AIDS” must be tackled to achieve reduction in the spread of the epidemic and its devastating consequences (75).

The long-term success of BCC programs also requires community involvement and ownership, which must be integrated into the Nigerian program. The Ugandan experience clearly indicates that community processes and initiatives constitute the major pillars for sustainability and success in the fight against HIV/AIDS (6).

CONCLUSION

Behavior change to ensure HIV prevention remains a critical challenge, and, at the same time, a priority in the current fight against the epidemic. While the complex nature of the human behaviors driving the epidemic is recognized, the examples of African countries such as Uganda, where the epidemic has been successfully stemmed, provide encouragement about the effectiveness of BCC strategies.

The National HIV/AIDS BCC Strategy provides Nigeria with a platform for more effective and coordinated BCC responses to the epidemic and the potential to realize the policy goal of reducing the rate of HIV infection by 25% by 2008. The strategic framework captures the essence of policy pronouncement that, “effective communication includes greater public enlightenment, focusing on the removal of socio-cultural barriers; informational barriers; systemic barriers; the improvement in the general public’s base knowledge regarding the HIV and AIDS epidemic; and catalyzing community-based responses of HIV and AIDS” (57). The challenge lies with ensuring good implementation on a continued basis. Thus, the document needs to be widely distributed; the capacities of stakeholders must be developed for effective implementation; and good oversight of the implementation and coordination must be ensured to bring the vision of the document to reality and effectively check the spread of HIV in Nigeria.

The mass media has a valuable role to play in disseminating information about HIV/AIDS and Nigeria’s strategic framework to fight this disease. Media practitioners also need to be involved in monitoring and reporting on the implementation of the strategic framework and publicizing “good practices.” Thus, building the capacity of media practitioners and organizations to contribute appropriately will be important in the context of improving HIV-related BCC in Nigeria. This should entail, among others, building the institutional capacity of media organizations to initiate media-driven responses that are more strategic in nature and that go beyond the present level of activities.

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REFERENCES

1. United Nations Development Programme. *Human Development Report. Nigeria 2004. HIV and AIDS: A Challenge to Sustainable Human Development*. Abuja: United Nations Development Programme, 2004.
2. Federal Ministry of Health. *2003 National HIV Seroprevalence Sentinel Survey*. Abuja: Federal Ministry of Health, 2004.
3. Federal Ministry of Health. *HIV/AIDS: What It Means for Nigeria (Background, Projection, Impact, Interventions, and Policy)*. Abuja: Federal Ministry of Health, 2002.
4. Green E, Nantulya V, Stoneburner R, Stover J. *What happened in Uganda? Declining HIV Prevalence, Behavior Change, and the National Response. Project Lessons Learned. Case Study*. Washington: The Synergy Project, USAID, 2002.
5. Stoneburner RL, Low-Beer D. Population-level HIV decline and behavioral risk avoidance in Uganda. *Science*, 2004;30:714–718.
6. Stoneburner RL, Low-Beer D. Behavior and communication change in reducing HIV. Is Uganda unique? *Afr J AIDS Res*, 2003;2:9–21.
7. Liskin L, Church CA, Piotrow PT, Harris JA. *AIDS Education—A Beginning*. Baltimore: Center for Communication Programs, Johns Hopkins School of Public Health, 1989;XVII:1–18.
8. United Nations Population Fund (UNFPA). *Communication for Development Roundtable Report. Focus on HIV/AIDS Communication and Evaluation*. November 26–28, 2001, Managua, Nicaragua. Organized by UNFPA with the Rockefeller Foundation, UNESCO, and the Panos Institute. New York: UNFPA, 2001.
9. Prochaska JO, Diclemente CC, Norcross JC. In search of how people change: Applications to additive behaviors. *Am Psychol*, 1992;47:1102–1114.
10. Kalichman S, Rompa D, Coley B. Lack of positive outcomes from a cognitive-behavioral HIV and AIDS prevention for inner city men: lessons from a controlled pilot study. *AIDS Educ Prev*, 1997; 9:S299–313.
11. U.S. Centers for Disease Control and Prevention. *Global AIDS Program: Strategies*. 2004. Accessed at www.cdc.gov/nchstp/od/gap on January 10, 2005.
12. Scalway T, Deane J. *Critical Challenges in HIV Communication: A Perspective Paper from the Panos London HIV/AIDS Program*. London: Panos, 2002.
13. National Population Commission and ORC Macro. *Nigeria Demographic Health Survey 2003*. Calverton, Maryland: National Population Commission and ORC Macro, 2004.
14. Piotrow PT, Rimón JG II, Payne Meritt A, Saffitz G. *Advancing Health Communication: The PCS Experience in the Field*. Center Publication 103. Baltimore: Center for Communication Programs, Johns Hopkins Bloomberg School of Public Health, 2003.
15. Family Health International, Institute for HIV/AIDS. *Behavior Change Communication (BCC) for HIV/AIDS: A Strategic Framework*. Arlington, Virginia: Family Health International, 2002.
16. USAID. *Behavior Change Communication Programs, 2004*. Accessed at www.usaid.gov/our_work/global_health/aids on January 10, 2005.
17. Catania J, Kegeles S, Coates T. Toward an understanding of risk behavior: an AIDS risk reduction model (ARRM). *Health Educ Q*, 1990;17:53–72.
18. Odutolu O. Convergence of behaviour change models for AIDS risk reduction in sub-Saharan Africa. *Int J Health Planning Manage*, 2005;20(3):239–252.
19. Fishbein M. The role of theory in HIV prevention. *AIDS Care*, 2000;30:273–278.
20. Figueroa ME, Kincaid DL, Rani M, Lewis G. *Communication for Social Change: An Integrated Model for Measuring the Process and Its Outcomes*. Baltimore, Maryland: Center for Communication Programs, Johns Hopkins Bloomberg School of Public Health, 2002.
21. Kelly K, Parker W, Lewis G. Reconceptualising behavior change in the HIV/AIDS context. In: Stones C, ed. *Socio-political and Psychological Perspectives on South Africa*. London: Nova Science, 2000.
22. *Communications Framework for HIV/AIDS: A New Direction*. Geneva: UNAIDS and University Park, Pennsylvania: Pennsylvania State University, 1999.
23. Glanz K, Rimer B. *Theory at a Glance: A Guide for Health Promotion Practice*. Bethesda, Maryland: National Cancer Institute, National Institutes of Health, 1997.
24. King R. *Sexual Behavior Change for HIV: Where Have Theories Taken Us?* Geneva: UNAIDS, 1999.
25. Bandura A. *Social Learning Theory*. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1977.

26. Clift E. *Information, Education and Communication: Lessons from the Past; Perspectives for the Future*. Geneva: World Health Organization, 2001.
27. Kincaid DL, Jara JR, Coleman PL, Segura F. *Getting the Message: The Communication for Young People Special Project*. Special Study No. 56. Washington, DC: U.S. Agency for International Development, 1988.
28. Piotrow PT, Kincaid DL, Rimon JG II, Rinehart W. *Health Communication: Lessons from Family Planning and Reproductive Health*. Baltimore, Maryland: Center for Communication Programs, Johns Hopkins School of Public Health, 1997.
29. Agha S. The impact of a mass media campaign on personal risk perception, perceived self-efficacy and on other behavioural predictors. *AIDS Care*, 2003; 15:749–762.
30. De Vroome E, Sandfort T, De Vries K, Paalman M, Tielman R. Evaluation of a safe sex campaign regarding AIDS and other sexually transmitted diseases among the young people in the Netherlands. *Health Educ Res*, 1993;6:317–325.
31. Rogers EM. The field of health communication today: an up-to-date report. *J Health Commun*, 1996; 1:15–23.
32. Federal Ministry of Health. *National HIV/AIDS and Reproductive Health Survey*, 2003. Abuja: Federal Ministry of Health, 2003.
33. Ogundimu F. Nigeria: Problems in Communicating Population Control. Working Paper No. 33. Bloomington, Indiana: Population Institute for Research and Training, Indiana University, 1990.
34. Piotrow PT, Rimon JG II, Winnard K, Kincaid DL, Huntington D, Convisser J. Mass media family planning promotion in three Nigerian Cities. *Stud Fam Plann*, 1990;21:265–274.
35. Bankole A. *The Role of Mass Media in Family Planning Promotion in Nigeria*. DHS Working Paper No. 11. Calverton, Maryland: Macro International Inc., 1994.
36. Network. Preventing HIV transmission in “priority” countries. *Network*, 1993;13:18–21.
37. Family Health International. *AIDS Control and Prevention Project Final Report*. Nigeria and Senegal. Arlington, Virginia: Family Health International, 1997(2).
38. Oke O. FHI/IMPACT comprehensive programming for HIV and AIDS in Nigeria. *Fourth National Conference on HIV/AIDS in Nigeria*, Abuja, Nigeria, May 2–5, 2004;173.
39. National Action Committee on AIDS. *HIV/AIDS Emergency Action Plan (HEAP)*. Abuja: National Action Committee on AIDS, 2001.
40. National Action Committee on AIDS. *Analysis of the Response on STD/HIV/AIDS in Nigeria*. Abuja: National Action Committee on AIDS, 2000.
41. Federal Government of Nigeria. *National Policy on HIV/AIDS*. Abuja: Federal Government of Nigeria, 2003.
42. Fatusi AO. *Study of African Universities’ Response to HIV/AIDS: The Nigerian Universities*. Report of a study submitted to the Association of African University, Ghana, June 2004.
43. The Guardian Newspapers. *Another AIDS victim is dead*. December 5, 1987;2.
44. The Guardian Newspapers. *New killer sexual disease discovered*. September 13, 1986;3.
45. Vanguard Newspapers. *Who’s afraid of the big bad AIDS? — Not Nigerian Men*. November 17, 1987;5.
46. Vanguard Newspapers. *11 out of 12 AIDS carriers now dead — Medical Director*. July 6, 1988; 16.
47. Vanguard Newspapers. *Call girls spread AIDS*. March 10, 1988;2.
48. Development Communications Network. *Mass Media Communication Strategies for Reproductive Health Promotion in Nigeria*. Lagos: Development Communications Network, 2001.
49. Journalists Against AIDS. *A Slow Awakening: The Media and HIV/AIDS Epidemic in Nigeria — A Score Card*. Lagos: Journalists Against AIDS, 2003;7–15.
50. Lear D. AIDS in the African Press. *Int J Community Health Educ*, 1990;10:253–264.
51. National Population Commission and ORC Macro. *1999 Nigeria Demographic and Health Survey*. Calverton, Maryland: National Population Commission and ORC Macro, 2000.
52. ActionAid Nigeria. *Mapping Civil Society’s Involvement in HIV/AIDS Program in Nigeria. A Report of Findings in Seven States*. A study commissioned by the UK Department for International Development (DFID). Abuja: ActionAid Nigeria, 2001.
53. Richie-Adewusi F, Oke O, Larivee C, Ogundehin D. Participatory development of thematic behavior change communication campaign among target groups: the FHI Nigeria experience. *Fourth National Conference on HIV/AIDS in Nigeria*, Abuja, Nigeria, May 2–5, 2004 (abstract A256-1).
54. Umba MA, Fagbemi B, Dennis-Antwi, J, Aneke QC, Shodeinde T, Yola DS, Tamen F. *Report of an Assessment of the Capacity of the Health Sector for Consumer Education and Community Mobilization in Nigeria*. Consultancy report submitted to PATHS, Abuja. March 31, 2004.
55. Fatusi AO. *Review of the Communication Strategies and Activities of the Communication Forum Member Agencies*. Consultancy report submitted to PATHS/JHUCCP, Abuja. January 2005.
56. Oke EA, Dr. Uwakwe CBU, Aderiokun G, Eloike T, Longe O, Banwat S. *Capacity Review of SACAs and LACAs in Nigeria*. Consultancy report submitted to the National Action Committee on AIDS, Abuja, 2003.
57. National Action Committee on AIDS. *National HIV and AIDS Behavior Change Communication. Five-Year Strategy (2004–2008)*. Abuja: National Action Committee on AIDS, 2005.
58. Fisher JD, Fisher WA, Misovich SJ, Kimble DL, Malloy TE. Changing AIDS risk behavior: effects of an intervention emphasizing AIDS risk reduction information, motivation, and behavioral skills in a college student population. *Health Psychol*, 1996; 15:114–123.
59. Bryan AD, Fisher JD, Benziger TJ. Determinants of HIV risk among Indian truck drivers: an information-motivation-behavioral skills approach. *Soc Sci Med*, 2001;53:1413–1426.
60. Fisher JD, Bryan AD. Information-motivation-behavioral skills model-based HIV risk behavior change intervention for inner city high school youth. *Health Psychol*, 2002;21:177–186.
61. Fisher JD, Fisher WA. The information-motivation-behavioral skills model. In: DiClemente, R, Crosby R, Kegler M, eds. *Emerging Theories in Health Promotion Practice and Research*. San Francisco, California: Jossey Bass Publishers, 2002;40–70.
62. Kozal MJ, Amico R, Chiarella J, et al. Antiretroviral resistance and high-risk transmission behavior among HIV-positive patients in clinical care. *AIDS*, 2004;18:2185–2189.
63. Fisher JD, Fisher WA, Malloy TE. Empirical tests of an information-motivation-behavioral skills model of AIDS-preventive behavior with gay men and heterosexual university students. *Health Psychol*, 1994;13:238–250.
64. Fisher JD, Fisher WA. The information-motivation-behavioral skills model of AIDS risk behavior change: empirical support and applications. In: Oskamp S, Thompson S, eds. *Understanding and Preventing HIV Risk Behavior: Safer Sex and Drug Use*. Thousand Oaks, California: Sage, 1996;100–127.
65. Misovich SJ, Fisher, WA, Fisher, JD. Understanding and promoting AIDS preventive behavior: measures of AIDS risk reduction information, motivation, behavioral skills and behavior. In: Davis C, Yarber W, eds. *Sexuality and Related Measures: A Compendium*. Syracuse, NY: Society for the Scientific Study of Sex, 1998.
66. Fisher WA, Williams SS, Fisher JD, Malloy TE. Understanding AIDS risk behavior among sexually active urban adolescents. An empirical test of the information-motivation-behavioral skills model. *AIDS Behav*, 1999;3:13–23.
67. Witte K. Fear control and danger control: an empirical test of the extended parallel process model. *Commun Monogr*, 1994;61:113–134.
68. Witte K. Fear as motivator, fear as inhibitor: using the extended parallel process model to explain fear appeal successes and failures. In: Andersen PA, Guerrero LK, eds. *The Handbook of Communication and Emotion: Research, Theory, Applications, and Contexts*. San Diego, CA: Academic Press, 1998;423–450.
69. Stephenson MT, Witte K. Creating fear in a risky world: generating effective health risk messages. In: Rice R, Atkin CK, eds. *Public Communication Campaigns*. 4th ed. Newbury Park, California: Sage, 2001.
70. Cameron KA, Witte K, Lapinski MK, Nzyuko S. Preventing HIV transmission along the trans-Africa highway in Kenya: using persuasive message theory in formative education. *Int J Community Health Educ*, 1999;18:331–356.
71. Witte K, Cameron KA, Lapinski MK, Nzyuko S. A theoretically based evaluation of HIV/AIDS prevention campaigns along the trans-Africa highway in Kenya. *J Health Commun*, 1998;4:345–363.
72. Witte K, Murray L, Hubbell AP, Liu WY, Sampson J, Morrison K. Addressing cultural orientation in fear appeals: promoting AIDS-protective behaviors among Hispanic immigrants and African-American adolescents, and American and Taiwanese college students. *J Health Commun*, 2001;6:335–358.

73. United States Agency for International Development (USAID). *The "ABCs" of HIV prevention: report of a USAID technical meeting on behavior change approaches to primary prevention of HIV/AIDS*. Washington, DC: Population, Health and Nutrition Information Project, USAID, 2003. Accessed at www.usaid.gov/our_work/global_health/aids/TechAreas/prevention/abc.pdf on January 10, 2005.
74. Wingood GM, DiClemente RJ. The use of psychosocial models for guiding the design and implementation of HIV prevention interventions: translating theory into practice. In: Gibney L, DiClemente RJ, Vermund SH, eds. *Preventing HIV in Developing Countries: Biomedical and Behavioral Approaches. AIDS Prevention and Mental Health*. New York: Kluwer Academic Publishers, 1999;187–204.
75. *Women and HIV/AIDS: Confronting the Crisis*. A joint report by UNAIDS/UNFPA/UNIFEM. Accessed at www.unfpa.org/hiv/women/report/index.htm on January 10, 2005.
76. Piot P. Message on the occasion of World AIDS Day, December 1, 2004. Accessed at www.unaids.org on January 10, 2005.