

THE EFFECTIVENESS OF ENTERTAINMENT
MASS MEDIA IN CHANGING BEHAVIOR

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There is strong evidence that mass media, particularly entertainment broadcast media, have played a significant role in a number of countries in bringing about changes in reproductive behavior and in promoting adoption of other health measures. Radio and television soap operas in Brazil, Ethiopia, India, Kenya, Mexico, Niger, Nigeria, Rwanda, St. Lucia, and Tanzania have been documented by independent research in their massive effects on audience attitudes and behavior with regard to HIV/AIDS avoidance and use of family planning (1, 2, 3, 4, 5 and 6).

One of the advantages of using serial dramas, as opposed to documentaries or single-episode dramas, is that they allow time for the audience to form bonds with the characters and allow characters to evolve in their thinking and behavior with regard to various issues at a gradual and believable pace in response to problems that have been well illustrated in the story line. Just as important, entertainment programs forge emotional ties to audience members that influence values and behaviors more forcefully than the purely cognitive information provided in documentaries. In addition, the emotional context of a melodrama improves retention of lessons learned by the audience, in much the same way that we remember the details of where we were on September 11, 2001 much more clearly than on an ordinary day.

As described in the social learning theory of Stanford University psychologist Albert Bandura, vicarious learning from others is a powerful teacher of attitudes and behavior (7). Next to peer and parental role models, role models from the mass media are of particular importance in shaping cultural attitudes and behavior.

Serial melodramas using the methodology developed by Miguel Sabido of Mexico for promoting reproductive health (8) have been remarkable in that they have attracted no serious opposition in any country. This stems, in part, from the thorough research that has been done prior to the development of the programs to measure audience attitudes and norms with regard to these issues. Characters for the serial dramas can then be developed that reflect the audience, so that the show is in harmony with the culture. Through the gradual evolution of characters in response to problems that many in the audience also are facing, soap operas can show adoption of new, non-traditional behaviors in a way that generates no negative response from the audience. Because of the bonds that are formed between audience members and characters, and because of the commonality of problems between characters and the audience, audience members tend to accept these changes, even though they may challenge some cultural traditions. Because they deal with issues that are as sensitive as sexual relationships and reproduction, it is especially important that such programs are designed not to build opposition or cause a backlash.

Mexico

In 1975, Miguel Sabido, then Vice-President of the big commercial Mexican network, *Televisa*, created the first social-content *telenovela* (television novel), which included a sub-plot that dealt with the issue of literacy. Telenovelas are similar to American soap operas in that they use

melodrama, but differ in that they are designed to come to an end after a few hundred episodes, like a novel.

The Mexican Department of Public Education had been carrying out a campaign to register people who lacked formal education in adult education classes. In the year before Sabido's literacy telenovela, they were successful in recruiting 99,000 people to register for adult education classes. Inspired by the need to promote literacy in Mexico, and also by the Peruvian telenovela, *Simplemente Maria* (which caused viewers to emulate the lead character's success through becoming a seamstress), Sabido set about to apply various theories of communication and psychology to the design of a program to influence the audience to pursue adult education. This program, *Venconmigo* ("Come with Me"), was commercially sponsored and was very successful in achieving high ratings. Not only did it contain sufficient dramatic quality to attract a large viewership, it also reflected the lives of the illiterate television viewers of Mexico, which attracted them to the program in record numbers.

In the 260-episode program, positive and negative characters (with regard to the value of education) tried to convince the illiterate characters of their points of view. The positive characters would tell the illiterate characters of the existence of an infrastructure for adult education and encourage them to sign up for classes, while the negative characters would tell them they were too old or too stupid to learn anything and advise them to stay away from such programs. The illiterate characters were torn between these points of view and were not sure how to escape the poverty and unemployment that came with being illiterate.

Eventually, illiterate characters, one-by-one, would register for classes and would struggle through the program. As they learned to read and write and received their diplomas, their lives improved. These changes were going on in the midst of many developments in the other sub-plots that kept the audience glued to the program. In the process, the illiterate viewers saw the changes that literacy brought to those characters with whom they most closely identified. Many of them began to register for classes.

Sabido decided to run an epilogue giving addresses of locations for registration for classes. He did this following the episode in which his most popular character graduated from school. This character was a grandfather who broke down in tears at his graduation ceremony because he could finally read the letters he had been receiving from his granddaughter. Before broadcasting this episode, Sabido warned the Department of Public Education that he might generate a crowd. They told him that they liked his program and that it was supporting their own efforts to promote adult education, but said they were sure that they could handle any crowd that Sabido's program might generate, because they had registered 99,000 people in a year's time.

Sabido broadcast the episode with the epilogue, and, the following day, 250,000 people tried to register for classes – in a single day! He continued to run epilogues for the remaining weeks of the serial, and a total of 840,000 people registered for classes during this time. The model Sabido had created was one that combined a commercially successful program with a very positive social impact.

Sabido then decided to use a telenovela to promote family planning as a solution to marital conflict. This program, named *Acompaname* (“Accompany Me”) was on the air in 1977. As with the earlier serial that dealt with literacy, the program was designed to create characters who would evolve over time to become positive role models for the audience. *Acompaname* showed in dramatic terms over the course of the nine-month series the personal benefits of planning one’s family, by focusing on the issue of family harmony.

The results of *Acompaname*, as reported by the Mexican government’s National Population Council (CONAPO) (9), were:

1. Phone calls to the CONAPO requesting family planning information increased from zero to an average of 500 a month. Many people calling mentioned that they were encouraged to do so by the television soap opera.
2. More than 2,000 women registered as voluntary workers in the national program of family planning. This was an idea suggested in the television soap opera.
3. Contraceptive sales increased 23 percent in one year, compared to a seven percent increase the preceding year.
4. More than 560,000 women enrolled in family planning clinics, an increase of 33 percent (compared to a one percent decrease the previous year).

In Mexico, to date, there have been five additional social-content soap operas, all developed by Miguel Sabido. They were *Vamos Juntos* (“We Go Together”), *Caminemos* (“Let’s Walk”), *Nosotros las Mujeres* (“We the Women”), *Por Amor* (“For Love”), and *Los Hijos de Nadie* (“Nobody’s Children”).

During the decade 1977 to 1986, when many of these Mexican soap operas were on the air, the country underwent a 34 percent decline in its population growth rate. As a result, in May 1986, the United Nations Population Prize was presented to Mexico as the foremost population success story in the world.

Thomas Donnelly, then with USAID in Mexico, wrote, “Throughout Mexico, wherever one travels, when people are asked where they heard about family planning, or what made them decide to practice family planning, the response is universally attributed to one of the soap operas that Televisa has done. ... The Televisa family planning soap operas have made the single most powerful contribution to the Mexican population success story.”

Similar effects were noticed in other Latin American countries when Sabido’s programs played in those countries.

India

Following a meeting David Poindexter, now Honorary Chair of Population Media Center, and Miguel Sabido held with Indira Gandhi, and a training program they organized for Doordarshan

(Indian Television), the country began broadcasting India's first social-content soap opera, *Hum Log* ("We People") in July 1984. The program included promotion of family planning and elevation of the status of women through the words and actions of key characters.

Over 17 months of their broadcast, the episodes of *Hum Log* achieved ratings of 60 to 90 percent. Research conducted by Professor Everett M. Rogers and Arvind Singhal, then of the Annenberg School for Communication of the University of Southern California, found through a sample survey that 70 percent of the viewers indicated they had learned from *Hum Log* that women should have equal opportunities, 68 percent had learned women should have the freedom to make their personal decisions in life, and 71 percent had learned that family size should be limited (10). Among other things, the program stimulated over 400,000 people to write letters to the Indian Television Authority and to various characters in the program, stating their views on the issues being dealt with or asking for help and advice.

Following a second training for a team from India in December 1986 held in Mexico City, producer Roger Pereira of Bombay undertook the creation of a second television soap opera. This program, *Humraahi* ("Come Along With Me"), went on the air in January 1992. It dealt with the status of women, with particular attention to age of marriage, age of first pregnancy, gender bias in childbearing and child rearing, equal educational opportunity, and the right of women to choose their own husbands. Within four months, *Humraahi* was the top-rated program on Indian television. The estimated audience was 230 million viewers. In the series, a servant girl dies in childbirth at age 15 after being forced into an arranged marriage at age 14 by her parents. Following that key episode, the other characters lament what is happening to the young women of India and the tragedy of early marriage and pregnancy. A Rockefeller Foundation-funded study developed by William Ryerson showed that viewers, contrasted with non-viewers, changed significantly in their attitudes regarding the ideal age of marriage and the acceptability of women in the work place -- two issues that were central to the story line.

Kenya

David Poindexter began working in Kenya in 1983 with the government-run Voice of Kenya, which later became the Kenya Broadcasting Corporation (KBC). After training Kenyan television and radio personnel in Mexico, he helped in the development of two programs: a television series, *Tushauriane* ("Let's Talk About It") produced by Greg Adambo; and a radio series, *Ushikwapo Shikamana* ("If Assisted, Assist Yourself") produced by Tom Kazungu. Both programs went on the air in 1987. The programs were aimed at opening the minds of men to allowing their wives to seek family planning. The programs also effectively linked family size with land inheritance and the resulting ability or inability of children to support their parents in their old age. Both programs were the most popular programs in their respective media ever produced by the Voice of Kenya.

By the time the two series had ended, contraceptive use in Kenya had increased 58 percent and desired family size had fallen from 6.3 to 4.4 children per woman. While many factors undoubtedly contributed to these changes, a study conducted by the University of Nairobi School of Journalism at rural health centers gave evidence of women coming in for family planning

saying that the radio program had caused their husbands to allow them to come for family planning.

Tanzania

The most extensive evaluation of the effects of a social-content serial drama occurred from 1993 to 1997 in Tanzania. There, Radio Tanzania broadcast a serial melodrama, *Twende na Wakati* (“Let’s Go with the Times”), that attracted 58 percent of the population (age 15 to 45) in areas of the broadcast. By design, in one region of the country, the area surrounding the city of Dodoma, a music program was heard instead of the soap opera during the first two years of the project (1993-95). Then, from 1995-97, the soap opera was broadcast in the Dodoma comparison area.

Independent research by the University of New Mexico and the Population Family Life Education Programme of the Government of Tanzania measured the effects caused by the program with regard to such issues as AIDS prevention behavior, ideal age of marriage for women, and use of family planning (4,5 and 6). While the population of the Dodoma comparison area was more urban than the rest of the country, a multiple regression analysis eliminated the influence such differences might have accounted for. Nationwide random sample surveys of 2750 people were conducted before, during and after the broadcast of the program. Data was also collected from the AIDS Control Programme of the government, the Ministry of Health, and the Demographic and Health Survey, all of which reinforced the finding of significant impacts on attitudes and behavior.

Among the findings were a significant increase in the percentage of the population who perceived that they were vulnerable to HIV infection; an increase in people’s belief that they can take effective action to prevent HIV/AIDS; an increase in interpersonal communication about HIV/AIDS; an increase in the belief that individuals, rather than their deity or fate, can determine how many children they will have; an increase in the belief that children in small families have better lives than children in large families; and an increase in the percentage of respondents who approve of family planning.

The study also provided evidence that the Tanzanian radio serial stimulated important behavioral changes. Over half the population of the areas where the serial was broadcast identified themselves as listeners, with more men than women in the audience. One of the key characters in the soap opera was a truck driver with many girl friends along the truck route. In the program he contracts AIDS. Of the listeners surveyed, 82 percent said the program had caused them to change their own behavior to avoid HIV infection, through limiting the number of sexual partners and through condom use. Independent data from the AIDS Control Programme of the government of Tanzania showed a 153 percent increase in condom distribution in the broadcast areas during the first year of the soap opera, while condom distribution in the Dodoma non-broadcast area increased only 16 percent in the same time period.

The program was also effective in promoting family planning. There was a strong positive relationship between listenership levels by district and the change in the percentage of men and women who were currently using any family planning method. The research also showed an increase in the percentage of Tanzanians in the areas of the broadcast who discussed family

planning with their spouses. The program also had a significant effect in raising the ideal age of marriage for women and the ideal age of first birth for women.

In regions where the show was broadcast, the percentage of married women who reported they were currently using a family planning method increased 10 percentage points in the first two years of the program, while that percentage stayed flat in the Dodoma area during the time the program was not broadcast there. Then, when the program was broadcast in Dodoma, the contraceptive prevalence rate there increased 16 percentage points. In regions where the program was broadcast, the average number of new family planning adopters per clinic, in a sample of 21 clinics, increased by 32 percent from June 1993 (the month before the show began airing) to December 1994. Over the same period, the average number of new adopters at clinics in the Dodoma area remained essentially flat.

Independent data from Ministry of Health clinics showed that 41 percent of new adopters of family planning methods were influenced by the soap opera to seek family planning. This included 25 percent who cited the soap opera by name when asked why they had come to the clinic, and another 16 percent who cited “something on the radio” and then identified the soap opera when shown a list of programs currently on the air. Another family planning serial drama using a different methodology that was broadcast nationwide by Radio Tanzania at the same time was cited by just eleven percent of new family planning adopters at the same Ministry of Health clinics. **These data point to the importance of the methodology used in the design of the serial drama.**

Counting all of the costs of the radio serial, the cost per new adopter of family planning was about 34 cents (U.S.). The cost per person who changed behavior to avoid HIV/AIDS was 8 cents (U.S.).

Ethiopia

In Ethiopia, Population Media Center produced a radio serial drama, *Yeken Kignit* (“Looking Over One’s Daily Life”), which was broadcast over Radio Ethiopia in 257 episodes between June 2, 2002 and November 27, 2004. *Yeken Kignit* addressed issues of reproductive health and women’s status, including HIV/AIDS, family planning, marriage by abduction, education of daughters, spousal communication and related issues.

An independent evaluation of the impact of the program was conducted through a baseline survey in May 2002 and a post-broadcast survey in December 2004. Findings from this study show significant results in terms of family planning and HIV/AIDS knowledge and practice. In most cases, there were significant differences in these knowledge and behavior change measures between listeners and non-listeners of *Yeken Kignit*, showing that the program had a differential effect on knowledge and behavior between listeners and non-listeners.

The Ethiopian program attracted about half the country’s population into its audience on a regular basis. In just two and a half years of nationwide broadcasting, that project achieved the following:

- 45% of women and 47% of men identified themselves as regular listeners to the program.
- The fertility rate fell from 5.4 to 4.3 children per woman.

- Demand for contraceptives increased 157%.
- Listeners to *Yeken Kignit* were 5 times more likely than non-listeners to know 3 or more family planning methods.
- Among married women in the Amhara and Addis Ababa regions who were listeners, there was a 55.1 percentage point increase in those who had ever used family planning methods, while among non-listeners, family planning use increased by 23.5 percentage points. There was a similar increase among married men who were listeners.
- Among married women in the Amhara and Addis Ababa regions who were listeners, there was a 29.3 percentage point increase in those who are currently using family planning methods. Among non-listeners, current use increased by 11.7 percentage points. A similar increase occurred among married men who were listeners.
- Spousal communication about family planning issues among currently married women climbed from 33% to 68%.
- There was a corresponding decrease of 70 percent in the proportion of respondents to the surveys who said that the decision to use family planning should be made solely by the husband.
- There was a 50% increase in communication between mothers and their children about sexuality issues.
- Male listeners sought tests at four times the rate of non-listeners.
- Female listeners sought HIV tests at three times the rate of non-listeners.
- There was a 51.7 percentage point increase among men and 20.8 percentage point increase among women in recognition of the importance of girls' education.
- There was a 34.7 percentage point increase among men and 13.1 percentage point increase among women in the belief that women are fit to hold public office.

PMC actually ran two radio serial dramas from 2002 through 2004. *Yeken Kignit* was broadcast in the Amharic language program, while a second program, *Dhimbibba* (“Getting the Best Out of Life”), was broadcast in the Oromiffa language. As of November 2004, 63 percent of new clients seeking reproductive health services at 48 clinics in Ethiopia reported that they were listening to one of PMC’s serial dramas. In fact, 26 percent of new clients named one of PMC’s programs as the primary motivating factor for seeking services. Of new clients who cited radio programs as the impetus for seeking services, 96 percent said that they were motivated by one of PMC’s programs.

The outpouring of emotion in Ethiopia, in response to PMC’s programs, has been overwhelming. Ethiopia’s news media have run almost a hundred stories on the soap opera phenomenon PMC created. From all over the country – and even beyond the borders of Ethiopia – 15,000 letters have poured in to PMC’s office in Addis Ababa.

An excerpt from one listener’s letter shows the impact PMC’s programs are having on people’s lives across Ethiopia: **“I am the mother of many children. Nobody cares about the desperate situation I am in. Instead, what I hear from the women around me is that a woman gets respect when she is a mother. It was while your radio program was discussing programs like family planning and spaced childbirth that I learned about things that affect me very much, including the value of small families.”**

A letter from a listener discusses how the program has made her daughter safer from abduction: **“The story of Wubalem reflects clearly the harmful traditional practices in our country such as abduction and sexual violence. These practices have prevented us from sending our girls to school. We were afraid that they would be abducted. Our first child was married at the age of 14 after she was abducted. We were worrying for years as we thought that our second child would face a similar fate. The radio drama focusing on abduction and sexual violence that you have presented and the discussions conducted on these topics have aroused considerable popular indignation. The people have now strongly condemned such inhuman traditional practices. Unlike in the past, special punitive measures have been taken by community people against offenders involved in such crimes. As a result, we have no worry in sending our girls to school. Our children go to school safely and return unharmed. Please keep the program on the air.”**

Because entertainment programming (radio or television, depending on the coverage of each medium in any country) attracts the largest audiences, it is particularly important to utilize entertainment media for disseminating information about reproductive health issues.

PMC works to develop comprehensive media campaigns in the countries where it is carrying out projects. Because of the strong evidence of their effectiveness, social-content serial dramas are, in most instances, a centerpiece of the strategy in any country. The strategy uses the best of what has been done in the past, and builds on it in each country with intensive coverage of issues related to sexual risk behavior. In this way, PMC intends to contribute to rapid change in the health-related behavior of people worldwide.

PMC provides people with entertainment and information to help them make informed decisions without telling them what to do. PMC’s approach emphasizes non-coercive, informed decision-making, tailored in each case to local needs and circumstances. Programs are designed to promote human health and dignity by providing education and examples of various alternatives and their consequences.

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