Entertainment-Education

For Better Health

INFO REPORTS

Key Points

For over 30 years entertainment-education (E-E) has been a tool for changing health behavior. E-E uses drama, music, or other communication formats that engage the emotions to inform audiences and change attitudes, behavior, and social norms. Worldwide, several hundred major projects have used E-E to improve health.

Entertainment-education has encouraged people to live healthier lives. For example, E-E projects for family planning and reproductive health have helped motivate people to use contraception, to prevent HIV infection by having fewer sex partners, and to use antenatal care services.

Entertainment-education dramas can persuade because they show characters who change their behavior to improve their lives. Stories have unique power and nuance to describe people's behavior and interactions, and their consequences. When audience members see that they could be in the same situation as the characters, stories can move them to change, too. E-E is particularly able to influence behavior rooted in traditions that are hard to change.

Theories of human behavior and behavior change underlie E-E. For example, social learning theory emphasizes how people learn by observing others. Thus the theory supports the use of dramas with characters who model healthy behavior.

Choosing an E-E format depends on audience and budget. Mass media formats reach people who have access to radios or televisions. Young people are a prime audience for popular music. Theater, and especially street theater, reaches people without access to radio or TV. Mass media projects can be costly. In contrast, a community-level activity may cost little. Projects often use several formats or media to reach the intended audience.

Mass media formats are often cost-effective. Although expensive to produce, radio or TV dramas have attracted audiences in the millions. They have cost very little per person reached and US$3 or less per person influenced to adopt a healthy behavior.

To achieve high quality, E-E projects require skill and creativity but also follow a process. As with other communication projects, the process consists of five basic steps—research and analysis, strategic design, development and pretesting, implementation and monitoring, and evaluation. At the same time, effective E-E requires skilled managers and producers. With training in E-E, creative directors, writers, and artists can convey educational content and positive values in an entertaining manner.

Audience research and participation are essential. Creating engaging E-E products requires thorough knowledge of the audience. As much as possible, members of the audience should assist in the design of E-E activities.

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Why Use Entertainment-Education?

Entertainment-education has a long history. For thousands of years, entertaining stories have passed on wisdom and values from generation to generation. Modern E-E dates from the 1940s and 1950s, when radio dramas both informed and entertained farmers and their families: *The Lawsons* in Australia and *The Archers* in the United Kingdom motivated people to adopt agricultural innovations *(96)*. To improve public health, E-E has encouraged people to exercise, eat more fruits and vegetables, and stop smoking (15, *20*, 37), as well as to adopt family planning and avoid HIV infection. Miguel Sabido developed one of the first dramas with a family planning theme (see p. 4).

E-E uses various forms of entertainment. Dramas on radio and TV, animated cartoons, popular songs, street theater, and other formats can educate and motivate as they entertain (*96*). In E-E there is no clear dividing line between entertainment and education (*26*). The two should be seamlessly woven together.

As a part of family planning/reproductive health programs, E-E can help program managers meet objectives. E-E can increase demand for services, motivate people to protect their health, and demonstrate to providers how to improve care. E-E can help meet these objectives in several ways:

• By showing behavior rather than just describing it. Observing others is one way that people learn and

Photo on Cover

The crew prepares to shoot a scene in a rice paddy for the Indonesian E-E movie, *The Savannah Wind*. The movie discourages the traditional practice of bride kidnapping and highlights the need for better maternal health care by depicting a woman who dies in childbirth. The main character is a young woman who visits her home on the remote island of Sumba after finishing medical school and decides to stay to improve health care there. © 1997 Harvey F. Nelson, Jr.

adopt a new behavior (see p. 4). For example, a TV drama in Bangladesh, *Shabuj Chhaya*, showed couples discussing family planning and visiting a clinic for antenatal care (8, 30). A radio drama in Nepal for health care providers, *Service Brings Reward*, provided information about family planning and demonstrated good counseling skills (47).

• By addressing norms and beliefs that are deeply rooted in a society. Certain issues, such as dowry or early marriage, may be too sensitive to address in lectures. For example, in South Asia animated cartoons and comic books from the Meena Initiative portray the dangers of early marriage and early pregnancy and the advantages of allowing girls to finish school (114).

• By attracting large audiences with an entertaining format. For example, the estimated audience for *Soul City IV*, a 1999 E-E campaign in South Africa to prevent domestic violence, was 16 million (*115*).

• By attracting audiences that are hard to reach. Young people might not come to a lecture, but they enjoy a music video. For example, in 1986 an estimated 150 million people watched the launch of the Mexican music video "Cuando Estemos Juntos" (When We Are Together), which encouraged sexual responsibility (52). In isolated villages with few televisions or radios, people gather around a single receiver to watch or listen to each new episode of a serial drama (46, 62, 93, 119).

• By offering formats to suit the scale and goals of most programs. E-E can be done on a small scale, such as puppet shows or street theater. It also can be done on a large scale—for example, through national broadcasts of radio and TV dramas or widespread distribution of photonovelas and comic books.

• By costing little per person influenced via the mass media. Radio or TV dramas or songs can be expensive to produce, but with large audiences the cost per person motivated to change behavior can be a few dollars (*40, 51*, 74, 84).

Two popular Jordanian singers, Ahmad Rami (left) and Qamar Badwan, perform the theme song at the launch of the Jordan youth campaign. The campaign encouraged young people to discuss family planning and reproductive health with their parents and, when married, with their spouses.
© 2001 Kevork Toranian, Courtesy of Photoshare

Despite the reach and influence of E-E on demand for services and the quality of care, E-E programs by themselves cannot make up for all gaps in health care (67). To increase use of family planning and reproductive health services, E-E programs need to be matched with efforts to expand services and train and equip providers.

How Can Entertainment-Education Influence Behavior?

Since the 1970s there have been several hundred major entertainment-education (E-E) projects to improve health. Most have been TV and radio dramas in developing countries (*96*). Among the earliest with a family planning theme were the TV serial drama *Acompañame* (Come Along With Me), broadcast in Mexico in 1977 and 1978, and the radio drama *Grains of Sand in the Sea*, which began in 1977 in Indonesia and continues today (5, *94, 96*).

Entertainment-Education Engages Emotions

Entertainment-education engages the emotions as well as the intellect. This helps explain its power to change behavior. Entertainment is more than amusement. It can evoke a range of emotions. An emotional reaction often leads people to think about themselves and their own attitudes and behavior (*75*). At the same time, E-E presents role models who can show the audience how to adopt healthy behaviors.

Entertainment-education often uses story-telling. Story-telling may be the oldest form of education. It remains a powerful way to communicate knowledge and experience (29). Stories can transmit knowledge that would be difficult to translate into explicit statements. By portraying situations that audience members might experience, stories can show ways of handling the situations. Stories can suggest words and tone of voice, for example, for couples to talk about family planning, and for young people to refuse requests for sex (*36*, 41, 68).

Audiences identify with characters and settings. Audiences respond emotionally to E-E that is realistic, culturally appropriate, and creatively produced. In a serial drama, for example, if the characters and settings are familiar to audiences, they can identify with the situations, conflicts, and feelings of the characters (*70*, 71, 100). When characters express their feelings, or when the story itself is dramatic, the audience responds emotionally. The audience feels a sense of empathy, and characters come to seem like friends (10, *70*, *95*, 100). When characters face a problem that evokes emotion, audience members who identify and empathize with them may be motivated to solve similar problems in their own lives in a similar way (50). Extensive research is necessary to help writers and artists accurately reflect the lives and culture of the audience.

The main character of a miniseries in Pakistan suffers a complication of pregnancy. *Aahat* (Approaching Sound) dramatized the effect of early and closely spaced pregnancies motivated by a mother-in-law's wish for a grandson. Two celebrities played the leading roles, Sania Saeed as the wife and Salman Ahmad as her husband. In E-E, evoking emotion is central to engaging the audience and changing behavior.
© 1991 CCP, Courtesy of Photoshare

The audience's emotional responses depend on the different characters. Dramas typically include character types that are familiar in a particular society, for example, a couple struggling to take care of their children, or a truck driver with several sex partners (*11*, 109). Some dramas have attracted large audiences in several cultures because they present characters and themes that are universally recognizable (101, 111). For example, broadcasters in Australia, Belgium, Brazil, Saudi Arabia, and 24 other countries aired the Japanese serial drama, *Oshin*, which taught lessons of love, sacrifice, endurance, and forgiveness (111).

Many E-E dramas portray positive, negative, and transitional role models. This scheme developed from drama theory and from the work of Albert Bandura, the social psychologist who made major contributions to social learning theory, and Miguel Sabido, a Mexican television executive who pioneered E-E dramas (6, 77, *89*). Largely positive characters model healthy values and behavior, and they are rewarded. Largely negative characters model unhealthy behavior and antisocial values, and they suffer as a result. Transitional characters, representing the audience, are uncertain at first about which behavior to adopt. Then, gradually, they become convinced. They begin to practice the healthy behavior, and they are rewarded (see also the case study on page 6 of the companion issue of *Population Reports* "Communication for Better Health").

Minor characters, sometimes called satellite characters, also may go through a transition. The main characters talk to minor characters, who then change along with the main characters. Thus the audience watches several characters, rather than just one, making decisions that improve their lives (21).

"The characters played in the show reflect the real life situation. I listened to a character that reveals harmful practices. Later, when I discussed some characters of the show with my friends, we got many useful things that can help us for our future life."
A listener to Journey of Life*, a radio drama in Ethiopia (43)*

Some dramas portray characters whose behavior is not predictably rewarded or punished. *Sexto Sentido*, the Nicaraguan TV drama series for young people produced by Puntos de Encuentro, deals with issues such as rape, domestic violence, homosexuality, and HIV infection. By portraying realistic characters with whom young people can identify, the series encourages young people to talk about these issues and reach a deeper understanding of society and the complex, uneven process of social change (54, 69).

Theories Link Entertainment-Education and Motivation

Seeing how the characters in a drama solve problems can give audiences the sense that they, too, can control their lives and solve these problems. This sense of being in control and able to solve problems is called self-efficacy. Observing the success of others and trying new behavior and succeeding can lead to self-efficacy. Thus audiences come to believe in their own ability to change and to succeed like the characters in a story. People believe in their own individual ability to change,

and the community as a whole can come to believe in its collective ability to change. Bandura's social learning theory explains how, by observing others, people can learn, be motivated to change, and believe that they have the ability to change (6). For example, in Tanzania the radio drama *Twende na Wakati* created the sense among many listeners that they could control the size of their families (*86*). Married women who felt they had this control were more likely to use a family planning method than women who did not (*11*).

Other theories also help to explain the power of E-E. Social influence theory, also known as the theory of the two-step flow of communication, highlights the influence of interpersonal communication on behavior change (48, 56). Audience members may discuss an E-E drama with people who have not seen it—for example, close friends and family members. Such discussions can motivate these people to change behavior even if they have not seen the drama. In Nepal such indirect exposure to a radio serial drama influenced contraceptive use as strongly as directly listening to the drama (*14*).

The MARCH approach (Modeling and Reinforcement to Combat HIV), formulated by the U.S. Centers for Disease Control and Prevention, explicitly combines E-E with activities to stimulate interpersonal communication. For the E-E component, projects have used serial dramas. For interpersonal communication community members may distribute flyers to their neighbors. As they do, they discuss and repeat the messages in the drama (*35*). Also, in many countries formal listener groups have provided a forum for discussing the lessons in E-E broadcast in the mass media (104) (see also p. 13).

Social norms govern both group and individual behavior. Dialogue about the contents of E-E programming, especially in community groups, can make people reconsider social norms. This can generate collective self-efficacy and collective action to change traditional practices such as demand for dowry, child marriage, and tolerance of wife-beating (7, *70, 92, 94, 115*). The ability of E-E to encourage community dialogue goes beyond conveying information and messages. It makes the audience participants in the development of their own communities and empowers them to start the process of social change (108, 113).

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The theory of Diffusion of Innovation also addresses change in social norms. It focuses on how a critical mass of people must adopt a behavior for it to become the new social norm (85). E-E can help to achieve this critical mass when it reaches large audiences. Many audience members then discuss the programs and the recommended changes among themselves and with others. E-E also can depict the process of social change itself, presenting characters who are slow or quick to adopt a new behavior and characters in between, who are cautious and need convincing.

From Drama to Games: A Range of E-E Formats

Selecting program formats is one of the important steps in the design of an entertainment-education (E-E) project. The choice depends mainly on the audience and on the objectives and budget of the communication program. Programs often use several formats in a multimedia campaign. Program managers can choose from a variety of formats.

Dramas in the mass media. Dramas can be presented as series or serials. In the broadcast media dramas are an effective and cost-effective way to reach large audiences (see p. 11 and Web Table 1: www.infoforhealth.org/inforeports/E-E/webtable1.shtml).

A serial drama, or soap opera, is a continuing story, usually presented on radio or TV once a week for 6 to 12 months or more. A shorter version, the miniseries, generally comprises four to six episodes (58, 80).

The serial drama has several advantages. The continuing story allows for the creation of a lifelike social context and characters who change slowly and face successes and setbacks as in real life. Audiences have time to get to know the characters and identify with them. With a main plot and several subplots, the serial drama can explore issues in-depth and from the perspective of several characters (73, *92*). Each subplot can present a story for a specific audience.

In contrast to the serial, the drama series presents a new and complete story in each episode. Many of the same main characters appear in every episode, however. Having a new story for each episode suits audience members who could not watch or listen to every episode in a drama serial (93). In the drama series what attracts and holds the audience are the characters, their different personalities, and how they interact in various situations. As audience members get to know and empathize with the characters, they enjoy anticipating how each character will respond to a new situation or a new lesson.

For example, since 1997 the NGO Minga Peru has produced *Bienvenida Salud* (Welcome Health), a variety show that includes a drama series. Local radio stations in the Peruvian Amazon broadcast the 30-minute show three times a week. The main characters of the drama are a young woman and her mother-in-law, who often get into arguments. Episodes deal with family planning, sexually transmitted infections, maternal health, early marriage, education for girls, and domestic violence. At least 25,000 people listen to the show each week (34, 62, 93, 112).

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Because each episode can deal with a different topic, the drama series has been used for distance education of health care providers. For example, various episodes of a distance education drama series started in 2001 for community health workers in Zambia have covered HIV prevention and transmission, immunization, clean water, and community mobilization. A continuing mystery in the personal life of the main character, Sister Evelina, provided suspense to keep the audience coming back for the next episode (17, 44).

Public service announcements (PSAs) or advertising spots are a common and versatile form of E-E. Generally a few minutes or less in length, they can inform audiences, show a benefit of behavior change, correct misinformation, or expose a social ill (2, *19*). For example, the international nongovernmental organization Breakthrough produces TV and radio spots for a campaign in India called "Is this justice?" The campaign is designed to bring social change by exposing the cruelty of stigmatizing women whose husbands gave them HIV. In one 60-second spot a man parking his car bumps into some parked motorcycles and then slaps his wife. The voice-over points out that blaming women because they have HIV is like blaming a woman for her husband's poor driving (16).

The situation comedy, or sit-com, relies heavily on the foolish or exaggerated behavior of several leading characters to engage the audience. Like the drama series, the sit-com is a set of separate episodes that can each highlight a new health topic. It is difficult to present serious subjects in a comic environment, however. Therefore, comedy must be used with great care in E-E. For example, in *The 9th Circle*, a Jordanian sit-com set in a restaurant, the comic characters are restaurant employees who are not involved in delivering information about family planning. Instead, the customers of the restaurant—for example, young adults, newlyweds, and older people—explain and promote the health benefits of family planning.

Feature films in Bangladesh, India, Mexico, Turkey, and other countries have explored themes of family planning or gender equality. Films can be shown on TV and in cinemas and recorded on videotape (*19*). For example, in Turkey the 90-minute film *Berdel*, produced by the Family Health and Planning Foundation, was shown on TV three times in 1992. It portrayed the consequences of son preference and unequal treatment of daughters as part of a multimedia campaign to promote

family planning. Sixty percent of people surveyed in 14 provinces said that they had seen *Berdel*. Turkey's two most popular film stars played the main characters, and the film won several international film awards (121, 122).

Popular music and music videos by well-known performers can attract young people's attention to messages of sexual responsibility and make the messages appealing. Among the first E-E songs and music videos were "Cuando Estemos Juntos" (When We Are Together) and "Detente" (Wait) by Tatiana and Johnny, two of the most popular singers in Mexico in the 1980s. The songs encouraged young people to wait before having sex, getting married, or becoming pregnant. Both songs were hits in Mexico and other Latin American countries (52). A similar project in the Philippines in the late 1980s featured the popular singer Lea Salonga and the group Menudo (83).

Some organizations reach young people in school with dances and songs about reproductive health and HIV. Examples are the Ashe Caribbean Performing Arts Ensemble and Dance4Life, which works in schools mainly in Africa and Europe (1, 32). Young people also perform their own songs. For example, in Rio de Janeiro in 1999–2000, young peer educators in the Guy-to-Guy Project wrote a rap song, "United for Peace" and sang it after performing their play, *Cool your head, man*. The song and play encouraged young men to stop being violent with each other and with young women (9).

The Ashe Caribbean Performing Arts Ensemble uses dance and song to teach young people about sexuality, reproductive health, and HIV prevention. Its EIC method **E**xcites young people with performances of music and dance, **I**nvolves them in arts training, and encourages a **C**ommitment to making healthy choices. *© 2007 Ashe Caribbean Performing Arts Ensemble*

Reality programming, also called "actuality" programming, presents everyday people, rather than actors, telling their own true stories. They speak in testimonials, interviews, diaries, or talk shows primarily on the radio. (Reality programming for E-E differs from "reality programming" on American and British television, where everyday people are put into artificial situations.) For example, a 2004–2005 project in Malawi trained people with AIDS to produce radio diaries each week about an important event or issue in their lives. The diarists talked about relationships with partners, family, friends, and their communities; about medical issues and the attitudes of health care providers; and about emotional stress (42).

Magazine or variety programs comprise a number of segments or formats, which the hosts weave together into a single presentation for broadcast or on stage. The format is designed to appeal to a wide range of listeners or viewers. The "magazine" format allows the educational content to be repeated in several segments of a single program. For example, a radio variety show from 2000 to 2003 in Ghana, part of the Linkages Project, promoted breastfeeding with songs, dramas, comedies, call-in segments, quizzes, and discussions with nutrition experts. The project also included training of health care providers and community members, and community activities (*81*).

In areas without access to mass media, mobile film units have brought variety shows about family planning, child survival, and HIV prevention to thousands of people.

In areas without access to mass media, mobile film units have brought variety shows about family planning, child survival, and HIV prevention to thousands of people. In Bangladesh, for example, such units show informational films, dramas, testimonials by local leaders, and product advertising. They also show feature films, music videos, and news and sports clips for pure entertainment (79). In India the Community Media Initiative used a video van to show episodes of *Jasoos Vijay*, a TV detective drama with a theme of HIV prevention. Thanks to the video van, people in 1,200 towns in Uttar Pradesh saw the episodes and participated in discussions and interactive games that accompanied the shows (105).

Theater and street theater are performed live, usually in a central community location. Theater can quickly and powerfully draw people's attention to an important health topic such as family planning, female genital cutting, violence against women, or HIV prevention (3, 9, 24, *38*, 45, 64, 117). People without access to radio or TV can watch. For example, in Bolivia, Teatro Trono enlists street children to perform plays for street children about drugs, self esteem, leadership, and gender equity (*38*). A street theater production can be performed
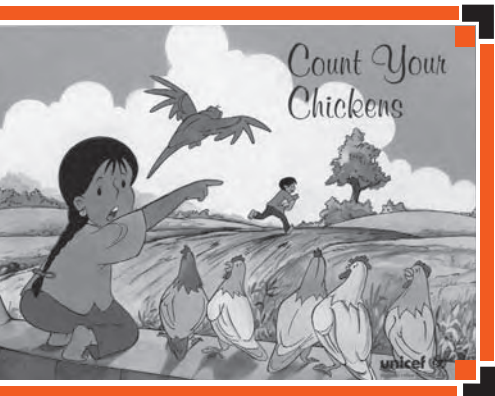
The Nrityanjali Academy presents street theater as part of an AIDS awareness program in Andhra Pradesh, India. Using a mobile van as a stage, the drama group gives condom demonstrations and performances about HIV/AIDS, STIs, and their prevention and treatment. *© 2003 Nrityanjali Academy, Courtesy of Photoshare*

in many locations. For example, in Lima, Peru, a play to correct misinformation about contraceptives, *Ms. Rumors*, was performed about 200 times from 1991 to 1994 in parks and squares and for people waiting at hospitals and clinics. In all, about 61,000 people saw the play (117). As a play is repeated in different places, it can be adapted to address local concerns (*61, 65*). Folk media, performed by community members, often combine theater and music (98).

Forum theater or interactive theater is a version of street theater. Like radio or TV dramas, street theater leads to discussion among audience members. Forum theater encourages and facilitates this. The cast invites the audience to participate in the drama, exploring the problems raised and the possible solutions (*65*). Forum theater is a type of "Theater of the Oppressed," Augusto Boal's concept of using theater to motivate social change (13). For example, Nalamdana, a street theater troupe in Tamil Nadu, India, performs dramas about HIV/AIDS, maternal and child health, children's rights, suicide prevention, cancer, and women's empowerment. The troupe typically performs in a village square or an urban slum. As many as 1,000 people attend, and the performance is interactive. After the performances, actors—who are trained in HIV counseling—discuss the educational content with audience members (*38, 91*).

Puppets can depict sensitive or controversial situations because they are an illusion rather than seeming to be real people.

Puppetry is a special form of street theater and has addressed themes of maternal and child health, family planning, and HIV prevention (3, 25). Puppets can depict sensitive or controversial situations because they are an illusion rather than seeming to be real people. The audience can understand their message without being offended (53).

Animated cartoons, comic books or graphic novels, and photonovelas can be used on their own or to support a broadcast drama or another E-E format (88). For example, animated cartoons in South Asia featuring a smart young girl, Meena, promote equal treatment of girls in education, and access to health services, and protection from early marriage and pregnancy. The carefully researched *Meena* stories have motivated parents in South Asia to treat their daughters and sons equally (*57, 61*). Children surveyed in Nepal said that because of Meena boys treat their sisters equally (*18*). Schools in South Asia use Meena comic books and story books (90). The government literature exam for grade 10 in Bangladesh includes a question about Meena (60).

Count Your Chickens

Through comic books and animated cartoons, Meena has influenced parents and become a role model for girls in South Asia. Girls in Nepal say that, because of comic books such as this one, they can attend school regularly. © 2002 UNICEF

"Since I saw the film [Meena] I have become very conscious when I serve food to my daughter."
A woman in Dhaka, Bangladesh (61)

Internet and mobile phone programming. The Internet and mobile phones can carry entertaining programming with health messages. For example, in India ZMQ Software Systems develops games for mobile phones to inform young people about HIV and AIDS. One game simulates a football (soccer) match. It provides information about HIV and AIDS when a player scores or prevents a goal (82). The Woodrow Wilson International Center for Scholars in the United States sponsors Games for Health (http://www.gamesforhealth.org/about2.html). This project brings together researchers, game experts, and users to promote games as a way of improving health care. The project also collects best practices and conducts contests for developers of health care games (120).

Budgeting for Entertainment-Education

Typical items in an E-E budget include research, monitoring and evaluation, production of print or broadcast materials, transportation, rent for filming locations, and administrative costs (see the budgeting tool in the companion *INFO Reports* issue, "Tools for Behavior Change Communication"). Research and evaluation typically account for about 10% of budgets (*96*).

Budgets for several radio and television E-E products are shown in Table 1. Comparisons should be made with care because included costs differ from project to project. One study assembled a comprehensive set of costs to calculate the cost–effectiveness of HIV/AIDS TV programming in India in 2002-2003. The analysis included all production costs, such as fees for equipment and costumes, and administrative costs, such as food, travel, and overhead (102).

Table 1. Budgets for Radio and Television E-E Formats

Country/Project/Year	Episodes/Length/Frequency	Budget (US$)
Radio drama alone		
Albania *Rruga MePisha* (Pine Street) 1999-2001 (*66*)	• 15-minute episodes • 2 episodes per week	• $120,000 per year • 30% for audience research • Airtime given free
Kenya *Tembea na Majira* (Move With the Times) 1996-2001 (*66*)	• 15-minute episodes • 1 episode per week	• $75,400 per year • Includes fieldwork, expert consultations, actors, production, and airtime
Tanzania *Twende na Wakati* (Let's Go With the Times) 1993-2001 (*66*)	• 30-minute episodes • 2 episodes per week	• $150,000 per year
Radio drama & other components		
Malawi *Zimachitika* (Such Is Life) 1997-2001 (*66*)	• 30-minute episodes and farmer's radio magazine • 2 episodes per week • Supporting activities included theater performances, comic books, cassettes of stories and songs, and a cartoon strip in the national newspaper	• $400,000 per year • Includes research, monitoring, and evaluation
Rwanda *Urunana* (Hand in Hand) 1999-2001 (*66*)	• 15-minute episodes and 15-minute radio magazine • 2 episodes per week	• $247,000 per year
Radio magazine		
Cambodia *Especially for You, Young People* 1999-2001 (*66*)	• 1-hour shows, including 20-minute radio drama, *Lotus on Muddy Lake* • 3 shows per week	• $260,000 per year • Includes training workshops, audience research, expatriate salaries, and administrative fee for technical assistance
TV drama alone		
India (North) *Jasoos Vijay* (Detective Vijay) July 2002-May 2003 (*102*)	• 10-minute episodes • 3 episodes per week (1 complete story every 4 weeks)	• $2.2 million • Includes all production and administrative costs[a]
TV reality show		
India (North) *Haath se Haath Mila* (Let's Join Hands) July 2002-May 2003 (31, *102*)	• 30-minute shows • 1 show per week	• $1.1 million • Includes all production and administrative costs[a]
TV spots		
India (North) National AIDS Control Program July 2002-May 2003 (*102*)	• 19 1-minute spots	• $1.1 million • Includes all production and administrative costs[a]
Philippines August-December 2000 (51)	• 4 30-second spots	• $546,720 • Includes concept, design, pretesting, production, and broadcasting

[a] Calculated for an analysis of cost-effectiveness. Includes all production costs such as fees for a camera, actors, costumes, transportation, scriptwriters, producers, directors, and editors. Management costs include salaries for expatriate staff and consultants, food, lodging, travel, research, publicity, office rent, and a 15% overhead fee.

Entertainment-Education Has Impact

E-E has influenced people's behavior concerning family planning, reproductive health, and HIV prevention. E-E has helped to motivate contraceptive use and visits to maternal and child health clinics (10, 30, *40,* 118). For HIV prevention, E-E projects have motivated people to have fewer sex partners, to be tested for HIV, and to adopt a caring attitude toward people with HIV or AIDS (*11*, 43, 49, *102*).

Analyses of behavior change communication (BCC) projects indicate how E-E projects can influence people. One meta-analysis assessed 39 family planning communication programs in developing countries conducted between 1986 and 2001 (*99*). Over half of the programs included E-E components such as music, theater, and radio and TV dramas. Among the indicators of impact, the programs had the strongest effect on knowledge of family planning methods. They influenced attitudes, including approval of family planning and intention to use family planning. The programs also influenced behavior such as communication with partners and use of family planning. (For more details on this study, see the companion *Population Reports*, "Communication for Better Health.")

"We have benefited a lot from the education through your program. Indeed, me and my husband are now actively participating in the use of family planning methods, and we see its advantages."
Letter in response to Twende na Wakati*, a radio drama in Tanzania (94)*

A systematic review of 24 HIV/AIDS communication programs included 16 projects with E-E components (*12*). These components included TV and radio dramas, film, a drama broadcast over village loudspeakers, theater, and comic books. The review reported the most consistent effects on knowledge of modes of HIV transmission and decreases in high-risk sexual behaviors, such as reducing the numbers of sexual partners and contacts with commercial sex workers. The review reported mixed results and weak effects on other indicators, such as understanding one's risk of HIV infection, talking to others about AIDS or condoms, and condom use.

Evaluations find that many different E-E formats have influenced knowledge, attitudes, and behavior related to family planning and reproductive health, including HIV/AIDS.

- TV drama—In South Africa the weekly drama *Tsha Tsha* addressed HIV prevention, HIV testing, and stigma. In one story line a young woman finds that she has HIV and struggles to tell her friends and family and to adopt a positive attitude. The first 26 episodes in 2003-2004 had an audience of about 1.8 million. An evaluation compared viewers with good recall of the drama and a matched group with low or no recall or exposure. The good-recall group reported significantly more HIV-prevention practices such as abstinence, monogamy, less frequent sex, and condom use (39, *49*).

- Radio drama—Since 1993 *Twende na Wakati* in Tanzania has modeled good and bad behaviors for family planning and HIV prevention. For example, a couple discusses family planning and then chooses a method, and a promiscuous truck driver does not use condoms and becomes infected with HIV. About 40% of new family planning users at government clinics said that they came because of the drama. Twelve percent of listeners adopted a behavior to prevent HIV infection, compared with 1% in a comparison area (*11, 86, 94*, 118). (For more details on the impact of TV and radio dramas, see Web Table 1, www.infoforhealth.org/inforeports/E-E/webtable1.shtml)

- TV spots—In 2000 four TV spots broadcast nationally in the Philippines portrayed a couple with two children discussing the benefits of family planning. From national surveys indicating contraceptive use and recall of the spots, researchers estimated that nearly 350,000 women started using a contraceptive as a result of the spots (*51*).

- Popular music—In Mexico "Cuando Estemos Juntos" and "Detente" were memorable and motivating. When interviewed, young people correctly identified the message of sexual responsibility in the songs. Many had discussed the message with friends and family members (52). In fact, years after the songs were hits, many people still remembered them and the messages (*19, 75*).

Investing in Mass Media: Getting the Most for the Money

Entertainment-education in the mass media can be expensive. For example, *Jasoos Vijay*, the TV drama broadcast in north India from 2002 to 2003, cost about US$2.2 million (*102*). To get the most for an investment in mass media, E-E programs have reached large audiences, and they have found ways to reuse products and further expand audiences. Working with communities to produce E-E projects on local radio stations is a way to decrease costs. Some projects have attracted advertising or commercial sponsorship.

Radio Ixil in Guatemala produced and broadcast a talk show and drama in 2007 for Mayan communities in the Ixil region. The drama encourages better agricultural techniques to improve nutrition and maternal and child health, and it also addresses domestic violence. Communities can develop low-cost E-E formats. © 2007 PCI-Media Impact

With large audiences, the cost per viewer is small. In north India 6.7 million people saw *Jasoos Vijay*, and an estimated 872,000 were motivated to increase condom use. The cost per viewer was US$0.33, and the cost per person increasing condom use was US$2.49 (*102*). In other mass media E-E projects, too, the cost per person influenced has been about US$3 or less (*11, 40, 51, 74, 84*).

Programs reuse or reproduce mass-media E-E materials to get the most for the initial high expenditure. For example, radio or TV E-E dramas in several countries have been so popular that they were rebroadcast (*75*). Some editing may be necessary, however, if programs are rebroadcast in communities with different customs or norms. Folk theater can be taped for broadcast on radio or TV, and TV series have been edited into a single show and shown from video vans (*91*, 105). A theater group in Tanzania, however, found that using videos of performances to increase the audience was too costly (*59*). Plays and TV series can be recorded digitally and saved on CD-ROM or made available on the World Wide Web.

Starting small can help to hold down costs. For example, the organization PCI-Media Impact trains members of community organizations to write and produce radio dramas in its "My Community" initiative. Communities then draft proposals for a radio project and compete for grants of up to US$15,000 from PCI. For the selected projects, PCI arranges technical assistance to produce the drama, to broadcast it on a local radio station, and to evaluate results. Communities' in-kind contributions and volunteer work amount to 20% to 80% of project costs. Under this initiative communities in Guatemala, Honduras, Mexico, and Peru have developed radio dramas to discourage pregnancy and prevent STIs/HIV infection among young people (*72*).

Advertising Covers Some Costs of E-E Projects

The large audiences for mass media entertainment-education have attracted commercial advertising. Food, candy, and soft drink manufacturers, cosmetics, oil, and financial services companies, and others have advertised on or sponsored E-E music projects, radio or TV dramas, and variety shows about family planning and reproductive health (*22*, *66*, 76, 77, 79, 83). Advertising fees or business sponsorship for production or broadcast expenses have covered some costs, and broadcasters have offered free airtime. Still, most projects need some donor funding (*66*).

E-E products have attracted substantial advertising in countries with a strong economic base and people with enough money to buy the advertised products (*66*). For example, in Kenya advertisers support the radio drama *Tembea na Majira* (Move With the Times) and an accompanying magazine-style radio program. The drama started in 1996 to provide agricultural information and has since included story lines about domestic violence, female genital cutting, and HIV/AIDS. Initially, the UK Department for International Development (DFID) provided support. Now advertisers such as Cadbury and Colgate cover most of the costs. Cadbury, for example, is mentioned before, during, and after the drama or magazine show. Also, Cadbury uses characters and themes from the drama in its own advertising (63, *66*).

Advertising on E-E dramas has increased sales for some companies. In Tanzania, for example, a mattress company, Ply Foam (Tanzania) Ltd., advertised on the E-E radio drama *Twende na Wakati* when the show started in 1993. The company stopped advertising after two years, however, because it could not meet the demand for mattresses created by the advertisements on the popular drama (*66*). In India in 1984 the TV drama *Hum Log* (We People) was the first Indian TV program to accept advertising. *Hum Log* promoted family harmony, gender equity, and family planning. Each 30-minute broadcast included 22 minutes of the drama and 8 minutes of commercials. The advertising

Entertainment-education products have attracted substantial advertising in countries with a strong economic base and people with enough money to buy the advertised products.

paid the US$6,000–$12,000 cost of producing each episode—one of the rare examples where advertising fees covered all E-E production costs. Seeing increases in sales, advertisers came forward to sponsor other TV shows (23).

E-E products need to be well-done to compete with pure entertainment for advertising. Also, the producing organization needs to maintain relationships with potential advertisers. Pursuing advertising takes time and energy (*66*, 76). Managers need to choose advertisers carefully, however, to avoid conflicts with E-E content. Advertisers should not expect to control the E-E content, and the advertising should not contradict the content.

An Approach to Managing Production

by Esta de Fossard*

To be effective, entertainment-education (E-E) should reflect the highest artistic quality. At the same time, it should rely on careful audience research and theories of behavior change. Where the E-E approach is new, specialists usually will be needed to train writers, artists, producers, and actors and perhaps provide ongoing guidance. In time, as they gain experience, all segments of the local communication industry can develop expertise and contribute to E-E programming.

To be effective, entertainment-education should reflect the highest artistic quality.

Most E-E programs follow the same general process for behavior change communication programs (described in detail in the accompanying issue of *Population Reports*, "Communication for Better Health"). In this discussion the focus is on aspects of the process that are specific to E-E. There are many approaches to producing E-E. Organizations vary in the emphasis they give to audience research or to community involvement, for example. The approach described here has created effective radio and TV dramas in countries throughout the world.

The E-E Manager Guides the Process

Typically, every E-E program requires a manager who has experience with E-E and understands its requirements and challenges. An assistant can help with scheduling and meeting deadlines. The majority, if not all, of the other personnel on the project are usually contracted as needed. The choice of E-E format largely dictates the staffing needs.

Tasks for the E-E manager include:

• **Holding an educational design or content harmonization workshop.** Here participants decide on the format, educational content, values to be promoted, and the schedule. These decisions are recorded in a design document. The workshop participants typically include specialists in the educational content of the E-E program, members of the audience, the manager of the larger project that the E-E program supports, and researchers. Representatives of government ministries may participate if the ministries are involved or if ministry approval of the programs is required. On the creative side, participants include producers and writers, and artists for comic books, graphic novels, or other print materials. Representatives of funding agencies also may attend to ensure that the design of the project fits the budget. The workshop participants comprise the design team for the project. The person leading the workshop, usually a trained behavior change workshop facilitator, should be highly experienced in communication for behavior change and social change.

• **Ensuring community support.** The E-E manager determines the type of community support that will best help the program and the community. A good start is to invite community representatives to the design workshop, where they can both contribute to the program and learn how E-E programs are produced. Community representatives can help to define the values to be promoted in a drama and help create the plot and characters. Community health or development workers—who encourage community members to watch or listen to the programs and who may lead group discussions—should participate also, so that they understand the purpose of the drama (27).

• **Choosing an appropriate production company.** A production company must be able to show success in the media and formats chosen for E-E. If the format is serial drama, for example, prior work with radio or TV newscasts or documentaries is not enough. Experience with drama is essential. If no production company has experience with E-E, then a consultant can be hired to provide training. The production company must guarantee that the educational content in the drama is not altered in any way without the E-E manager's approval.

• **Choosing broadcast outlets that have broad reach** and that most of the intended audience listens to or watches. The outlet must also be appropriate for a serious drama. The outlet should be reliable about presenting the E-E programming regularly at the right time for the audience.

• **Hiring creative writers with knowledge and experience in E-E writing.** Writers can be hired directly by the organization initiating the behavior change project, or they can be subcontracted by the production company. In either case, it is essential that the writers have experience or at least training in writing for E-E. In some cases, inexperienced writers have been able to create successful E-E projects with some guidance from project management. In general, however, if no experienced E-E writers are available, a consultant should be hired to provide training. Writers whose experience is with strictly entertainment formats are accustomed to artistic freedom. E-E writers, however, must be willing to follow the design team's decisions about the educational content. They must be willing and able to convey the educational content through the plot, dialogue, and character development. Because of the competition from other radio or TV shows, some of which may also present health information, the drama must be of high quality to get and hold the audience's attention.

Among the mistakes that inexperienced writers can make are: Presenting so many messages that audiences become overwhelmed; placing too much emphasis on the educational content and too little on the entertainment; and making the messages too obvious or artificial, instead of weaving them into the story and character development naturally and gradually. While work on an E-E drama can—and often does—advance a writer's career, E-E writers should acknowledge that the programs they are creating are more important than their personal fame.

- **Scheduling all aspects of the E-E project.** Production of a TV drama involves the most complex scheduling of any format. In its proposal the production company should include a schedule for all steps, including finding locations for scenes (see the checklist, p.15).

- **Monitoring quality and accuracy.** A review panel chosen by the E-E manager reviews scripts and print materials both for their artistic quality and for the accuracy of the educational content. The review panel should include a topic specialist, an E-E drama specialist, an audience representative and—where necessary—a representative of the appropriate government ministry. All panel members must have attended the design workshop. Also, the E-E manager appoints a "message monitor" to make sure that the educational content is accurate and consistent. The message monitor attends the design workshop and every recording or filming session and reads every publication carefully to ensure that the educational content is correct. The monitoring criteria can be remembered with a formula (see p.14).

The Audience Is Involved

E-E programming requires that the audience be involved. Members of the intended audience play a key role in preliminary formative research, pretesting, monitoring, and evaluation. As noted above, in the educational design workshop, audience members help to choose formats and determine educational content.

Members of the intended audience play a key role in preliminary formative research, pretesting, monitoring, and evaluation.

Research leads to knowledge about the audience. Behavior change communication requires thorough understanding of the audience from the start. This is as true for E-E as for any other health communication activity. Especially important is understanding the audience's current knowledge and behavior concerning the health topic. Their interests, education, and patterns of media use also are important. Therefore, E-E projects begin with formative research, best carried out by a professional research team.

Pretesting materials with the audience ensures that they are appropriate. No matter how carefully prepared, E-E materials always must be pretested with representative members of the audience. For example, it is usual to pretest three episodes of a serial drama to ensure that the audience identifies with the characters and understands the themes. To save money and time with TV shows, pretests can be done with only audio recordings of the episodes or with actors

reading the scripts to audience members. Typically, audience members are asked if they:

- Consider the program relevant to their lives.
- Understand the language and appreciate the story (or other format).
- Find the story (or other format) and the characters appealing.
- Recognize the educational content in the programs.
- Consider the educational content important and relevant.
- Consider the role models to be trustworthy.

They may also be asked what changes they might make in their lives because of the drama (*26*, 28).

A listener group in Nepal hears an E-E radio program. Listening together creates opportunities for discussion and can generate collective behavior change. Listener groups also help program managers monitor dramas and make changes to increase effectiveness.
© 2005 Saroj Nepal/CCP, Courtesy of Photoshare

Audience feedback keeps E-E dramas on course and can increase impact. Wherever possible, E-E programs should collect audience responses while the programs are being broadcast. Such monitoring helps ensure that the audience continues to find the material attractive and to understand the educational content. Audience responses can be solicited or unsolicited. One simple way to get direct feedback to a radio or TV program is to ask listeners for comments. In an epilogue at the end of each episode, a host can review the educational content of the show and/or ask for comments or the answers to quiz questions. The answers can come in via mail or e-mail, text messages on mobile phones, a telephone hotline, or on an internet site with a blog. In some remote areas listeners can drop off answers or comments at the local health clinic, where a project representative picks them up.

Comments from the audience are extremely helpful. They reflect what the audience learned, how audience members have changed behavior, and with what consequences (55, 103). Scripts for upcoming episodes can be modified as a result. Fan mail also provides ideas for future episodes (*94*). Many E-E programs have inspired their audiences to write thousands of letters (10, 55, *70*, *94*, 109, 112).

(5E x Q) + (7C x A)

The Formula for Effective Entertainment-Education

The formula (5E x Q) + (7C x A) summarizes the important elements of entertainment-education. The 5 Es describe entertainment. Entertainment must: appeal to the **emotions**, inspire **empathy**, provide an **example** of the recommended behavior, persuade the audience that they can carry out the recommended behavior (self-**efficacy**), and leave them with a sense that the new behavior will **enhance** their lives. The Q stands for consistently high **quality**, which will multiply the impact of the 5 Es. The expression 7C x A represents the characteristics of the educational content: **correct, complete, consistent, compelling, clear, concise**, and **culturally appropriate**. The A stands for **accountability**: Project staff must realize that they are accountable for what happens to people if they follow the advice of the E-E program (*26*).

- Variety shows—The radio variety show in Ghana (see p. 7) helped to increase significantly the percentage of infants breastfed within one hour of birth from 32% to as high as 62% in project areas. The percentage of infants exclusively breastfed to six months of age increased significantly, as well, from 68% to 79% (*81*).

- Street theater—An evaluation of performances by Nalamdana in 1996 found significantly increased knowledge about HIV and AIDS and reduced misconceptions among surveyed members of the audience. The performances were especially informative for people with little or no formal education. The performances also changed attitudes of audience members toward people with AIDS. Before the performances 29% said they would shun people with AIDS, 8% said they would turn them over to the police, and 18% said they would treat them the same as other people. After the performances 10% said they would shun, none said they would involve the police, and 50% said they would treat people with AIDS the same as others (116).

- Reality programming—Since 1999 the program Arab Women Speak Out (AWSO) has used video recordings and case histories of successful women as the centerpiece of empowerment workshops in Egypt, Jordan, Lebanon, Palestine, Tunisia, and Yemen. In Egypt, Jordan, and Yemen, participants were significantly more likely than nonparticipants to know where to find health information and to have helped improve community health care. Also, 83% of participants said they make family decisions, compared with 60% of nonparticipants (78).

Like all effective BCC programs, effective E-E projects need to choose formats and communication channels that reach and motivate the audience. Thirteen characteristics of effective BCC programs can be found on page 10 of the companion issue of *Population Reports*, "Communication for Better Health."

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Modern entertainment-education applies a tradition shared by cultures worldwide. People delight in a good story or song that teaches them something—for example, a parable teaching ethical behavior or a folksong challenging injustice. Such entertainment-education has passed important lessons from generation to generation for hundreds or even thousands of years: think ahead, be prepared, treat others as you want to be treated. The media have grown in sophistication and reach, but these lessons are still communicated today through entertainment to improve family planning and reproductive health.

Checklist for Producing an Entertainment-Education Drama

Note: The major categories are in approximate time order, but some activities may be accomplished simultaneously.

Resources

- ☐ Availability confirmed of the health care resources that people will need to carry out the new behavior—for example, access to clinics or contraceptives.
- ☐ Budget line items established for production activities.[1]
- ☐ Broadcast outlets researched.
- ☐ Availability of local writers and actors checked.
- ☐ All necessary staff hired.

Contracts

- ☐ Research and evaluation team selected; contracts prepared, approved, and signed.
- ☐ Production companies invited to submit proposals.
- ☐ Production company selected; contract prepared, approved, and signed.
- ☐ Writer(s)' contract(s) prepared, approved, and signed.
- ☐ Actors' contracts prepared, approved, and signed (if contracted separately from production company).

Content Design

- ☐ Design team chosen and invited to the design (content harmonization) workshop. The design team typically includes content experts, members of the audience, the manager of the larger project that the E-E program supports, researchers, producers, writers, and artists. Representatives of government ministries and funding agencies may also attend.
- ☐ Design workshop planned and preparations completed.
- ☐ Audience research completed.
- ☐ Design workshop held; detailed audience profiles compiled; design document drafted.
- ☐ Review panel selected by project management. The review panel should include a topic specialist, an E-E drama specialist, an audience representative, and—where necessary—a representative of the appropriate government ministry. The review panel must have attended the design workshop.
- ☐ Review panel meeting held to outline responsibilities and to review the design document.
- ☐ Writer training (as needed) and scriptwriting auditions completed; writer(s) chosen by the review panel and the E-E manager.
- ☐ Decisions made on how informal feedback to the programs will be encouraged and how it will be collected.
- ☐ Design document completed.

[1]See the budget tool in the companion *INFO Reports*, "Tools for Behavior Change Communication."

Adapted from de Fossard and Riber, 2005 (28)

Pretesting of Programs

- ☐ Date and place for pretesting set; audiences invited.
- ☐ Story treatment (synopsis) and character profiles completed by writer; checked by review panel.
- ☐ Pretest episodes prepared; checked by review panel.
- ☐ Original music (if desired) commissioned and written, preferably in time to go with pretest episodes.
- ☐ Pretesting programs recorded, preferably using the actors selected to appear in the ongoing programs.
- ☐ Pretest questions prepared by research team and checked by review panel.
- ☐ Pretests carried out (preferably with writer(s) present); results compiled immediately; reviewed by E-E manager, writer(s), and review panel.
- ☐ Decisions made by review panel about changes to be incorporated into future scripts.

Writing

- ☐ Audience visited by writer(s) to help develop drama and characters.
- ☐ Regular times established for a meeting of the E-E manager with the writer(s), editor, and director.
- ☐ Scriptwriting schedule and completion dates posted.
- ☐ Routine established for review of scripts by review panel.

Promotion and Support Materials

Support materials such as information booklets are for people who want to know more about the E-E topic. These materials support the E-E program using other media.

- ☐ Proposals for promotion and support materials discussed with and approved by E-E manager.
- ☐ Promotion agency selected (if required); contract prepared, approved, and signed. (Support materials might be prepared in-house or by the same agency that prepares the promotion materials. If not, a separate contract will be needed for the developer of support materials.)
- ☐ Support materials pretested as necessary and revised.
- ☐ All materials reviewed and approved by E-E manager.
- ☐ Promotion materials delivered to broadcaster on time.
- ☐ Support materials delivered to distribution points.
- ☐ Training provided by project staff or trainers in use of support materials, where necessary. For example, community members are taught to use listening guides.

Production

The following activities are carried out by the production company but should be monitored by the E-E manager.

For TV:

- ☐ Shooting locations found and reserved, if necessary.
- ☐ Sets built, if necessary.
- ☐ Timeline for shooting and editing established; E-E manager notified.
- ☐ All recording and other equipment on hand or ordered.
- ☐ Editing facilities hired, if needed.
- ☐ Message monitor appointed by the E-E manager to attend all shoots.
- ☐ Director reviews and approves scripts.
- ☐ Actors guided by a trainer experienced in acting for E-E drama.
- ☐ E-E manager attends several shoots and editing sessions to ensure accuracy and quality.
- ☐ Finished episodes reviewed by E-E manager.
- ☐ Finished episodes delivered to broadcaster on time.

For Radio:

- ☐ Suitable recording studio found with appropriate equipment for recording several actors at once and preferably for adding sound effects and music as recording is done (called edit-free production).
- ☐ Producer selected.
- ☐ Actors trained, if necessary.
- ☐ Timeline for recording and editing established; the message monitor attends all recording sessions.
- ☐ Review of each finished recording by E-E manager.
- ☐ Finished episodes delivered to broadcaster on time.

Monitoring and Evaluation[2]

- ☐ Monitoring sites chosen.
- ☐ Broadcasts and printing monitored to ensure fulfillment of contracts.
- ☐ Monitoring begun and ongoing.
- ☐ Results of monitoring tabulated. Where necessary, changes recommended by the E-E manager to the writer for future episodes.
- ☐ Arrangements made for summative evaluation.
- ☐ Summative evaluation carried out.
- ☐ Results of summative evaluation compiled, disseminated to stakeholders, and fed back into project replanning.
- ☐ Reports prepared and distributed describing the project, results, and lessons learned.

[2]Planning for monitoring and evaluation starts before the design workshop and continues after the scriptwriting is under way.

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