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Communication for Better Health

How managers of family planning programs can build effective behavior change communication programs

In Abuja, Nigeria, radio talk show hosts discuss the stigmatization of people with HIV. A young woman in Zambia shares information with her peers on sexual and reproductive health issues. In India a community meeting encourages women to start peer educator groups on health issues important to them. The mass media, interpersonal communication, and community-based communication each have strengths. Together, the three reinforce each other and increase the influence on behavior. Photos (top to bottom): © 2004 Wale Ewedemi, © 2005 Uttara Bharath Kumar, © 2001 Nrityanjali Academy, Photos courtesy of Photoshare

Key Points

To meet their goals, family planning programs must build behavior change communication (BCC) into their overall strategies. BCC is a process that motivates people to adopt healthy behaviors and lifestyles. For example, BCC programs have motivated people to use contraception and to obtain HIV tests. BCC programs are cost-effective when they reach large audiences. Effective BCC programs:

Use a proven process. Following a sound process helps ensure results. Typical steps consist of analysis, strategic design, development and pretesting of messages, implementation and monitoring, and evaluation.

Apply theory. Theories of behavior change help programs develop appropriate strategies and messages that will resonate with the audience.

Rely on research. Research provides information that guides program design, monitoring, and evaluation.

Involve the community. When community members help design and guide BCC programs, programs are more capable of addressing the community's concerns and needs. Also, the community strengthens its capacity to identify and address health and social problems.

Develop relevant and creative messages and materials. Messages should make clear the benefits of the recommended behavior that the audience values. Programs need to tailor messages and materials to the interests of different audiences and their readiness to change.

Address both the individual and the larger society. Both individual behavior change and social change are necessary to achieve sustained improvements in health.

Combine communication channels. Using a mix of mass media, interpersonal communication, and community approaches increases the influence on behavior.

Plan with scaling up in mind. Expanding activities to reach more people and more areas works best when it is planned from the start.

Develop and sustain capacity for the future. Training, education, and working partnerships build capacity. Also, with technical assistance, individuals and local organizations can learn how to carry out effective BCC programs.

See companion *INFO Reports*, "Tools for Behavior Change Communication." Also see companion *INFO Reports*, "Entertainment-Education for Better Health."

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Family Planning Programs

USAID FROM THE AMERICAN PEOPLE

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- Model for a Creative Brief, p. 14
- *INFO Reports:* "Tools for Behavior Change Communication"

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Communication Motivates Behavior Change

In Ethiopia an Amharic-language radio serial drama captivated audiences from June 2002 to November 2004 with tales of love and betrayal, suspense and romance, and suffering and triumph. The gradually unfolding plots of *Yeken Kignit* ("Looking Over One's Daily Life") followed the lives of characters such as Fikirte Gezmu. Fikirte must face the death of her grandfather, help her sister who suffers from fistula after early childbearing, and comfort a friend who seeks medical treatment for infertility only to discover that she is infected with HIV. The drama encouraged use of contraceptive methods, challenged negative attitudes towards people living with HIV and AIDS, and explained how HIV is transmitted. After two and a half years of national broadcasts, the drama had reached nearly half the country's adult population. The final evaluation found higher levels of contraceptive use and discussion between spouses about family planning and HIV, and lower levels of stigma-related attitudes among *Yeken Kignit* listeners compared with nonlisteners (146, 203) (see Spotlight, p. 6).

Yeken Kignit is one of many behavior change communication (BCC) programs that have helped people to adopt healthy behavior. BCC programs motivate people either to change unhealthy behavior or to continue healthy behavior. BCC programs can and have increased awareness of common reproductive health problems. They have influenced attitudes and social norms and addressed myths and misconceptions. They have depicted healthy choices and their benefits. They have moved people to use contraception and to make use of family planning services and HIV testing (6, 50, 101, 105, 116, 144, 165).

Health and development programs use BCC across a broad range of efforts to improve people's health and well-being. These efforts have addressed, for example, family planning and reproductive health, maternal and child health, prevention of infectious diseases, democracy and governance, and poverty alleviation (*55*, *56*, *91*, 134, *136*, *200*, *225*).

To address most health problems fully, BCC programs must be integrated with an overall health program. An overall program usually includes an effective service delivery system and requires a supportive political and policy environment (*56*, *136*, *200*). For example, a BCC campaign can motivate people to space births. Family planning services must be ready to respond. This requires convenient clinic hours and locations; a variety of contraceptive choices in continuous supply; competent, helpful providers; and policies that remove unnecessary medical barriers to contraceptive use (see Quick Look, p. 4).

BCC programs motivate people either to change unhealthy behavior or to continue healthy behavior. To address most health problems fully, BCC programs must be integrated with an overall health program.

This report focuses on helping family planning and reproductive health program managers establish BCC programs. The basic BCC principles and processes involved are common to all fields of health and development.

BCC Programs Grow Stronger, Smarter

Over the last five decades family planning and reproductive health programs have grown and evolved. Communication programs have grown and evolved with them (see Figure 1, below). As understanding of communication and behavior has grown, family planning BCC programs have become more strategic. Strategic BCC programs use a systematic process to understand people's situations and influences. They develop messages that respond to people's concerns. They draw on behavioral theory, define clearly the specific objectives they want to achieve, integrate these objectives into their program plans, and use them as a basis for measuring success.

Figure 1. Family Planning Communication Evolves

How to Use This Report

This issue of *Population Reports* can help managers of family planning and reproductive health programs to:

- Advocate inclusion of BCC in family planning programs, a crucial element that has had a low cost for each new contraceptive user (see pp. 4–5, 8, 10).
- Learn how to apply theories of behavior to help choose the most appropriate BCC strategies and messages (see pp. 8–9).
- Learn the key factors contributing to effective BCC programs (see p. 10).
- Oversee the steps in planning, carrying out, and monitoring and evaluating a BCC program (see pp. 11–21).
- Make sure that monitoring and evaluation collect information that helps guide the program (see pp. 18, 20–21).
- Compare and assess different approaches to developing capacity for BCC programming and to scaling up BCC activities (see pp. 21–23, 25–26).

QUICK LOOK

What BCC Programs Can Achieve

Effective BCC programs can:

- Increase awareness and knowledge of a health problem and its solution.
- Demonstrate or depict healthy behavior.
- Improve skills and sense of self-efficacy (that is, feeling capable of performing the behavior).
- Reinforce healthy knowledge, attitudes, and behavior.
- Show the benefits of adopting healthy behavior.
- Help shift social norms to encourage more healthy behavior.
- Advocate a position on a health issue or policy.
- Increase demand or support for health services.
- Refute myths and correct misunderstanding.
- Change perceptions of risk.
- Prompt individual and community behavior change.

BCC programs alone cannot:

- Substitute for health care services when services are limited or of poor quality.
- Produce sustained changes in complex health behaviors when those changes require the support of a larger health program, including services and appropriate policy.

Sources: Family Health International 2002 (*55*), National Cancer Institute 2001 (*136*), and World Health Organization Mediterranean Centre for Vulnerability Reduction 2003 (*225*)

Furthermore, larger BCC programs use a mix of three major communication channels:

- Mass media channels, which can reach large audiences. Examples include radio and television, widely circulated newspapers and magazines, billboards and bus advertising, and the Internet.
- Interpersonal channels, often one-to-one communication, such as counseling and telephone hotlines.
- Community channels, which include rallies, public meetings, and folk dramas and also local newspapers and local radio stations.

Each type of channel has its own strengths (*56*, *136*, *200*). For example, mass media entertainment and reality programming can depict healthy behavior for large audiences. Interpersonal communication with health care providers helps clients learn the skills to practice new behavior. Later, they themselves may become advocates, speaking to friends, family, and neighbors in favor of the new behavior. Community-based approaches spread new ideas through social networks and, over time, encourage widespread support of them throughout the community. In most BCC programs one type of channel has the lead role (*139*). Together, the three reinforce each other to achieve changes in behavior.

Today, many BCC programs emphasize the involvement of communities. Community participation can range from assisting with needs assessment, planning, or implementing activities to direct involvement in decisions about all aspects of program management, resource allocation, and evaluations (see box, p. 24).

Just as BCC programs have evolved, so, too, have the terms to describe such programs. Previously, organizations used "information, education, and communication" (IEC) strategies to improve people's awareness and knowledge and to promote positive behaviors (36, 163). BCC builds on IEC, and emphasizes that communication should be strategic and guided by systematic processes and behavioral theories (*55*, 58, 224). Many organizations now use the term "behavior change communication," but others use different terms for different emphasis. Examples include "strategic communication,""communication for social change," and "participatory development communication" (22, *47*, *56*, *120*). This report uses the term "behavior change communication" to encompass all of these approaches.

Theories and process guide programs. Theories of behavior guide the selection of the most appropriate communication approaches to changing behavior. They also help shape effective messages (see box, p. 8). Additionally, a multistep process has evolved to guide the development of BCC programs. Numerous models describe a systematic sequence of steps from analysis through design, development and pretesting, implementation and monitoring, and, finally, to evaluation. Alternative models and processes focus on facilitating dialogue among community members to help them define their own problems and develop and implement solutions together in order to effect social change (see p. 24).

BCC Key in Addressing Family Planning and Other Reproductive Health Issues

Effective BCC programs can help family planning programs meet their central goals, including reducing unmet need for contraception and helping couples choose and use suitable methods. Almost one-fifth of married women in developing countries—over 100 million women—have an unmet need for contraception (157, 168). That is, they want to avoid or delay pregnancy, but they are not using contraception.

Effective BCC programs can help family planning programs meet their central goals.

Communication addresses the major reasons for unmet need: lack of knowledge about contraceptives, worries about contraceptive side effects, and opposition to family planning, whether their own or from others (26, 31, 168, 218). BCC programs inform people about family planning methods and services. Also, BCC programs help people to make good family planning choices. For example, they provide accurate information about side effects and how to manage them. They encourage couples to discuss their fertility desires and contraception. Also, they help make the use of contraception socially more acceptable (168).

In addition, BCC programs are crucial for changing the behaviors that spread HIV. To reduce risky behaviors, HIV prevention programs have made considerable efforts to educate people about modes of HIV transmission and prevention strategies (58). HIV-related BCC programs also play an essential role in changing societal attitudes such as reducing stigma. The stigma of HIV/AIDS discourages people from being tested and from getting treatment (*120*). To broaden and sustain their impact, however, many HIV prevention programs also address social norms that foster the pandemic. These include norms that condone having multiple sex partners and norms that tolerate sexual coercion and violence against women (166, 199). Community participation and sense of ownership of the program are vital for accomplishing such social changes (166, 198).

BCC programs are crucial for changing the behaviors that spread HIV.

In Tanzania a member of a youth performing arts group dramatizes the effect of stigma on people living with HIV. Live performances can reach some groups, such as youth, that are hard to reach in other ways. Photo: © 2005 Felicity Thompson, Courtesy of Photoshare

Research Documents Influence on Reproductive Health Behavior

BCC programs have motivated people to visit health clinics, discuss family planning, use contraception, advocate abandonment of female genital cutting, protect themselves against HIV infection, and to get tested for HIV (6, 50, 101, 105, 116, 144, 146, 147, 165).

For example, one review analyzed 39 international family planning BCC programs funded by the U.S. Agency for International Development (USAID) and conducted between 1986 and 2001 by the Center for Communication Programs at the Johns Hopkins Bloomberg School of Public Health (179). The programs assessed used a variety of communication channels, including broadcast and print media; interpersonal communication through outreach workers, schools, health care centers, the workplace, and door-to-door activities; and community-based approaches such as group meetings, folk drama, and rallies. Generally, these programs had a large reach. On average, nearly 70% of the intended audience reported exposure to the programs. One-third were nationwide programs (179).

The review found increases among the intended audience in knowledge of family planning, communication between sexual partners, approval of family planning, and use of modern contraceptives after the programs ended. After taking into account exposure to the programs, the review found that some 40% of people exposed to the programs were using modern contraceptive methods, compared with 28% of those who said they had not been exposed (179). Similar findings come from an analysis of international family planning BCC programs conducted by other organizations (179), BCC programs promoting safe sexual behavior, smoking cessation, and other public health initiatives in the United States (*181*), and an earlier analysis of 16 small family planning programs with communication components in developing countries (14).

Also, analyses of data from Demographic and Health Surveys found that people who were regularly exposed to family planning messages, and to radio and television in general, had greater knowledge of family planning methods and were more likely to use contraception and to intend to use contraception in the future than people not exposed (219, 220). These analyses took into account many other factors that might influence reproductive behavior, such as place of residence, education, ethnicity, economic status, age, and number of children.

SPOTLIGHT

Ethiopian Radio Serial Follows Process to Success

In Ethiopia an Amharic-language radio serial drama, *Yeken Kignit* ("Looking Over One's Daily Life"), used entertainment-education as a means to improve women's and men's reproductive health and to promote contraceptive use. The radio drama motivated many Ethiopians to use contraception and get tested for HIV. Communication staff followed a systematic process of program planning, implementation, and evaluation (see p. 11). Research findings and behavioral theory informed strategy and design. Pretesting and monitoring with the intended audience ensured relevant storylines and sensitivity to sociocultural, gender, and religious differences (42, 146, 191).

In entertainment-education programming, educational content is seamlessly woven into an entertainment format such as dramas on radio or television, animated cartoons, popular music, or street theater. Entertainment-education can contribute to social change and influence people's awareness, attitudes, and behaviors by showing desirable behaviors rather than describing them, by addressing norms and beliefs that may be too controversial to confront directly, and by reaching populations who might otherwise be difficult to reach, such as youth (122, 172, 173, 214). (For more about entertainment-education, see the companion *INFO Reports*, "Entertainment-Education for Better Health.")

Yeken Kignit aired on Radio Ethiopia from June 2002 to November 2004. Population Media Center (PMC), an international organization specializing in entertainment-education, developed and produced the drama. Multiple storylines in the drama addressed HIV/AIDS, family planning, education of girls, and spousal communication.

Step 1: Analysis Provided Foundation for the Program

The radio program grew out of numerous discussions among various stakeholders, including several government agencies, donor governments and foundations, local nongovernmental organizations (NGOs), business leaders, and reproductive health researchers (161). These discussions helped to focus the program's mission and to assure that objectives and messages were specific and appropriate for Ethiopia (161).

Formative research included a review of previous health communication activities in Ethiopia, identification of audience subgroups, and interviews with technical experts (161, 191, 192). In May 2002 PMC partnered with the research firm Birhan Research and Development Consultancy to survey over 2,000 women ages 15 to 49 and men ages 15 to 59 in two regions and the city of Addis Ababa for baseline data. Questions covered risk perceptions and behaviors, the influence of culture on sexual and reproductive health decision-making, and knowledge of family planning and HIV/AIDS (161, 192). Producers and writers also visited rural villages to learn what issues and problems people discuss, to collect popular sayings and stories, and to see how health and social services were set up. At the same time, they recorded village sounds for use in the drama (161, 192).

Step 2: Strategic Design Established the Communication Channel and Objectives

Discussions with numerous stakeholders identified radio as the communication channel for the program. The program arranged with Radio Ethiopia to air the drama. Only Radio Ethiopia reaches a majority of the country's population (161).

PMC staff designed the program to address problems identified in the audience research. These problems included high levels of unmet need for family planning, negative attitudes and misperceptions about contraceptive methods, lack of spousal and parent-child communication about HIV/AIDS, lack of knowledge about modes of HIV transmission and prevention, and high levels of stigma and discrimination against people with HIV and AIDS (146).

Photos: © 2005 Population Media Center

In Ethiopia a staff member of the Population Media Center (PMC) reads letters from listeners to the radio dramas Yeken Kignit *("Looking Over One's Daily Life") and* Dhimbibba *("Getting the Best Out of Life"). The 15,000 letters from listeners helped scriptwriters to plan future episodes and evaluators to assess program achievements.*

The overall program objective of the radio drama was to promote family planning use for birth spacing and limiting and to improve the reproductive health of men and women in Ethiopia. Its specific communication and behavioral objectives were to improve among the intended audience: (1) contraceptive knowledge, attitudes, and practices; (2) HIV/AIDS awareness, attitudes, and behaviors; and (3) perceptions regarding women's status and other broad factors that influence reproductive health and family planning indirectly, such as the value of children and family size.

Step 3: Development Used Theory and Evidence, Pretesting Ensured Relevance

PMC developed *Yeken Kignit* following the Sabido methodology, created by Mexican television producer Miguel Sabido of Televisa (Mexican television) originally for commercial programs (114, 145, 162, 173, 174). Programs in several countries have used this methodology successfully (145, 162, 173, 174), and the U.S. Centers for Disease Control and Prevention recently adapted it (41, 70, 141). The Sabido methodology draws from five theories of communication and behavior change: Shannon and Weaver's Communication Model, Bentley's Dramatic Theory, Jung's Theory of Archetypes and Stereotypes, Albert Bandura's Social Learning Theory, and MacLean's Concept of the Triune Brain, supplemented by Sabido's Theory of the Tone. These theories

provide a foundation for the structure and design of messages, settings, characters, and plots. They also provide a framework for predicting how and why the drama will affect the knowledge, attitudes, and behaviors of the listening audience (12).

In the Sabido methodology, statements expressing values identified by formative research help to define three types of characters: positive characters, negative characters, and transitional characters. The transitional characters start out uncertain but adopt more positive behaviors during the course of the drama. Transitional characters are the real role models for the audience. They encounter real-life barriers and challenges while changing their behavior, and they alternate between negative and positive values while doing so—a process that audience members themselves would undergo (11, 162).

To ensure high quality, the program recruited program coordinators with experience in radio broadcasting and theatrical arts and scriptwriters familiar with family planning and HIV/AIDS issues (161). Then, along with selected stakeholders, the staff including producers and scriptwriters participated in a five-week training workshop on designing an educational *and* entertaining radio serial. During training researchers presented findings from the audience research. Producers and scriptwriters used these findings to help them develop relevant characters, including Fikirte, the key positive character (161, 191). Fikirte talks to her friends and family about the benefits of family planning and encourages her stepfather to send her sister to school. Damte, the key negative character, has multiple sex partners and is involved in drug trafficking. Wubalem, one of the transitional characters, is caught between her husband wanting a child now and Fikirte's advice to avoid getting pregnant for awhile. Fikirte urges Wubalem to give her body time to heal after her fistula surgery and to wait until she and her husband are more financially stable. Later, Wubalem convinces her husband that it would be good for her to use contraception for some time (192).

Actors in the radio serial drama Yeken Kignit *work in the recording studio. Radio Ethiopia aired 257 new episodes of the drama between June 2002 and November 2004.*

An advisory committee, created during the formative research phase, consisted of scriptwriters, program producers, gender and health experts, communication experts, and theater arts advisors from the community. The committee guided the creation of program content and coordinated with health services to ensure that providers were prepared when the drama brought in more clients (11, 161, 191). A technical advisory committee also reviewed each script for medical accuracy (161).

Program staff created four pilot episodes. They pretested the pilot episodes in focus group discussions with members of the intended audience to ensure that the different storylines were clear and relevant, that the language used in the serial drama was suitable, and that the characters were appealing and engaging (161, 191).

Step 4: Implementation and Monitoring Improved Storylines

Radio Ethiopia broadcast new episodes of *Yeken Kignit* twice a week in the evenings and rebroadcast the episodes in the afternoons. Between June 2002 and November 2004 Radio Ethiopia aired 257 new episodes.

The program monitored audience response in various ways (11, 161). For example, the program established listener groups and collected listening diaries, conducted three waves of focus group discussions, analyzed a sample of letters from listeners, and conducted exit interviews at hospitals and clinics.

Scriptwriters used the audience feedback continuously to shape the scripts (161). For example, the audience felt that the key negative character, Damte, was too devilish and the key positive character, Fikirte, was overly pious and angelic. Therefore scriptwriters toned down both characters to make them more realistic and credible (192).

Step 5: Evaluation Found Reproductive Health Behaviors Improved

Just after the last broadcast between November and December 2004, researchers from the research firm, Birhan, surveyed nearly 3,000 men and women in the same areas where the initial survey took place (42, 146). Among survey respondents who listened to the radio, 77% of men and 78% of women said that they heard *Yeken Kignit*. Youth and young adults listened more often than any other age group (146, 191).

Study results indicate that the radio program contributed directly and indirectly to use of reproductive health and family planning services. Before the radio drama aired, 12% of currently married women were using a modern contraceptive method (146). After the radio drama aired, married women who had listened to *Yeken Kignit* were significantly more likely than married women who had not listened to the drama to be using a modern contraceptive method (40% compared with 25%) (160). This difference remained even after the analysis took into account other possible influences on contraceptive use, such as age, education, and religion.

In addition *Yeken Kignit* contributed to improved HIV-related behaviors. For instance, listeners were twice as likely as nonlisteners to have been tested for HIV even after taking into account such factors as education and ethnicity. Also, listeners consistently had lower levels of stigma-related attitudes than nonlisteners. For example, among men, 82% of listeners said they would feel comfortable spending time with an HIV-positive friend compared with 57% of nonlisteners, and 86% of listeners felt there is nothing to be ashamed of if a family member has HIV or AIDS compared with 60% of nonlisteners (146).

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In Afghanistan a community health worker explains correct use of condoms. Pretesting with local leaders found that community workers could use pictures when counseling about condom use in some communities but not in others. Pretesting with gatekeepers and audience members helps to ensure that materials are acceptable and relevant.

HIV-related mass media campaigns also have changed specific behaviors. Two major reviews of HIV-related mass media programs in developing countries found that such campaigns influenced people's knowledge, attitudes, and behaviors. The campaigns did not affect every possible outcome, however, and not every campaign succeeded (17, *21*). For example, one review assessed 15 mass media campaigns for young people conducted between 1990 through 2004. The review found positive impacts on several outcomes, such as social norms about the acceptability of young people discussing reproductive health; discussing HIV/AIDS, abstinence, or condom use with someone else; feeling capable of using condoms; and condom use itself. The campaigns, however, did not have much impact on certain other outcomes, such as age at first sex, number of sex partners, or feeling capable of practicing abstinence (17). Reports on more recent individual campaigns continue to find that mass media campaigns generally improve HIV-related behavior, such as condom use, testing for HIV, and interpersonal communication about HIV (103, 104, 109). (To help ensure BCC programs contain the major components needed for success, see Quick Look, p. 10.)

A good investment. A recent review of 45 BCC programs in both developed and developing countries suggests that, in general, such programs change health behavior cost-effectively (*90*). The review focused on programs with large mass media components. Some programs also involved community-based approaches and interpersonal communication. Among the programs reviewed, there was great diversity in types of evaluation designs, how the studies calculated costs, and what outcomes they measured (85, *90*, 213). Therefore generalizations must be made with caution.

The review found that BCC programs in many health areas have been cost-effective, particularly when they have reached large portions of the population (*90*). For example,

Theories Inform

Theories about why and how people change their behavior guide communication strategies. Behavioral theories help programs to understand why people behave as they do. With this understanding, programs develop strategies that reinforce healthy behavior or change unhealthy behavior (*63*, *91*, 129, 137).

Two types of behavioral theories are important for BCC programs—theories of behavioral prediction and theories of behavior change. Predictive theories address *why* people change behavior. They identify what prompts people to perform (or not perform) a health-related behavior. In contrast, behavior change theories explain *how* people change behavior. They describe the "stages" that individuals may go through as they change their behavior.

Prediction Theories Explain What Determines Behavior

Behavioral prediction theories focus on the internal and external factors that influence people's behavior. These factors help explain why some members of a given population are performing a behavior while others are not (*63*). (These theories are called predictive because they focus on the factors that determine or "predict" people's behavior.) BCC programs make use of these theories to identify the factors that will most influence behavior (*56*, *91*).

BCC programs use several different theories of behavioral prediction, such as the Health Belief Model (15, 97, 126), Social Cognitive Theory (8-10), and the Theory of Reasoned Action (3, 4). There is growing consensus, however, that eight factors best explain and predict behavior (61-*63*, *91*). Although different theories use different terms, these eight factors include: intention to perform the behavior; environmental (external) constraints or barriers; skills (the necessary abilities to perform the behavior); attitude (benefits of the behavior outweigh the risks); perceived social (normative) pressure (individuals' perceptions that other important people think they should or should not perform the behavior); self-image (behavior suits how people see themselves); emotional reaction; and self-efficacy (feeling capable of performing the behavior) (61-*63*, *91*).

Generally, the first three factors together—that is, strong positive intention, the necessary skills, and lack of external constraints—are considered necessary and sufficient to perform any behavior (61-*63*). Intention is defined as a person's subjective judgment: "How likely am I to do that (or not do that)?" People do not always act on their intentions, however. They may intend to act, but they discover that they do not have the necessary skills to carry out the behavior. Alternatively or in addition, people may encounter external constraints. For example, people may intend to use condoms. They do not, however, because they do not have access to condoms or because their partners object to condoms.

Most scholars generally view the remaining five factors—attitude, perceived social (normative) pressure, self-image, emotional reaction, and self-efficacy—as influencers of the strength and direction of intention. Of course, once a person tries a behavior, the good or bad result strongly influences whether that person tries it again (*63*).

How to apply theories of behavioral prediction. Theories of behavioral prediction and the eight factors identified above help a BCC program to understand the intended audience's perspective and to decide how to address that audience (*62*,

91). Which of the eight predictive factors are standing in the way of healthier behavior? Which factors provide crucial support for the behavior? Research with the intended audience identifies these factors and other important information (see p. 12). Then the program can focus messages and activities on eliminating the key negative factors and/or reinforcing the key positive factors. The program will either have to increase skills, remove or help people overcome external constraints, change intention, or some combination of these (*63*).

Behavior Change Theories Describe Process of Change

Behavior change theories focus on the stages that people pass through as they change their behavior. For example, one widely known theory, the Stages of Change Theory, identifies five phases: precontemplation, contemplation, preparation, action, and maintenance (see illustration, below) (*136*, 148). Another theory, the Diffusion of Innovation Theory, proposes that people adopt a new idea (an innovation) through a different five-stage process: knowledge, persuasion, decision, implementation, and confirmation. This theory stresses the importance of interpersonal communication through peer networks and of opinion leaders to influencing an individual's adoption or rejection of a new idea (156, 210). The process of behavior change is not always linear, however. People may move from one stage to the next, or they may fall back to an earlier stage (*63*, 75, 108).

How to apply theories of behavior change. Identifying the intended audience's current stage of behavior change helps tailor approaches and messages to their information needs (see p. 12). Tailored messages seek to move the intended audience from its current stage to the next stage. Knowing the audience's current stage also helps the program to gauge how much change is possible and to set realistic objectives (*56*).

Philippines Program Applies Theories

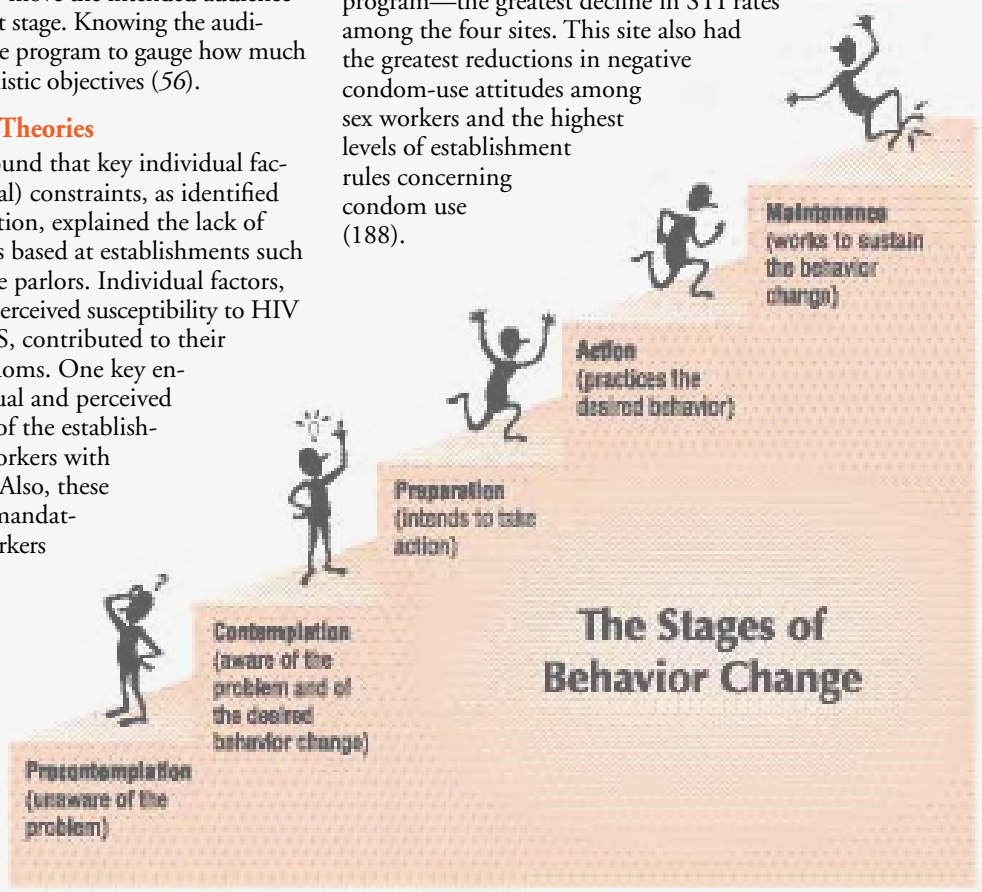
In the Philippines a program found that key individual factors and environmental (external) constraints, as identified in theories of behavioral prediction, explained the lack of condom use among sex workers based at establishments such as bars, nightclubs, and massage parlors. Individual factors, including the sex workers' low perceived susceptibility to HIV and low knowledge about AIDS, contributed to their negative attitudes towards condoms. One key environmental constraint was actual and perceived negative attitudes of managers of the establishments towards providing sex workers with AIDS prevention information. Also, these establishments lacked policies mandating condom use between sex workers and clients (127).

To reduce HIV risk behavior among sex workers, the program aimed to improve sex workers' attitudes towards condoms and remove environmental constraints (change establishment norms and expectations for condom use). The program implemented different activities at four sites. All sites offered a "standard care" component including free, routine examination for sexually transmitted infections (STIs) and prescription for treatment if diagnosed. It also included health education sessions that addressed sex workers' risk behaviors for STIs and HIV, negative consequences of STIs and HIV, and benefits of correct and consistent condom use.

One site added a peer counseling program based in part on the Diffusion of Innovation Theory. Program staff trained popular, respected sex workers (opinion leaders) to counsel other sex workers on high risk behaviors and condom use and to build self-efficacy for condom use with clients. Sex workers were at the earliest stages of adopting condom use. Such opinion leaders potentially were key to influencing their behavior.

Another site addressed environmental constraints by training managers of entertainment establishments on how to implement, support, and reinforce safe sexual practices within the workplace. The managers then created their own professional association. They set policies requiring condom use across all establishments in the city. Also, they required sex workers to visit health clinics that offered AIDS education and clinical services. One final site implemented all three program components (188).

The final evaluation showed that the site with the combined activities that addressed all the relevant behavioral factors identified in behavioral theories had a 60% decline in STI rates from the baseline survey to the end of the program—the greatest decline in STI rates among the four sites. This site also had the greatest reductions in negative condom-use attitudes among sex workers and the highest levels of establishment rules concerning condom use (188).



Sources: Grimley 1997 (75) and Prochaska 1992 (148)

Characteristics of Effective BCC Programs

Experience and evidence from around the world have shown that effective BCC programs have a number of common characteristics. As program managers oversee BCC programs, they should ensure the following:

- Use results from audience research to design activities (see p. 12).
- Define and segment the audience; tailor messages and materials to the interests of different audience subgroups and their readiness to change (see pp. 12, 17).
- Set "SMART" objectives (see pp. 12–13).
- Involve the community in planning, implementing, and evaluating the program (see pp. 24–25).
- Plan the program with scaling-up in mind (see p. 23).
- Use multiple communication channels (see pp. 4, 15).
- Apply theory to develop effective strategies and messages (see pp. 8–9).
- Emphasize positive benefits of the recommended behavior that the audience values (see pp. 8, 14).
- Address both the individual and the larger society (see p. 26).
- Pretest messages and materials with audience members and revise as indicated (see p. 18).
- Ensure widespread exposure to the campaign or program (see p. 5).
- Through monitoring and evaluation, make midcourse corrections to the program as needed and justify future investments (see pp. 18, 20).
- Through training, education, or working partnerships, develop local capacity to create high-quality BCC programs (see p. 21).

Sources: Bertrand 2005 (*16*), Bloom 2006 (23), Bracht 2001 (27), Cabañero-Verzosa 2003 (*30*), Cooley 2006 (45), Deane 1999 (*47*), DeJong 2001 (*48*), ExpandNet/World Health Organization 2007 (54), Family Health International 2005 (*56*), Figueroa 2002 (*60*), Frankel 2007 (*66*), Freimuth 2001 (68), International Bank for Reconstruction and Development/World Bank 2004 (92), Kiwanuka-Tondo 2002 (111), McKee 2000 and 2004 (*120*, 121), National Cancer Institute 2001 (*136*), O'Sullivan 2003 (*139*), Rossi 2003 (159), Snetro-Plewman 2007 (*177*), Snyder 2001 and 2003 (*178*, *180*), UN Millennium Project 2005 (197), United Nations Children's Fund 2005 (*200*), United Nations Children's Fund 2000 (*201*), Yoon 1996 (227), and Younger 2001 (228)

in the Philippines a family planning mass media campaign aired four television spots between August and December 2000. This national campaign cost US$546,720 and persuaded an estimated 348,695 women to start using a modern contraceptive (110). Thus the cost for each new user was $1.57.

Maternal and child health and HIV/AIDS campaigns have also reported low cost-per-user-reached. In Bangladesh the Smiling Sun program, a national multichannel mass media campaign, encouraged women to use family health services at good-quality clinics identified with the Smiling Sun logo. The campaign cost about $832,000. Among all rural areas of the country, the campaign potentially covered 927,466 children under the age of five and 1,072,299 pregnant women. The campaign cost only $0.05 for each additional user of antenatal care and only $0.30 for each additional child vaccinated for measles (*89*). Mass media campaigns usually involve large initial costs. The cost for each person motivated to change behavior is low because mass media reach hundreds of thousands of people.

Communication—A Process, Not A Product

Successful BCC programs follow a systematic process. For programs addressing individual behavior, the process usually consists of four or five major steps. Different organizations have different names for these steps. Still, they all involve analysis, strategic design, development and pretesting of messages and materials, implementation and monitoring, and evaluation * (*30*, 74, *79*, 137, *139*, 189, 196, *201*, *225*). The process guides planning and implementation (see Spotlight, p. 6). Following a proven process helps programs to work efficiently and to avoid mistakes. Programs with limited BCC budgets can adapt the steps to suit their scope (*136*) (see box, right). For help with following the steps in this process, see the tools in the companion *INFO Reports*, "Tools for Behavior Change Communication" (see p. 20).

Other models and processes focus more on affecting social change in a community, so as to improve the health and welfare of all its members (*47*, *60*, *87*). These models follow a different process. They focus on participatory communication that enables people and communities to define who they are, what they want, and how they can achieve the desired change (*47*). Key principles include empowering individuals and communities and engaging people in making decisions that improve their lives (see box, p. 24). Objectives and outcomes also differ from the conventional BCC model. For example, social change models value the communication process, such as expanding dialogue and debate and increasing community leadership, not only as a means to achieve health or community development outcomes. They also value the participatory communication process as an end in itself (*47*, *60*).

The gap between BCC for individual behavior change and BCC for social change is narrowing (*60*, *128*, *211*). The conventional BCC model for individual behavior change has evolved in a participatory direction and some conventional BCC programs address both individual behavior change and social change (see box, p. 24). Similarly, participatory programs involve some elements of information transfer from programmers to communities in order to achieve underlying behavior change objectives (*128*, *211*).

STEP 1 : Analysis

Analysis provides the foundation for the BCC program. Analysis involves defining the health problem, the intended audience, and communication needs. Some of this information will already be available. For example, the Ministry of Health usually collects information about the extent and severity of health problems. Epidemiological data help to identify the primary audience of the program—that is, who is at risk of or is suffering from the health problem (*136*, *139*, *201*). To gain insight into the health problem, potential solutions, and the audience, programs can contact other organizations who are addressing the problem through communication and other approaches. These organizations can explain what they have learned and what remains to be done (*136*).

* Some processes include monitoring with evaluation rather than with implementation. This report includes monitoring with implementation because monitoring focuses on processes and tracking the production of materials during the implementation stage, whereas evaluation occurs at the end of the program.

Key Steps for Programs With Limited BCC Budgets

Family planning programs with limited budgets for BCC still can carry out strategic BCC programs. All BCC programs, regardless of budget, should follow certain key steps in the program process, such as defining the intended audience and objectives and pretesting materials. BCC programs can carry out these key steps easily, quickly, and inexpensively even if resources are limited.

1. **Define the intended audience.** Programs can often use existing research to help define the audience, such as statistics from the Ministry of Health or national surveys. Programmers might also have to depend on their own knowledge of and experience with the community if they do not have the resources to conduct further formative research.
2. **Define objectives.** What does the program want to accomplish with its BCC materials and activities? For example, does the program want to bring people into a clinic? Does it want people to buy contraceptives at pharmacies? Different audiences and objectives will require different messages and channels.
3. **Develop the key message point.** What is the key message point that the program wants to convey to the audience?
4. **Choose the communication channels.** Which channels will best reach the audience? Small programs may decide to use the help of the news media as much as possible to spread their message. Programs should not overlook other possible channels, however, such as radio public service announcements or outreach through community-based volunteers.
5. **Ensure good-quality materials.** BCC programs may want to hire an ad agency, graphic designer or illustrator, or some other creative professional to develop a good-quality product. If materials are not good enough to catch the audience's attention, the program effort will be wasted.
6. **Pretest materials.** Pretesting can be informal. For example, programs can obtain feedback about materials by asking members of the intended audience what they think of the materials, whether it be in a clinic waiting room, at a local market, or even on a neighborhood street. Informed pretesting is better than no pretesting at all. Before launching the materials, programs should revise them based on feedback obtained during pretesting.

Sources: Aguilar 2007 (2) and National Cancer Institute 2001 (*136*)

Programs often also conduct their own in-depth audience research. Formative research (also called formative evaluation) provides that understanding. Formative research takes place before any program design or implementation. It collects information about the audience; their knowledge, attitudes, and beliefs about health; and the factors that affect their health behavior. Formative research also can discover the intended audience's media habits (for example, how much they listen to the radio and at what times of day). Research can assess the audience's access to information, services, social support, and other resources (*16*, 68, *136*). Thus it helps programs to address their audiences effectively. Formative research also contributes to the conceptual framework. The conceptual framework describes how the BCC program expects to influence health behavior (see Step 2, right).

Analysis provides the foundation for the BCC program.

A thorough analysis of the audience identifies different groups of people based on such characteristics as age, sex, place of residence, values, and stage of behavior change (see illustration, p. 9). Most BCC programs customize messages to suit subgroups of people who have similar needs, preferences, and characteristics (*30*, *139*, *201*). This audience segmentation can help to make programs more efficient and effective. It is efficient because it allows the program to direct its limited resources to those most in need or most likely to change. It is effective because message content, form, and style can be tailored more closely to the needs and abilities of more cohesive groups (5). Of course, when a medium such as radio reaches large populations, even a well-defined subgroup can amount to millions of people.

In addition, analysis identifies secondary audiences—that is, people who influence the health behaviors of the primary audience (*136*, *139*, *201*). Examples include family, friends, and local opinion leaders. The program may need different messages to reach these secondary audiences.

The analysis step also involves assessing communication resources (*30*, *79*, *136*, *201*). For example, can other organizations collaborate and share costs? What communication channels best reach the intended audience? What are the capabilities of the local media industry, such as broadcasting, printing, advertising, and audience research? Are qualified communication professionals available?

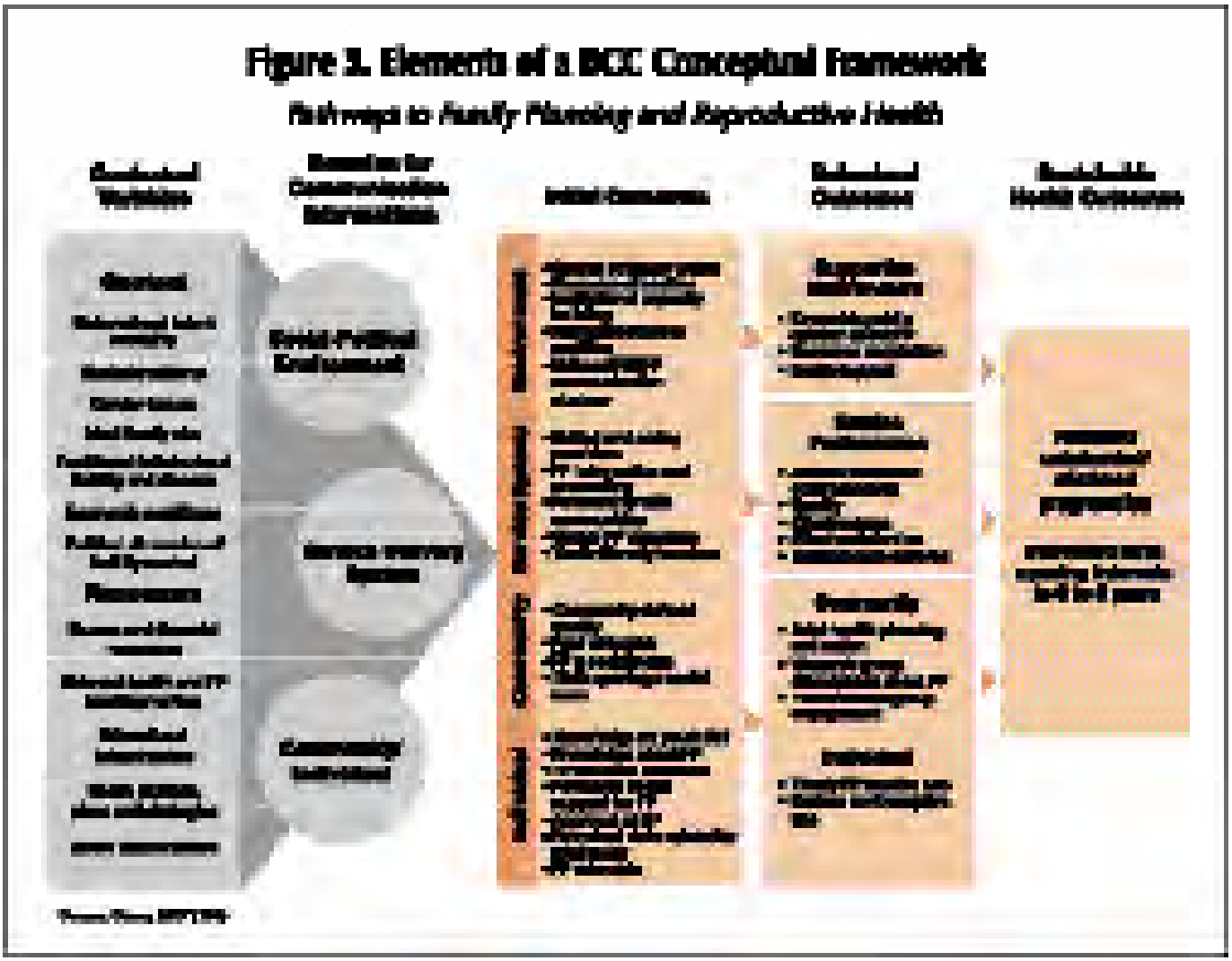
STEP 2 : Strategic Design

Strategic design creates the roadmap for the program. Information collected from formative research, along with relevant behavioral theories, guides strategic design. During strategic design the program establishes objectives, develops the conceptual framework, selects indicators, chooses communication channels, develops the creative brief (a document used to inform, or "brief," the creative team), and builds an implementation plan.

Establish "SMART" objectives. Objectives should be SMART—that is, Specific, Measurable, Appropriate, Realistic, and Timebound (see Figure 2, below). Objectives describe the intermediate steps that must be taken to achieve end goals (158). They help the program to choose which activities to undertake and to decide what outcomes to pursue and measure (*136*). Outcomes are the intended results or benefits for the audience during or after exposure to a program (18, 207).

Figure 2. Defining SMART Objectives

Sources: National Cancer Institute 2001 (136), O'Sullivan 2003 (139), and United Nation's Children's Fund and World Health Organization 2000 (201)



BCC programs often define three levels of objectives:

1. *Communication objectives* describe sought-after improvements in the indirect influences on behavior, such as knowledge, attitudes, or social norms (see box, p. 8). For example, a communication objective could focus on reducing barriers to contraceptive use in the community.
2. *Behavior change objectives* refer to the intended changes in actual behavior. A behavior change objective might focus on increasing contraceptive use among the intended audience.
3. Together, communication and behavior change objectives contribute to the overall *program objective*. Program objectives refer to anticipated results of the overarching health program in terms of outcomes, such as decreasing the fertility rate among women of reproductive age (*56*, 138).

Develop a conceptual framework. A conceptual framework shows how program activities are expected to contribute to objectives. Such frameworks outline the logical sequence of steps to achieve results (*20*, *66*).

Figure 3, above, illustrates the conceptual framework for a program to reduce unintended or mistimed pregnancies and to increase birth spacing intervals to the recommended time frame of three to five years (169). One communication objective might be to increase knowledge of modern contraceptive methods among women ages 15 to 49 by 20% over the next five years. A related behavior change objective might be to increase use of modern contraceptives among this group of women by 10% over the next five years. To reach behavior change and program objectives, the BCC program needs to consider "contextual variables," which relate to underlying social, political, and economic conditions (see far left of Figure 3) (183). These underlying conditions, identified in the formative research, along with relevant theory, inform the specific communication activities to undertake.

Strategic design creates the roadmap for the program.

Communication interventions take place in three mutually supportive domains: the social-political environment, the service delivery system, and among individuals and communities (see "Domains for Communication Interventions" in Figure 3). These efforts are intended to produce "initial outcomes" at different levels: the social

Model for a Creative Brief

1. Intended Audiences

Be specific about who the program wants to reach. The primary audience consists of people that the BCC program wants to motivate to practice a healthy behavior. These usually are the people who are at risk of or who are suffering from a particular health problem. Secondary audiences are people who influence the health behaviors of the primary audience, such as family, friends, and opinion leaders.

2. Objectives

State what the intended audience should do after they hear and/or see the message. Objectives should be SMART:

- ***S**pecific* (indicate who or what is the focus of the effort and what type of change is intended),
- ***M**easurable* (indicate a quantity, such as the percentage change expected),
- ***A**ppropriate* (be sensitive to audience needs and preferences and to social norms and expectations),
- ***R**ealistic* (decide what can be achieved reasonably under existing conditions and with available resources), and
- ***T**imebound* (state clearly the time period for achieving the behavior changes).

3. Obstacles

State the obstacles that can prevent the audience from making the desired change. These might be beliefs, cultural practices, peer pressure, or misinformation, for example. Audience research and relevant behavioral theories can help identify these factors. Focusing on decreasing such barriers to behavior change can help with designing more effective programs.

4. Key Benefits

State the benefits of the desired behavior for the intended audience. These often appear in the program's messages.

5. Channels

State which channels and products will carry the messages—for example, television, radio, newspapers, Internet Web sites, posters, flyers, telephone hotlines, peer or client counseling, community meetings, or live entertainment.

6. Key Message Points

Identify the core information that will be included in all communication, including advertising slogans, counseling messages, and community activities.

Sources: National Cancer Institute 2001 (*136*) and O'Sullivan 2003 (*139*)

and political environment, service delivery systems, the community, and the individual. At the level of the individual, communication activities are expected to improve knowledge, change attitudes, and influence other factors (see "Initial Outcomes" in Figure 3). Changes in these initial outcomes lead to increased adoption of the desired behaviors, including increased use of modern contraceptives (see "Behavioral Outcomes" in Figure 3). In turn, behavior change leads to achieving the overall program objectives, such as reducing unintended or mistimed pregnancies and increasing birth spacing intervals (see "Sustainable Health Outcomes" in Figure 3).

Select indicators. Conceptual frameworks also aid in the selection of appropriate indicators (*66*, 92). An indicator measures a single aspect of a program that contributes to meeting objectives (*20*, *66*). For example, evaluators might choose to track the number of audience members who attend particular community mobilization events. This indicator assesses outreach activities. Evaluators try to choose indicators that are *valid* (measure the topic or issue that they are meant to reflect), *reliable* (produce consistent results when repeated over time), *specific* (measure a single topic or issue), *sensitive* (responsive to change), and *operational* (measurable) (19, *139*).

Choose communication channels. Findings from formative research guide the choice of communication channels. Formative research can identify which channels best reach the audience and which channels the audience considers most credible concerning health topics. Combining the three types of channels—mass media, interpersonal communication, and/or community channels—can help maximize the effect of BCC programs (see box, p. 15). To choose the appropriate mix of channels, the communication team should consider which channels will best deliver the message to the intended audience within the available budget.

Beyond choosing the three types of channels, BCC programs also need to select specific channels and devise activities. For example, which radio stations best reach youth in the cities? Information and communication technologies (ICTs) enable people to interact and participate in the BCC campaign, but which ones can the audience use (see box, p. 19)? Programs can choose from a variety of formats, materials, and venues within each type of communication channel (see Table 1, p. 16).

Develop a creative brief. The creative brief is a document that the communication team develops and shares with people and organizations involved in development of messages and materials, such as advertising agencies, public relations firms, or writers and designers. It provides all staff with the same direction for developing messages and materials. The creative brief includes a profile of the intended audience, audience actions expected (behavior change objectives), and the resulting benefits that the audience will appreciate. The creative brief should

Egyptian Project Combines Channels to Reach Families

Combining mass media, interpersonal, and community-based communication channels can help maximize the effect of a BCC program (*56*, 98, 111, *136*, 184, *200*). The *Mabrouk!* ("Congratulations!") Initiative of Egypt's larger Communication for Healthy Living Project (CHL) is one that offers a comprehensive package of messages for young, married Egyptian couples through a variety of channels.

The *Mabrouk!* Initiative offers messages specifically on antenatal care, safe delivery, postpartum care (maternal and child health and family planning), and infant health. A multimedia campaign delivers the initiative throughout Egypt, while interpersonal and community approaches reinforce these messages in eight focal governorates (80, 82, 84).

Reaching millions through mass media entertainment-education. CHL, with several media partners, co-produces an entertainment-education TV variety show, *Al Afdal* ("The Best"). During the Muslim holy month of Ramadan in 2004, 2005, and 2006, the show addressed various health themes in a segment for newlyweds. These segments featured call-in contests and on-location interviews with brides and grooms at their weddings in focal governorates. In Ramadan 2005 the weekly show featured messages concerning husband-wife communication, three-to-five-year birth spacing intervals, and positive gender roles. Also, once a month the show hosted on-location, newlywed events in focal CHL governorates for live audiences totaling almost 60,000. During the 2004 Ramadan daily broadcast, the show reached an estimated 15 million viewers. In 2005 the show was the most popular Ramadan TV program (82, 84).

In Egypt Tarek Allam, celebrity host of the television variety show Al Afdal *("The Best"), interviews a bride and groom before a live audience. The television show has reached millions of viewers with messages about husband-wife communication, birth spacing, and positive gender roles.*

Interpersonal communication with new mothers. Postpartum visits are an essential part of the *Mabrouk!* Initiative. Nurses visit the homes of postpartum women to discuss infant health and postpartum care for the mother. They encourage women to start family planning within 40 days after delivery. In 2005 and 2006 nurses conducted over 23,000 postpartum home visits in the eight governorates. Also, hospital staff delivered CHL messages and materials, including the *Mabrouk* Booklet, to over 130,000 postpartum women before they left hospitals. Almost 10% of new mothers in Egypt have received this booklet, which provides information about antenatal and postnatal care, breastfeeding, and family planning (84).

The Mabrouk *("Congratulations") booklet provides important health information to newlyweds across Egypt. Topics include caring for children and preparing for pregnancy and delivery.*

Empowering communities. CHL works with local voluntary organizations, called community development associations (CDAs), to assess and address the health needs of their villages. In the first year of the program, CHL staff guided three CDAs through the early stages of carrying out the health program in their villages. These CDAs then paired with newer CDAs to share their knowledge and skills, thus building their capacity. More CDAs join the program each year**.** The community mobilization program started in seven villages in one governorate. By 2006 it had expanded to 120 villages in eight governorates, with a total population of about 500,000 (84). Through this effort, CDAs train outreach workers to assist nurses with the postpartum home visits. Outreach workers have helped nurses counsel over 1,700 women about maternal and neonatal health (39, 73, 84).

Monitoring and evaluation of CHL and of the *Mabrouk!* Initiative are ongoing using several national and local data sources. A national survey, called the Egyptian Health Communication Survey, provides information on audience exposure to different CHL program messages and on the effect of the program on behavior change (52). The Menya Village Health Survey, a panel study conducted in seven focal villages of the Menya governorate, monitors local implementation of CHL (53). These surveys and other program-specific studies will be used to measure outcomes, determine future needs, and redesign communication strategies and activities for improving the health status of Egyptians.

Photos: © 2004 Communication for Healthy Living Project

Table 1. Many Choices for Behavior Change Communication Programs

Communication Channel	Examples of Activities	Advantages
Mass Media Channels		
Broadcast (television or radio at national or regional level)	• Public service announcements (PSAs), commercials • Talk shows • Call-in shows (for example, "ask the expert" shows, contests) • Diaries (reality programming) • Serial dramas • Situation comedies • Magazine or variety shows • Animated cartoons • Music videos • Songs and jingles • Celebrity endorsements	• Range of formats conducive to health messages available, particularly for television • Can be highly creative • Dramas and comedies can depict behaviors rather than describe them. • Reaches a large percentage of the intended audience • Opportunity for direct audience involvement through call-in shows • Can use local languages and dialects • Comes into the home and can promote family discussion
Print media	• News coverage and advertising in newspapers and magazines • Direct mail • Decision-making aids for clients and providers • Comic books, photonovelas (a comic book-like form that uses photos to tell a dramatic story) • Pamphlets, fliers • Posters, billboards	• Reaches a large percentage of the intended audience • Can cover news more thoroughly than television or radio • Intended audience has the chance to clip, reread, contemplate, and pass along material. • Small-circulation papers may take PSAs free of charge.
Information and Communication Technology	• Internet Web sites, social media (for example, e-forums, blogs, and chat rooms), distance learning • CD-ROMs • Mobile phone programs	• Can reach large numbers of people rapidly • Many formats are available whenever the user wants access. • Can instantaneously update and disseminate information • Can be interactive and user-directed • Can combine the audio-visual benefits of television or radio with the self-pacing of reading
Interpersonal Channels		
Between provider and client, teacher and student, parent and child, or among peers	• Telephone hotline • Client counseling • Instruction • Informal discussion groups	• Can be more credible because it is face-to-face • Permits dialogue (most participatory form of communication) and responds immediately to the individual • Can motivate, influence, and support
Community-Based Channels		
Community mobilization, group interaction	• Discussion groups, peer support groups, listening groups, workplace groups • Community meetings • Rallies	• Greater opportunity to use participatory approaches • May have more credibility because trusted local leaders and/or organizations are involved • Enhances sustainability of effort • Can cost little depending on number of participating communities
Outreach activities by program staff or community members	• Community, village-to-village • Household • Peer-to-peer	
Live performances	• Street theater • Puppet shows • Talent shows • Contests (talent, art, or dance)	
Community media	• Community newspapers • Local radio	

Sources: National Cancer Institute 2001 (*136*), O'Sullivan 2003 (*139*), Roberts 1995 (*154*), and United Nations Children's Fund 2000 (*201*)

	Disadvantages
	• Difficult for intended audience to keep or pass on material • Production and air time can be costly (radio less costly than television). • Message may be obscured by commercial clutter.
	• For literate audience only • News coverage demands a newsworthy item. • Larger circulation papers may take only paid ads and inserts. • Exposure usually limited to one day • Keeping up good relations with news media can be time-consuming.
	• Many intended audiences do not have access to the Internet. • Intended audience must search or sign up for information. • Newsgroups and chat rooms usually require monitoring.
	• Can be expensive initially and/or costly to scale up • Reach may be limited • Difficult to keep messages consistent • Requires specific training
	• Costly to scale up • Low reach compared with mass media • Low frequency • Difficult for intended audience to keep or pass on material (for community media)

also include the key message points that will be conveyed in all messages, activities, and channels (*136*, *139*). (For help with developing a creative brief, see the tool on p. 14.)

Build an implementation plan. The next step is an implementation plan, covering partners' roles and responsibilities, activities, timeline, budget, and management. At this stage the program also should plan for monitoring and evaluation (also called process evaluation and summative evaluation, respectively). (For a summary of all the documents that should have been prepared by the end of this step, see Quick Look, p. 18.)

Monitoring and evaluation should be planned for in every BCC program from the beginning, starting with formative research to inform the analysis stage, and then developed and used throughout the planning and implementation process. A monitoring plan should describe what aspects of the program will be monitored, how and how often, and what indicators will be used (*66*). Monitoring enables managers to determine if the program is on track and to account for budget expenditures (see Step 4, p. 18). An evaluation plan describes the research design, indicators, and methods used to determine if changes in outcomes have taken place and can be linked to the BCC program (see Step 5, p. 20) (*66*).

There are a number of types of evaluation designs (see box, p. 21). The choice depends on the nature of the BCC program, the funds and expertise available for the evaluation, the duration of the program, and the information needs of stakeholders and decision-makers (*136*). Ideally, evaluations include measurements at the start and completion of a BCC program, so that they can be compared. Evaluation design should measure exposure to various BCC activities (*66*, 138). Developing a strong evaluation plan may require help from an evaluation expert who is familiar with research design, sampling, and advanced statistical analysis.

As a rule of thumb, it is advisable to allocate approximately 10% of a BCC program budget to monitoring and evaluation. A monitoring and evaluation budget may exceed 10%, however, particularly for pilot programs intended to determine whether the program is worth replicating or scaling up (*142*). For small programs with relatively small budgets, 10% represents a limited amount (*142*). Evaluation conducted on such a small scale usually cannot be expected to detect significant program results. Thus, the funds may be better spent on program activities and low-cost monitoring (94, 106, *142*).

STEP 3 : Development and Pretesting

The analysis, conducted in Step 1, and the strategic plan, created in Step 2, guide the development of concepts, messages, and materials. The program should tailor its messages based on the audience's position in the stages of behavior change (228). For example, research may find that most people are already aware of and concerned about the desired behavior, but they have not yet tried it. They may need messages that focus on the benefits of behavior change. Research may find, instead, that most people are already motivated to change their behavior. Then messages may need to provide practical information, such as where to obtain supplies and how to use them (see illustration, p. 9).

For example, a study in southwestern Uganda found that adolescent girls were aware of HIV but underestimated their risk of infection. They distrusted condoms. Generally, they lacked a formal, culturally appropriate source of sexual and reproductive health information. Surveys of the community found that people were aware of the vulnerability of adolescent girls to HIV and other STIs. Also, people wanted adolescents to know more about reproductive health risks. Therefore, program staff worked with the community to revitalize and update a traditional channel of communication for adolescent girls about sex and marriage, the *senga* (meaning father's sister). With training, *sengas* delivered messages about HIV and family planning that were both accurate and culturally appropriate. They also gave young women traditional information about sex and marriage (130–132).

Choose type of appeal and tone. Programs can use a number of different types of appeals in their messages, such as informing, entertaining, persuading, educating, or empowering (*201*). For example, entertainment-education approaches can educate and motivate people as they entertain them (175) (see Spotlight, p. 6). Messages also can vary in tone—for example, using humor or fear. Fear appeals both motivate behavior change and cause defensiveness and resistance to change. Which response dominates depends on whether the message proposes effective and feasible action to avoid the threat (222, 223).

Obtain creative talent. To develop effective materials, the program needs creative talent. This talent could come from within the organization. It also could come through partnerships or contracts with other organizations, such as advertising agencies, public relations firms, or NGOs with staff trained in communication (*79*, *136*). The program should use the creative brief developed in Step 2 to explain the communication strategy to the creative staff and help them to understand the objectives and what the program has learned about the intended audience. A profile of a typical audience member can also help the creative staff to develop materials that are relevant and appealing to the audience. (For guidelines on managing the work of an ad agency, which can be adapted for working with other creative professionals, see the publication, "How to Select and Work With an Advertising Agency," at http://www.jhuccp.org/pubs/fg/2/2.pdf.)

Pretest messages and materials. During pretesting, typical members of the intended audience see or hear preliminary versions of the campaign materials. Then they are asked questions such as: What message does the TV spot convey? Are the characters in the radio drama believable? Is the information in the brochure easy to understand? What is attractive about the piece? What is unattractive about it? Is anything offensive? Answers to these and other questions may indicate the need for changes. Revisions may be minor or substantial, but the pretesters' reactions should not be ignored (228).

There is no substitute for pretesting with the intended audience. Review by colleagues or experts will not reliably predict audience reaction. For example, in the Accelerating Contraceptive Use Project in Afghanistan, pretesting with community leaders at one site found that pictures in condom instructions would be unacceptable. In the two other sites pictures were acceptable if used only in counseling (88, 115).

STEP 4: Implementation and Monitoring

During this step the manager of the BCC program makes sure that each program component is developed as planned and that each product reaches the correct destination on time. Implementation can typically involve distributing print materials, broadcasting radio and television messages, or conducting community meetings or individual counseling sessions (*30*).

When launching the program, program managers can engage the media to obtain maximum news coverage of the program. News coverage often is people's first source of information (155). Kickoff events and press conferences are good ways to get the news media's attention.

QUICK LOOK

Planning Documents That Help Guide Implementation

During strategic design of BCC programs, staff should prepare several planning documents to help guide implementation of the program. These include:

1. Creative brief, which provides guidance for developing all program activities and materials. It describes:
- Intended audiences
- Communication and behavior change objectives
- Obstacles to behavior change
- Benefits of the desired behavior
- Channels that will carry the messages
- Key message points (see p. 14)

2. Conceptual framework, which helps clarify how the program intends to reach objectives. This visual depiction shows the logical order of the program steps that will lead to intended outcomes (see p. 13).

3. Implementation plan, which comprises:
- Partners' roles and responsibilities
- Activities
- Timeline
- Budget
- Management plan (see p. 17)

4. Monitoring and evaluation plans, which describe:
- What aspects of the program will be monitored
- How and how often the program will be monitored
- Research design for evaluation
- What indicators will be measured
- What methodology will be used to determine whether changes in outcomes can be linked to the BCC program (see p. 17)

Technology Shapes Behavior Change Communication

Information and communication technologies (ICTs) offer new opportunities for health communication. Mobile phones, the Internet, and handheld computers or personal digital assistants (PDAs) can offer the low cost per-person-reached that is typical of broadcast media. In contrast to these one-way media, however, the new technologies offer the possibility of dialogue and individually tailored communication. Already, these technologies have helped to raise awareness of health issues, encouraged people to seek support and accurate information, increased dialogue within communities, motivated behavior change, and increased demand for services (34, 119, 186).

Many "digital divides" persist—between North and South, within regions of the South, and between urban and rural areas, men and women, young and old, and high-income and low-income (28, 78, 95). These technologies are spreading rapidly, however. In the developing world the number of mobile phone subscribers increased from 46 per 1,000 people in 2000 to 258 per 1,000 people in 2005 (*93*). Also, telecenters, cybercafés, community kiosks, and other community access points are bringing computers and the Internet to much of the world's population. For example, Mexico's Internet subscription rate is only 2% of households but almost 70% of the population has access to the Internet, if they want it, through commercial or government-sponsored Internet cafés (95, 124). As the number of public ICT facilities grows, so does the opportunity to reach people with health information through the Web and stand-alone computers (119).

Mobile phones cannot yet offer as much content as computers, but they are widely used and they go almost everywhere. Health programs have used mobile phones to deliver health messages, to remind people to take medicines or oral contraceptives, and to provide follow-up and counseling for people with HIV/AIDS or other chronic diseases such as tuberculosis and diabetes (102). For example, the Freedom HIV/AIDS Initiative offers four mobile phone games that promote HIV/AIDS awareness among Indian youth. SafetyCricket, HIV Quiz, The Messenger, and Red Ribbon Chase were downloaded over seven million times in 2006 (151, 182, 229).

By comparison, Web-based and other computer-based ICTs offer users more participation in health communication. Users can search for specific information, play educational games, and take courses and quizzes. They can seek social support, share feelings and concerns anonymously, and obtain answers to sensitive questions through e-mail messages, Web sites, and social media such as e-forums, blogs, and chat rooms. Increasing numbers of Web sites provide health information and messages to general audiences or to specific groups of users. They seek to promote healthy behaviors, enable informed decision-making, and enhance self-efficacy to seek health care services (24, 167, 186).

For example, in 2006 the Jordan Health Communication Partnership launched the first Arabic-language health portal on the Web, at www.sehetna.com. The *Sehetna* ("Our Health") site offers accurate health information on a variety of topics tailored for all age groups, from adolescents to the elderly. It also features health news, physician directories, and the opportunity to submit questions to an "Ask the Expert" feature. The site has averaged over 12,000 unique users each month since its launch in April 2006 (13, 57, 206).

Young people especially like Web-based applications because they provide information interactively and privately. For example, numerous Web sites offer reproductive health information to adolescents. They include "Auntie Stella" in Zimbabwe (http://www.auntiestella.org/), "@dolescencia" in Mexico (http://www.adolescencia.uanl.mx/), "teenpath.net" in Thailand (http://www.teenpath.net), and "loveLife" in South Africa (http://www.lovelife.org.za/youth/) (24, 149, 171).

In addition to the Internet, health communication programs also use CD-ROMs and computer software. Settings range from primary care facilities to classrooms (107, 112, 119, 186). These tools avoid problems with Internet access. In two states of India, for example, multimedia computer software in ICT centers helps migrant workers learn how to avoid HIV infection. It provides information about HIV, sexual and reproductive health, and migrants' legal issues. Over the first three years 12,000 people obtained information at 28 ICT centers. The centers began with support from the United Nations Development Programme and now run under the supervision of the state governments (202).

Left photo: Freedom HIV/AIDS uses mobile phone games to raise awareness of HIV/AIDS among Indian youth. Mobile phones and other information and communication technologies offer new interactive opportunities for health communication, and they cost little per person reached.
© 2007-2008 ZMQ Software Systems

Right photo: Web sites are popular among youth because they provide information both interactively and privately. The "loveLife" Web site in South Africa teaches adolescents about reproductive health.

News coverage often is people's first source of information.

For example, Egypt's Communication for Healthy Living project hosted group weddings that attracted hundreds of newlywed couples. Extensive news coverage of these receptions in national radio, television, and newspapers spread the message of the *Sahatek, Sarwetek* ("Your Health, Your Wealth") campaign throughout Egypt (38, 81). Specific messages focused on safe pregnancy and delivery, postpartum care, neonatal and infant care, and birth spacing. Developing an ongoing relationship with the news media helps ensure continuing coverage of the program.

Monitoring occurs during program implementation. It enables managers to track program activities, outputs, reach, and costs (*16*, *66*, 159). For example, programs may monitor the quality, timing, frequency, and audience size of radio and television announcements or dramas. Programs may track print runs and distribution of print materials. They may conduct site visits—for example, to check if clinics have program materials and use them properly.

Program managers and evaluators can collect data from such sources as log books of TV or radio stations, program activity forms, and clinic registries (*136*). How often data are collected depends partly on how easy they are to collect. Existing data collection systems, such as service statistics, can be convenient. Usually, however, the program also must develop new data collection processes—for example, organizing staff to monitor television and radio broadcasts (*66*).

Tools Available for BCC Programs

For help with planning and carrying out the steps in the BCC program process, see the tools in the companion *INFO Reports* issue, "Tools for Behavior Change Communication." The tools include:

- Checklist of the steps and activities of the BCC program process
- Example of an audience profile
- Table of the major cost areas for BCC programs
- Checklist for ensuring good-quality communication materials
- Tips for working with the news media
- Table of types of evaluation for BCC programs and of sample indicators

For information on developing entertainment-education formats, see the other companion *INFO Reports* issue, "Entertainment-Education for Better Health."

Program managers also should monitor the immediate reactions of the audience whenever possible. Program managers can create listener groups or conduct focus groups or short surveys to determine audience members' understanding of and reactions to messages (11, 161, *209*). That information helps managers and evaluators identify obstacles and opportunities and make midcourse corrections (see Spotlight, p. 6).

STEP 5 : Evaluation

Evaluation assesses program achievements and how well the program has met its objectives (*66*). It can measure the extent to which observed changes in outcomes can be linked to communication activities. That is, have audience members changed in the ways described by the communication and behavior change objectives? And is the BCC program responsible for these changes?

To assess whether the BCC program accounts for the observed change in outcomes, evaluators consider eight criteria: (1) observation of change in the outcome; (2) degree of relationship (correlation) between exposure to the program and the observed outcome; (3) evidence that exposure occurred before the observed change in the outcome; (4) lack of evidence suggesting that the observed change is due to other factors; (5) observation of a large, abrupt change over time in the outcome in the absence of other major influences; (6) evidence of a causal connection (consistent with theory); (7) evidence that the impact increases as the level or duration of exposure increases (dose response), and (8) consistency with findings of previous research (19, *59*, *142*). The more criteria that evaluation findings meet, the greater the confidence that the BCC program is responsible for the observed outcomes (*142*). A strong evaluation design will plan from the start to check many of these criteria.

Evaluations can provide valuable evidence to decision-makers, demonstrating that BCC programs contribute to health outcomes and justifying future investments (*66*, 92). A dissemination plan helps ensure that key stakeholders and decision-makers learn about program results. Different people prefer different formats for presentation of results. For example, busy policy makers usually appreciate a policy brief. A program manager may want a detailed report. Researchers tend to favor journal articles. The public and members of the audience may most appreciate a participatory presentation and discussion, with time for questions and answers (*139*, *142*).

Evaluation can facilitate sustainability and scale-up by identifying key factors that contributed to success.

Information from evaluation often serves as part of the formative research findings for design of the next program. By identifying key factors that contributed to success, evaluation can facilitate sustainability and scale-up (54).

Examples of Evaluation Designs

Evaluation studies can help others learn what happened, why, when, where, and with what effect (*139*). Because they must invest resources wisely, policy makers, program managers, and donors need to know which programs work and which do not (*209*). Also, reports of evaluation findings enhance understanding of and support for BCC (*136*). Cumulatively, evaluation studies published in peer-reviewed journals can be a particularly persuasive tool to encourage continued efforts in BCC (*86*).

To design and implement good BCC evaluations, program managers should plan for evaluation in collaboration with key stakeholders. They should ensure that evaluation is an integral part of the program from start to finish. Evaluation should also be based both on a conceptual framework and objectives that draw on formative research and behavioral theory (*139*, *209*). Good evaluations use practical and rigorous methods—that is, they are appropriate to the situation, take measurements at multiple points in time, compare groups exposed to the program with groups that are not exposed, and use multiple data sources to compare and cross-check the consistency of the evidence produced (*86*, *139*, *209*).

Some examples of evaluation designs for BCC programs include (*16*, *64*, *136*, *209*):

- **Pretest-posttest separate sample design.** Evaluators collect information before the start of a BCC program from a randomly selected sample of members of the intended audience. After the end of a BCC program, evaluators collect information from a second, randomly selected sample of members of the intended audience.

- **Pretest-posttest nonequivalent control group design.** Evaluators select a "treatment" group—that is, people exposed to the BCC program—and a control group that is not. The two groups are not selected randomly. They are similar but not equivalent. Evaluators collect information from members of both groups (but not necessarily from the same individuals) before and after the BCC program. This design typically uses groups that have already been formed such as schools or well-defined communities.

- **Panel design.** Evaluators collect information from the same members of the intended audience at multiple times. This design allows evaluators to determine who changed their behavior, how much their behavior changed, and to link program exposure to these observed changes.

- **Time series design.** This design relies on a large number of data collection points over time to identify trends observed before and after the BCC program. Time series designs often make use of routinely collected data, such as sales or service statistics. Time series can be used for evaluating full-coverage programs, where it is not possible to find an unexposed group.

Planning for the Future

Three factors determining the long-term success of behavior change communication are: (1) developing ongoing capacity to create high-quality BCC programs, (2) planning BCC programs with future expansion in mind, and (3) sustaining behavior change over time.

Develop and Sustain Capacity for High-Quality Programs

Over the last 20 years government agencies, private organizations, and some universities have strengthened the capacity to develop and conduct BCC programs. They have trained communication professionals. They have established independent communication organizations or units within larger organizations. They have joined in partnerships that bring together the many different skills needed for BCC. Such skills include communication planning, project management, audience research, development of messages and materials, media production, pretesting, public relations, and monitoring and evaluation (*30*). Each approach to capacity building has different merits. Pursuing all available approaches generally is the best strategy at the national level.

Training can develop some capacity quickly. People receive training in BCC at many levels and in many ways. Training can take place in classrooms, on the job, through self-instructional materials, or via distance-learning programs or Web-based technology (65, 135). To make the most out of investments in training, organizations should have clear policies and processes for deciding whom to train. Programs should select and train the staff members who will actually work on communication programs and who are likely to stay with the organization for a time (46).

The United Nations, international and in-country NGOs, some community-based organizations, and a small group of international consultants conduct a variety of communication training courses and workshops (43, *96*). For example, the World Health Organization provides training on the COMBI (Communication for Behavioural Impact) Design Process, an approach for planning social mobiliza-

tion and communication programs for a variety of health issues. Recently, the Namibian Ministry of Health and Social Services unveiled its plan for a nationwide HIV-prevention communication campaign based on the COMBI process (204, 205, *225*). The Center for Communication Programs at the Johns Hopkins Bloomberg School of Public Health also conducts workshops to help health care professionals worldwide design strategic health communication programs. The workshops use an interactive software program called SCOPE (Strategic Communication Planning and Evaluation). SCOPE allows users to design, implement, and evaluate health communication programs directly on the computer (*83*).

Another training approach, called competency-based training, identifies the tasks required by a specific job and the skills needed to perform those tasks. Competence is about turning knowledge into action (*96*). The approach is commonly used to train health care providers in clinical skills (25, 99, 113, 164, 187). In 2002 a meeting of communication experts from various organizations and regions developed a preliminary set of key communication competencies (see http://www.changeproject.org/com/pubs/competenciesreport.pdf, p. 14). This set of competencies is the starting point for the development of accepted competency standards that universities and training programs worldwide can use to create competency-based curricula to educate and train communication professionals (*96*).

The competencies developed at the 2002 meeting informed a project already underway in Peru to develop the national capacity for health communication. Between 2002 and 2005 the USAID-funded CHANGE project, a consortium of Peruvian universities, and two Peruvian NGOs developed communication competencies for various health professionals. They identified specific health communication competencies for regional health authorities, physicians, nurses, health technicians, and health promoters. Project partners used the competencies to develop training modules and curricula for each profession. Then they held competency-based training workshops in six regions of Peru for nearly 1,000 health care professionals in the particular communication competencies appropriate to their specific jobs (33, 212).

In Malawi workshop participants use interactive computer software called SCOPE to design an HIV/AIDS BCC program. Such workshops and tools help to develop local capacity for high-quality BCC programming. Photo: © 2002 Arzum Ciloglu/CCP, Courtesy of Photoshare

Education develops capacity over the long term. Teaching students—the next generation of professionals—the basic competencies for BCC helps ensure capacity for the longer term. Around the world, academic institutions offer communication degrees, typically in schools of health, communication, agriculture, or education. Over 80 universities and other academic institutions offer postgraduate communication programs focused on improving people's health and well-being. About one-third are in developing countries (44). For example, the College of Development Communication at the University of the Philippines Los Baños offers three postgraduate degree programs in development communication and also undertakes training, advisory, and action projects (208). (For a list of undergraduate and graduate communication courses that the college offers, see http://www.devcom.edu.ph/ver1/, under "Academic Programs" from the menu on the left side.)

Free-standing BCC organizations provide expertise. In some developing countries independent organizations have emerged to provide BCC services. Some of these organizations, such as the Communication for Development Foundation Uganda (CDFU) (http://www.cdfuug.co.ug/) and the Healthy Russia Foundation (http://www.healthyrussia.ru/), are legacies of institutional capacity building by large nongovernmental health programs with BCC components (37, 100, 143). Others, such as Egypt's Information, Education and Communication Center of the Ministry of Information's State Information Service, grew out of partnerships between donor agencies and governments (40). Some were the field offices of global BCC technical assistance programs but became independent and self-sustaining (226). Through years of dedicated work to develop staff skills and strategic partnerships, these organizations have developed the expertise to respond to their countries' unique health communication needs. They provide technical assistance and services in designing, implementing, and evaluating BCC programs.

Partnerships make use of existing capacity. More and more, experts point to the need to strengthen institutional partnerships and networks (46, 123, 193, 212). This approach to capacity development does not require one organization to develop all the skills and resources needed. Rather, a number of organizations collaborate, each contributing its specific capabilities—and strengthening them in the process. For example, a family planning program can join with a local university or research firm to conduct research and contract an advertising agency or media production firm to develop messages and materials.

Help can come from other branches of the same program's organization, universities, private firms, government agencies, NGOs, and community groups (*96*). Working with partners can offer greater credibility, new approaches and methodologies, and greater access to resources and skills and to the intended audience (46, *136*, 153, 212).

In Egypt agricultural extension workers conduct seminars on reproductive health. They encourage farmers to ensure their families' reproductive health. Partnerships between different sectors are a good way to make use of existing capacity and resources. Photo: Pathfinder/Egypt Takamol Integrated Reproductive Health Services Project

In some situations it may be helpful to involve partners in other sectors, such as the environment, education, or democracy and governance. For example, in Egypt the Takamol Integrated Reproductive Health Services Project uses agricultural and irrigation extension workers to inform farmers about reproductive health topics during routine outreach visits. They provide information on breastfeeding, child health, early marriage, healthy timing and spacing of pregnancies, antenatal care, maternal health, gender-based violence, and involving men in reproductive health decision-making. Farmers already accept these experts as credible information sources (195).

Plan for Large Scale

If BCC is worth doing, it is worth doing in a big way. Major improvements in public health often require the healthier behavior of many, many people (*48*, 54). The term "scaling up" typically refers to expanding program activities to reach more people and more areas, thus increasing impact (1, 29, *48*, *87*). This is also referred to as "going to scale." Scaling up is done best by planning for it from the start, with vision and commitment. By looking ahead, program planners can build in the components needed for large scale. Such components are difficult to add or alter later (45, *177*, 197). For example, a simple program is easier to scale up than a complex one. Therefore, programmers with scale in mind design a simple program rather than a more intensive approach envisioned just for a specific site (45, *87*, 176, *177*).

Programs can use a variety of strategies to scale up their activities and impact (35, *48*, 51, 133). Strategies of BCC programs have included the following:

Testing and refining programs before expanding. Programs testing particular approaches or messages in pilot areas should choose sites with potential for high impact. Early success will build confidence among program staff and communities, attract more interest from other communities and policy makers, and encourage more support. Positive features to look for in a pilot site include dynamic leaders, existing community groups, and volunteers (*177*).

Assessing the costs and effectiveness of a program is essential before scaling it up (*48*, *177*). Data from program monitoring and evaluation should provide this information. Program managers also should consider the key elements that made the program a success, simplify the program model to emphasize those elements, and assess whether those elements will be sustainable during scale up (45, 176, *177*). If a program was not effective, it should be redesigned and retested before going to scale (*177*).

The Madagascar Child Survival and Reproductive Health Program was designed from the start to improve breastfeeding practices rapidly and at scale. It started in two districts in 1996. The program worked with local radio stations to broadcast 6 to 10 breastfeeding promotion messages each day during the "mass campaign months," which happened one month in every three. The program also distributed the messages on cassettes to bus and taxi drivers, who played them for passengers. Community-based group activities and interpersonal communication between health workers and mothers reinforced the messages (150). Over the next six years the program scaled up to reach nearly eight million people—about half of the nation's population. In program sites breastfeeding within one hour after birth increased from 34% among new mothers to 76% in just two years, between 2000 and 2002. In comparable sites without the program, levels remained at about the national average of 35% (150, *177*).

Scaling up is done best by planning for it from the start. A simple program is easier to scale up than a complex one.

Partnering with other organizations to expand size and coverage. Solid partnerships can bring together the support, resources, credibility, and expertise needed for eventual expansion (*30*, *136*, *177*). Such partners may include community organizations, NGOs, commercial organizations, research institutions, government units, and communication media themselves such as radio or TV networks or production houses. Indeed, plans to scale up can influence the choice of partners at the start. For instance, the program may not need a particular organization at first, but that organization might contribute to scaling up later (*87*).

In 2001 the Romanian Family Health Initiative (RFHI) started a two-year pilot initiative in three districts, providing family planning through primary health care units. By 2007 RFHI had scaled up the pilot project to the national level. Key to this success was collaboration among the Romanian Ministry of Health and Family (MOHF), USAID, JSI Research and Training Institute, and local NGOs. Multisectoral

Participatory Approaches Empower

Photos: © 2007 Tostan

In Sengal a group of villages makes a public declaration to renounce female genital cutting and child marriage. Such events help to change social norms and can get news coverage, which widens impact.

When community members help design and guide a health or development program, the community gains problem-solving skills and ownership of the program. These two important elements contribute towards sustainable results (27, *47*, 227). The process has been called participatory communication. It has at least three elements:

- Through dialogue communities and BCC programmers reach a shared understanding of the community's problems and needs,
- Community members participate in planning and implementing social programs, and
- The community makes decisions (*128*, *211*).

In their purest form participatory approaches seek to strengthen the overall capacity of a community to address its own health and social issues beyond the life of a particular project. Changing specific health behavior or reaching a specific health objective is less important (*128*). Behind this approach lies the philosophy that communities have the right to decide what matters most and are in the best position to know (*77*, *128*, *211*).

Under this framework the solution to a health or social problem may not involve communication. *Finding* the solution, however, involves communication—among community members and between the community and programmers. Techniques include dialogue, community meetings, workshops, and participatory analysis techniques such as community mapping and modeling (community members draw a map of the community in order to identify what programs they need most and where).

Participatory approaches tend to focus on social change such as community empowerment, social cohesion, and leadership. In contrast, conventional BCC approaches tend to focus on individuals' behavior and related factors such as knowledge, attitudes, and skills (*60*, *128*).

The gap between the two approaches is narrowing (*60*, *128*, *211*). For example, in 2002 a diverse group of communication scholars and practitioners developed an integrated model of "communication for social change" that combines these two frameworks. The model includes both individual behavior change outcomes as well as social change outcomes (*60*). The appropriate mix of communication approaches depends on the nature of program goals and community needs (*128*).

In practice some BCC programs have employed participatory approaches without losing focus on health objectives and behavior change. Community participation in BCC programs has ranged from involvement in formative research to identifying the health and social needs to be addressed to some degree of involvement in directing and carrying out the program, such as a community advisory committee or review board (76, 118, 152, 170).

Participatory Approach Motivates Communities to Stop Female Genital Cutting

Through community-based education, Tostan, an international NGO based in Senegal, has had considerable success in empowering communities in six African countries to abandon female genital cutting (FGC). Since 1997, 2,336 villages in Senegal, 298 in Guinea, and 23 in Burkina Faso have renounced this harmful practice (49, 194).

Tostan uses a participatory approach to community-based education called the Community Empowerment Program. In the first phase of the program, a village sets up a committee to adapt and manage the program. In the second phase a group of villagers receives training and education in hygiene, women's health, human rights, and problem-solving. Training emphasizes enabling participants, who are mostly women, to analyze their own situation and find the best solution. In the third and fourth phases, each trainee shares what she is learning with one other person, and the group begins to organize public discussions. The public discussions concern issues identified by the trainees. Participants serve as discussion leaders and seek the consensus of the community in renouncing certain harmful practices such as FGC. In the fifth phase, if communities express support, community members reach out and spread educational activities to neighboring villages where family ties exist. Finally, a group of villages organizes a public declaration to indicate their collective intention to renounce harmful practices (49, 76).

Tostan started activities in 1988 in 20 villages in the Kolda Region of Senegal, where nearly 88% of women had experienced FGC. By 2001 the program had expanded to 90 villages in the region (76). Program staff evaluated the Community Empowerment Program approach in this region. They compared 20 villages

Communities

that undertook the community-based education and 20 control villages that did not (49).

The evaluation found that Tostan's Community Empowerment Program has brought about social change within communities, enabled villagers to improve living conditions, and increased respect for human rights and women's health. Specifically, the program has helped reduce community support for and practice of FGC. Prevalence of FGC among daughters of both program participants and residents of the comparison communities was high before the start of the education program (87% of daughters among program participants and 93% in the comparison communities). Prevalence remained high after the program ended, but it had dropped significantly among daughters of the participants (to 79%). The four percentage point decrease among daughters of women from comparison villages was not statistically significant.

In particular, 68% of participants' daughters ages newborn to four years had *not* been circumcised before the start of the program. Two years after the program ended, this percentage rose significantly to 78%. In contrast, in the comparison group, the percentage of daughters in the same age group who had not been circumcised did not change significantly.

Even greater percentages of participants said they did not intend to have their daughters circumcised in the future. Before the program started, 7 women of every 10 said that they wanted to have their uncircumcised daughters circumcised in the future. This proportion fell to about 1 woman in every 10 among those who participated in the program, while more than 5 women of every 10 in the comparison villages expected to have their daughters circumcised in the future (49). Tostan's FGC-focused programs have empowered participants, particularly women, by enabling them to raise important issues in the community and to lead a process of community decision-making (49, 117).

In Senegal Tostan, an international NGO, uses community-based education to bring about social change. Participatory approaches help communities develop a sense of ownership in programs, which contributes to sustainable results.

working groups composed of staff from the MOHF, donors, NGOs, and other implementing partners developed supportive policies and draft legislation, standards, and protocols for key project components.

One component was a BCC campaign. The campaign sought to create awareness of family planning and reproductive health issues and raise demand for modern contraceptives. Coordination between stakeholders ensured that campaigns to build demand for contraceptives started in areas where providers had been trained and clinics had the necessary contraceptive supplies. The level of contraceptive use among married women of reproductive age in rural areas increased from 21% in 1999 to 33% in 2004. Over the same period the rate of abortions in these areas declined from 2.4 to 1.1 per 1,000 married women. Romanian policies now support provision of family planning at the primary health care level (71, 72).

Influencing policy or legislation to broaden the reach of programs. Working with the news media is one way to win support for expansion. News coverage can increase public understanding of a health issue and shape the public debate (*91*, 215-217). Also, individuals and groups can campaign for supportive policies and programs (5). Both the beneficiaries of programs—that is, the audience—and public interest organizations can influence policy.

In South Africa the Treatment Action Campaign (TAC), an activist AIDS organization, used the communication tools of advocacy, mass movement, and political pressure to lobby the government. The group sought universal access to

antiretroviral (ARV) treatment through the government health care system (221). When TAC formed in 1988, ARV treatment was available only to a small minority of South Africans who could afford to pay for private health care (140). In February 2003 TAC organized a thousands-strong march on parliament. In March 2003 it began a civil disobedience campaign (69). On August 8, 2003, South Africa's cabinet made a commitment to provide ARV treatment through the public sector (190).

In Cape Town, South Africa, some 20,000 people marched on parliament in February 2003 to call for universal access to antiretroviral (ARV) treatment for HIV. Later, the government agreed to provide ARV treatment through the public sector. Committed individuals and groups can influence politicians and policy makers to expand programs. Photo: © 2003 South Africa Treatment Action Campaign (TAC)

Work Toward Social Change to Sustain Behaviors

To be most effective in the long term, programs must focus not only on motivating individual change. They also must change the social and cultural contexts that influence individuals (23, *60*, *120*, 121). BCC programs must broaden to include such approaches as advocacy, to strengthen political commitment, and community participation, to create a sense of ownership in the program (see box, p. 24).

Sustaining healthy behavior usually requires a continuing investment in BCC as part of an overall health program.

When the expectations of their families, peers, and communities support healthy behavior, people are more likely to practice healthy behavior, even in difficult circumstances. In other words, changing social norms sustains behavior change over the long-term. The practice of contraception in Indonesia serves as an example. In 1967 less than 5% of Indonesian married women used modern contraceptive methods. The average woman gave birth to nearly six children over her reproductive lifetime. In contrast, in 2006 almost 60% of married women were using a modern contraceptive method. The total fertility rate had fallen by more than half (from 5.9 children per woman to 2.6) (125).

Over the four decades the government family planning program, USAID, and other partners worked to create a strong enabling environment to support use of family planning services. This included having well-trained staff to provide services, creating new social norms that favored a small family size, cooperating with religious leaders, and developing government and political support. In particular, long-term BCC campaigns, with the slogan "*Dua anak cukup*" ("Two children are enough"), created a small family size norm, increased people's interest in having fewer children, and generated demand for family planning services. Over the years the campaign used a variety of channels to promote the small family size norm. The communication strategy evolved as the situation in Indonesia changed—from reaching rural areas with grassroots participation and promoting smaller family norms, to building an independent private sector and improving quality of care (125).

Between 1997 and 2003 Indonesia experienced a political and economic crisis. Still, levels of contraceptive use continued to rise (7, 32, 67, 185). The new social norm seems to explain the sustained rate of use. A study found that the more widespread the small family size norm was in a particular Indonesian county, the more likely that levels of contraceptive use remained unchanged during the crisis. For example, in counties where one-third to two-thirds of women supported the small family norm, women were 1.5 times more likely to use contraception than in counties with low normative support for small family sizes (185). This suggests that BCC programs that change social norms to promote positive behaviors contribute to sustained individual and collective behavior change over time.

Social norms help to sustain individuals' healthy behavior and may decrease the need for intensive BCC programs. Still, sustaining healthy behavior usually requires a continuing investment in BCC as part of an overall health program. People need to hear messages repeatedly—and often to discuss them with others—before they take action. Furthermore, as people go through the process of changing their behavior, they need to hear different messages (148). Also, every year young people reach adulthood and take on responsibility for their own health, including their reproductive health. Thus there are new audiences to reach. Even those who have adopted healthy behavior may need occasional reminders.

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Good reproductive health often requires healthy behavior. BCC programs in family planning, related reproductive health, HIV prevention, and other health and development areas have helped millions of people adopt healthier behavior. For example, BCC programs have helped to increase contraceptive use by increasing knowledge, addressing personal barriers such as worries about side effects, and improving attitudes about small family size and spacing children. BCC programs also are essential to changing the social contexts that influence individual behavior. For instance, many HIV prevention programs address social norms that foster the pandemic, such as norms that condone having multiple sex partners.

Thus, virtually all family planning and reproductive health programs benefit from a strong BCC component. The route to successful BCC is well-known. Proven processes, models,

and theories help program managers develop effective BCC programs. BCC programs generally change health behavior at a low cost per person, particularly when they reach many people. Even small family planning programs can develop strategic BCC components. They can adapt and simplify BCC development processes to fit their overall program and budget. One communication product or approach will not be enough, however. To promote and sustain healthy behavior, BCC requires ongoing attention.

*In Indonesia long-term BCC campaigns with the slogan "*Dua anak cukup*" ("Two children are enough") helped to create a small family size norm and sustain use of family planning services. This photo, titled "*Rukun*" ("Harmony"), won third place in a photo contest sponsored by BKKBN, Indonesia's national family planning program. Photo: © Yudi Tirtajaya/Yogyakarta and BKKBN*

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