Media Interventions to Promote Responsible Sexual Behavior

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While the media have been used effectively to promote sexual responsibility in other countries for decades, few such opportunities have been seized in the United States. Mass media may be especially useful for teaching young people about reproductive health because elements of popular culture can be used to articulate messages in young people’s terms, in language that won’t embarrass them and may even make safe sex more attractive. Media can potentially change the way people think about sex, amidst cultural pressures to have sex at a young age, to have sex forcefully, or to have sex unsafely. Information can be communicated through a variety of channels—small media (e.g., pamphlets, brochures, and the Internet) and mass media—and in a variety of formats—campaigns, news coverage, and educational messages inserted into regular entertainment programming. Several international studies show that exposure to family planning messages through television, radio, and print media are strongly associated with contraceptive use. Domestically, safe sex media campaigns have been associated with increased teen condom use with casual partners, and reductions in the numbers of teenagers reporting sexual activity. Due to private ownership and First Amendment concerns, U.S. sexual health advocates have been working with the commercial media to incorporate subtle health messages into existing entertainment programming.

The amount of time and attention that young people give to mass media and popular culture provides an ideal opportunity for communicating about sexual health. While the media have been used effectively to promote sexual responsibility in other countries for decades, few such opportunities have been seized in the United States. In Europe, three fourths of adult respondents to a recent survey said they learn about STDs from TV, books, or magazines, while in the United States only one fourth said they receive this information from the media (ASHA, 1996; Brown, Steele, & Walsh-Childers, 2001). In India, Africa, and Latin America, popular soap operas that included plots about family planning and HIV prevention have reportedly increased clinic visits and changed health behaviors (Johns Hopkins Center for Communication Programs, 1995; Katende, Bessinger, Gupta, Knight, & Lettenmaier, 2000; Rogers et al., 1999; Singhal & Rogers, 1999; Vaughan & Rogers, 2000).

Health advocates have developed several basic strategies for working with the media in the interest of healthier media consumers: (a) mass media campaigns (using social marketing and entertainment education), (b) embedded messages, (c) media advocacy, (d) media literacy, (e) small media, and (f) Internet interventions. Each strategy has its strengths and weaknesses, but results suggest that such intentional uses of the media in the interest of sexual health will be valuable. Several international studies have found that women who view more family planning messages on television, radio, and print media are more likely than those who see fewer messages to use contraceptives (Bankole, 1999; Bankole, Rodriguez, & Westoff, 1996; Kincaid, 2000). In some cities in the United States, safe sex media campaigns have contributed to an increase in teen condom use with casual partners, and reductions in the numbers of teenagers reporting sexual activity (Alstead et al., 1999).

Mass Media Campaigns

Public information campaigns are the most common form of intentional use of the mass media for public health purposes. Effective health-oriented campaigns typically are similar to campaigns for commercial products in that they use a number of media channels and are designed to generate specific effects in a relatively large number of people within a specified period of time (Rogers & Storey, 1987).

One of the most promising ways of reaching the public is to develop entertaining programming for radio, television, movies, or music that features socially responsible messages. Entertainment education, also known as enter-educate, prosocial entertainment, or edu-tainment, is used throughout the world to put educational content into entertaining formats to increase knowledge, create favorable attitudes, and change overt behavior concerning an educational issue (Singhal & Rogers, 1999). Building on Bandura’s (1986) social learning theory, this approach presents an idea—such as family planning—through drama, and provides lessons on the rewards of a new behavior and the disadvantages of an old one.

Today, entertainment education is used to promote reproductive health in more than 20 countries and at least six U.S.-funded agencies are actively involved: the Academy for Educational Development (AED), Johns Hopkins University/Population Communication Services, Population Communications International (PCI), Population Services...
International (PSI), Program for Appropriate Technology in Health (PATH), and the United Nations Children’s Fund (UNICEF).

Data from a field experiment in Tanzania on the effects of an entertainment-education radio soap opera, “Twende na Wakati” (“Let’s Go With the Times”), on the adoption of family planning, showed significant reported behavior change. In 1995, 22% of listeners reported that they adopted family planning as a result of listening to the radio soap opera. The percentage of married women in the treatment area who reported using a family planning method increased from 29% in 1993 to 41% in 1997. Data from 70 clinics showed a significant effect from 1993 to 1995 for both new and continuing adopters of family planning (Rogers et al., 1999).

“Twende na Wakati” was also examined for effects on knowledge, attitudes, and adoption of HIV/AIDS prevention behaviors, another theme of the soap opera. An experimental design and five annual surveys showed a reduction in the reported number of sexual partners by both men and women, and increased condom adoption. The radio soap opera influenced these behavioral variables through certain intervening variables, including (a) self-perception of risk of contracting HIV/AIDS, (b) self-efficacy with respect to preventing HIV/AIDS, (c) interpersonal communication about HIV/AIDS, and (d) identification with, and role modeling of, the primary characters in the radio soap opera. To assess an individual’s sense of efficacy (a belief that the individual can control his or her future) with respect to HIV/AIDS, respondents were posed the hypothetical question, “What would you do if a doctor told you that you had HIV/AIDS?” In 1993, 21% of respondents in the treatment area gave an efficacious response to this question (the individual would stop having sexual intercourse or always use condoms). This figure increased 10 percentage points in the treatment area by 1995, while declining by 11 percentage points in the comparison area over the same period. Similarly, from 1993 to 1995 the percentage of respondents in the treatment area who felt they were not at risk for HIV/AIDS fell from 21 to 10, while increasing from 10% to 15% in the comparison area (Vaughan & Rogers, 2000).

In Nigeria, in 1993, women who had seen pro-family-planning music videos featuring the popular music artist King Sunny Adé were significantly more likely (11%) to be using modern contraceptives compared to those who did not watch the programming (Bankole, 1999; Bankole et al., 1996). In Uganda, in 1996, 60% of young men and women exposed to the Uganda HIV/AIDS Youth Communication Campaign reported taking some HIV prevention action as a result: 27.2% said they abstained from sex, 21.4% said they started using condoms, and 4.7% reported discussing safer sex (Katende et al., 2000).

Relatively few such campaigns have been conducted domestically. One exception is the “Campaign for Our Children,” designed to reduce teen pregnancy in Baltimore, Maryland in the mid-1980s. The campaign, which included dramatic billboards and television and radio spots, has been credited with contributing to a significant decrease in teen pregnancies (National Campaign to Prevent Teen Pregnancy, 2001).

Project ACTION, a U.S. social marketing campaign modeled after a project in Zaire, is believed to have increased teen condom use with casual partners, from 72% to 90%, and to have reduced the number of teenagers reporting sexual activity, from 82% to 75% in Portland, Oregon. The campaign, which used public service announcements (PSAs), condom vending machines, and teen talk shows about AIDS, was launched by Population Services International (PSI) in 1992 to promote teenage condom use. Vending machines were selected as the primary distribution mechanism, based on focus groups that showed that condom access was a key barrier to safe sex. A private advertising agency developed TV spots that featured teens fantasizing about sexual encounters being “showered” with condoms falling from the sky. The final words directed viewers to condom vending machines: “Don’t even THINK about sex...without a condom. Find this condom machine.” With the help of local TV and radio stations, safe sex messages aired on 2,800 minutes of public service announcements, 78 minutes of news coverage, and 90 minutes of radio. More than 85,000 condoms were sold through the vending machines from 1992 to 1994 (AIDS Alert, 2000).

**Embedded Messages**

Due to private ownership of the media and First Amendment concerns, it is difficult to disseminate long-running prosocial messages or shows that are produced by government or nonprofit agencies in the United States. So, rather than producing whole shows, U.S. sexual health advocates have been working with the commercial media to incorporate subtle health messages into existing entertainment programming. AIDS awareness messages have appeared on soap operas like “General Hospital,” emergency contraceptive information on the popular drama “ER,” and procondom messages on “Friends.” Several nonprofit agencies maintain Hollywood offices to work with producers to embed health messages, including Population Communication International (PCI), the National Campaign to Prevent Teen Pregnancy, and the Media Project, a joint effort by Advocates for Youth and the Henry J. Kaiser Family Foundation.

Recently, these groups assisted writers for the popular teen-targeted shows “Dawson’s Creek” and “Felicity” in developing episodes dealing with teen sexual health and date rape. Earlier, the long-running hit show “Beverly Hills 90210,” with editorial consultation from the Media Project, featured high school characters who either waited to have sex or used contraceptives (Folb, 2000). The Centers for Disease Control and Prevention (CDC) and PCI have sponsored a “Soap Summit” awards ceremony in Hollywood since 1995. Soap Summits provide the writers, producers, and executives of daily network soap operas with a forum for creative discussion on current social and health issues,
including population, teenage sexuality, violence against women, sexually transmitted diseases, death and dying, and assisted fertility. The most recent Soap Summit, held in October 2000, covered body image issues and AIDS. The “Sentinel for Health Award for Daytime Drama,” created by the CDC, was given to ABC-TV’s “One Life To Live” for a storyline focusing on breast cancer.

Although the impact of such messages has not been evaluated systematically, preliminary results suggest that embedded messages can be effective. The Harvard School of Public Health’s campaign against drunk driving generated more than 80 television episodes that mentioned or showed designated drivers, and is believed to have increased awareness and use of designated drivers (DeJong & Winsten, 1999). A rape hotline number presented at the end of a two-part “Felicity” episode on date rape received more than 1,000 calls. Viewers’ knowledge of emergency contraception increased 17% after “ER” showed a date rape victim being treated with a morning-after pill (Brodie & Foehr, 2001; Folb, 2000; MacGregor, 1999).

The insertion of socially responsible messages in entertainment media is a potentially powerful way of affecting sexual behavior, because the “selling” of a particular behavior isn’t as obvious as it may be in a public service advertisement and, thus, audiences may not be as likely to resist the message. These messages also are more likely to reach and attract attention, compared to PSAs that are rarely shown at strategic times and are not aired frequently enough. The dramatic formats allow more time for developing more complex messages, although in the United States it is rare to have a sustained storyline about a sexual health topic. The evaluation of the “ER” episode about emergency contraception and another about the Human Papilloma Virus (HPV) showed that audiences have a short memory for information that does not endure over a longer period of time. Within 2 months of the airing of the “ER” emergency contraceptive episode, awareness of the method had dropped back to pre-episode levels (Brodie et al., 2001).

The primary drawback to such a strategy in the United States, however, is that the media are unlikely to publicize controversial messages or content that may frighten advertisers away (Wallack, Dorfman, Jermigan, & Themba, 1993).

Media Advocacy

Some health activists also have begun to use the mass media as tools for bringing health issues to the attention of the public and policy-makers. Rather than waiting for the media to cover an issue, health activists generate news that attracts the attention of the news media (Wallack et al., 1993). The focus of this approach is typically on public policies that affect health rather than on individual health behaviors. The underlying rationale is that individuals will not be able to change unhealthy behavior unless policy and systematic changes support the desired behaviors. Thus, for example, public policies that affect access to and affordability of sexuality education, contraception, and abortion could be important topics for media advocacy.

Media Literacy

Other media education strategies borrow key concepts of the media literacy movement, an educational effort to give people (usually school children) the tools to critically analyze media messages, and to develop messages they would rather see and hear about. Media educators believe that understanding how “reality” is constructed through the mass media means understanding the production process (including technological, economic, bureaucratic, and legal constraints), the text, and the audience/receiver/end-user. By gaining critical analysis and viewing skills, and participating in media production, media literacy is believed to lead not only to a greater understanding of the stories (including sexual scripts) that media tell and the sources they use, but also may result in personal changes, such as improvements in self-esteem (e.g., the ability to say “no” to sex), taking responsibility for one’s life (e.g., practicing safe sex), sharing experiences with others (e.g., negotiating condom use), and learning the ability to express oneself (Kawaja, 1994).

Basic precepts of media literacy include: (a) media are constructed, and construct reality, (b) media have commercial implications, (c) media have ideological and political implications, (d) form and content are related in each medium, (e) receivers negotiate meaning from the media, and (f) teaching media literacy should be hands-on and participatory.

Unfortunately, few media literacy efforts and no sexually relevant curricula have been empirically evaluated. However, a few early studies of other kinds of media literacy curricula suggest that such efforts have value. Singer and Singer (1998) used a case-control design to study a general media literacy curriculum involving eight lessons and 10-minute videotapes. Elementary school students exposed to the lessons made significant progress in television literacy, compared to students in a control group. In another experimental study, Austin and Johnson (1997) found that media literacy training on alcohol advertising increased third-graders’ understanding of the persuasive intent in alcohol advertising, and social norms for alcohol use.

Small Media

Small media, delivered through interpersonal interaction, such as brochures, pamphlets, classroom-based curricula, or documentaries, can also have an impact on sexual attitudes and behavior. For example, one of the CDC’s five-city AIDS Community Demonstration Projects used role-model stories, told in pamphlets, flyers, and community newsletters, to promote safe sex behaviors among women living in a low-income housing project in Long Beach, California. Each story targeted individuals at different stages along the continuum of behavior change—from risky sexual behavior to consistent and correct condom use. The pamphlets were based on true life stories of audience
members (who were injecting-drug users, partners of drug users, and sex workers) elicited through in-depth interviews (Corby, Enguianados, & Kay, 1996). More than 200 role model stories, distributed on 175,000 flyers, told about people in the community who had taken positive steps toward the campaign goal of consistent and correct condom use, providing role models that were believable and similar to members of the audience (Corby et al., 1996).

Internet Interventions

The unregulated nature of the Internet also provides a unique opportunity to address subjects that are elsewhere deemed taboo, although this open status may soon give way to screening devices and other regulations (Cate, 1998; Hafner, 1998). Several exemplary sexuality education sites are specifically designed for teenagers: Planned Parenthood Federation of America’s www.teenwire.org, Sex, Etc.’s www.sxetc.org, and ASHA’s www.iwannaknow.org.

The Internet may be especially useful in circumstances where alternative sources of sexual information are limited. Recent legislation in many Southern states (such as North Carolina, Virginia, Texas, etc.) mandates that school health educators teach abstinence until marriage, unless a broader curriculum is approved in public hearings by parents and local school boards. Taboos on discussing sexuality and other important health topics leave many adolescents unarmed with preventive skills.

Not only is there a need and a possibility for providing educational information (about relationships, negotiation skills, and sexual health) on the Internet, but the medium itself may be optimal for this project due to the (currently) unregulated nature of its content. The Communication Decency Act of 1996 was declared unconstitutional by the Supreme Court for violating the First Amendment, which mainly governs adult rights to information and free speech. Nonetheless, federal attempts are ongoing to regulate children’s access to sexual content on the Internet.

Further, the Internet’s uniquely intermediate status between a mass medium and interpersonal communication also make it an ideal venue for communicating sensitive information. The Internet may allow audience segmentation beyond a level that has heretofore been possible or economically feasible. Mass media have been able to address audiences by broad categories, but the nature of a mass medium, traditionally, has made it difficult to segment audiences. The Internet is far reaching, like a mass medium, yet interactive, like a conversation. It can be used to reach large audiences with individualized messages.

In addition, the Internet has the advantage of being able to relay information on demand, meeting health clients’ immediate needs or answering questions when their needs occur. This consumer-driven feature of the Internet makes it an especially important service for issuing reproductive health information to young people, who may not be connected to health care services and who may lack transportation or resources to contact providers. The Internet can facilitate personal decision-making—an important factor in addressing sexual risks—through personal risk assessment, and can help individuals evaluate potential outcomes in combination with personal circumstances. The Internet is unique in its ability to provide online peer support and informational exchange through message boards, chat rooms, and e-mail. These online peer discussions constitute the most common health-related uses of the Internet; they enable individuals with specific health conditions or concerns to communicate with others in similar circumstances (Eng & Gustafson, 1999). The Internet can help minimize health costs by enabling individuals to manage some health problems on their own. This preventive nature of Internet health services is especially important for teenagers who often lack access to health facilities. Finally, another advantage of the Internet is its ability to promote self-efficacy and model communication skills—key components of healthy adolescent development, and prerequisites to safe sex practice and STD prevention.

Clearly, a few limitations of using the Internet to deliver health information remain. For one, inaccurate or inappropriate information may be available. Another is the risk of violations to privacy and confidentiality as increasing amounts of personal information are shared online. Third, the opportunity to provide sexual health information on the Internet may be limited due to the increasing use by libraries and school systems of software such as Cyber Patrol, designed to block out sexually explicit information. Because this software frequently uses key word searches to block out sensitive information, sexual health sites can also be blocked (Hafner, 1998). Perhaps the greatest impediment to using the Internet as a vehicle for reducing adolescent sexual health risks has to do with access. Unfortunately, those most at risk—homeless and runaway youth, African American youth, and low-income populations—are the least likely to have access to the Internet. (A recent Commerce Department study indicated that while 32% of White families have Internet access in their homes, this is true for only 12% of African-American families; Saunders, 1999.) As Internet health applications become more widespread, those without access to these technologies may increasingly fall behind in their ability to access information and care.

Evidence on the effectiveness of Internet health interventions is lacking, but preliminary results show that some patients are more likely to be truthful to a computer than a clinician when reporting HIV-risk factors (Locke et al., 1992). Computer access to support groups and decision guidance on the Internet have been shown to positively impact women with breast cancer and persons with AIDS (Eng & Gustafson, 1999). Computer programs that promote shared decision-making have been shown to reduce the use of surgery and high-cost health interven-
tions (Barry, Cherkin, Chang, Fowler, & Skates, 1997). Other studies indicate that some patients prefer online counseling to face-to-face interaction (Alemi et al., 1996).

Evaluating Media Interventions

Substantial debate has occurred in recent years about whether health communication efforts have any effect on viewers at all, if so, what the nature of these effects is. Due to the complexities and costs of conducting scientific evaluations of mass media campaigns, most large-scale health communication programs rely on self-report data to track their effects. Public health experts question the methods employed, pointing to at least two major flaws in how impact is evaluated: the lack of random sampling, and the lack of long-term studies. When the mass media are the vehicle for dissemination, the large-scale nature of such interventions makes them difficult to assess in isolation from other societal variables (Atkin & Marshall, 1996). When behavior change is the goal, it is difficult and expensive to set up studies that will track participants long enough to be able to detect changes in behavior, which typically occur gradually.

Another shortcoming is that many studies of mass media campaigns have blurred the distinction between cause and effect by not adequately accounting for self-selection bias. When viewers of a pro-family-planning TV program report contraceptive use, it is unclear whether they were drawn to the program in the first place because they already believed in family planning, or whether the program actually caused them to change their beliefs (Freedman, 1996).

Several groundbreaking scientific studies have linked sexual health behavior and media exposure. In Tanzania, PCI’s “Twende na Wakati” was subject to experimental-control analysis, with longitudinal data (Vaughan & Rogers, 2000). Surveys in 1993 and 1995, with roughly 3,000 respondents per survey, measured a greater decline in reported number of sexual partners for both men and women and a greater increase in the use of condoms in those areas where “Twende na Wakati” aired, compared to areas where the show was not broadcast. When asked what they did as a result of listening to the program, 16% of listeners said, spontaneously, that they adopted a method of HIV/AIDS prevention.

One solution to the evaluation challenges may be to take on faith the possibility that public health campaigns are good, and to concentrate study designs on examining how they achieve effects and which approaches are most useful. By switching the focus of a study from whether to how, the treatments in two areas need only be different; no group needs to be denied the benefits of a prosocial media campaign (Bertrand & Kincaid, 1997).

Lessons Learned

Numerous campaigns have experimented with key strategies to overcome the obstacles to providing reproductive health services to targeted populations, and especially to reach youth. Community mobilization can diminish social disapproval and intimidation (AIDS Alert, 2000; Alstead et al., 1999). Gearing reproductive health messages to specific subgroups of the population, through audience segmentation and message tailoring, can increase access to health services and overcome reluctance (Backer, Rogers, & Sopory, 1992). Motivational media campaigns using clear, simple messages; multiple media channels; and positive images can increase awareness about the risks of being sexually active and teach people how to take preventive measures (Kirby et al., 1999). In all health communication programs, the involvement of members of the target audience as educators, coordinators, and program developers is considered key to success (AIDS Alert, 2000).

Sexual health campaigns will be most effective when the media are complemented by other activities at the individual, community, and policy levels, and when the campaign can be sustained over the long term (McGuire, 1960). The messages provided in safer sex or pregnancy prevention media campaigns will get lost in the sea of competing messages that promote irresponsible and unhealthy sexual behavior unless they are repeated extensively and reinforced by service providers and public policy. Without a link to health services—such as a hotline number—it is unlikely that a media campaign will be successful.

One of the paradoxes of U.S. culture is that sexual desire is used to sell everything from motorcycles to ice cream while the sexuality of youth is denied. As the federal government increases funding for abstinence-only-until-marriage sex education in the public schools, sexually transmitted disease rates among young people soar. The media could be an important source of information and models of healthy sexuality for young people. Unfortunately, a number of barriers exist primarily because the media are first and foremost profit-making entities that are reluctant to take on controversial issues that may alienate viewers and advertisers. In the absence of a more open discourse about sexuality in the culture, the media’s sexual titillation will continue to sell products and attract consumers.

Nevertheless, a number of recent efforts in the United States and in other countries suggest that the media could help shift cultural norms toward a healthier view of sexuality. Previous work shows that, to be successful, media-based campaigns for sexual health should:

1. Conduct formative research to define campaign goals, select target audiences, identify media channels, and refine the campaign strategy.
2. Tailor messages so they speak to the audience mem-

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2 In large-scale and national mass media campaigns, random assignment to control and treatment groups is essentially impossible, due to the areas of mass media transmission. Quasi-experimental designs are more feasible, but they, too, do not resolve the ethical difficulties of denying a control community the “treatment” of health information.

3 Although Vaughan was working for PCI, the creator of the soap opera, this analysis is considered one of the best done in entertainment education history. Due to language and radio access differences, Vaughan and Rogers were able to study communities not exposed to the program without actively denying anyone the treatment.
bers’ “world view,” and use credible sources and appropriate and understandable language.

3. Ensure exposure by working with media gatekeepers and using cost-effective approaches (e.g., radio, billboards, transit cards) as well as entertainment and news. News stories bring important third party endorsement and can be achieved by creating news events.

4. Frame the issues in terms important to policymakers, thus taking advantage of the agenda-setting function of mass communication.

5. Combine media and community strategies to leverage program activity in the community. Health communication campaigns may induce the target audience to participate in face-to-face interventions and self-help programs; enroll program participants and volunteers; announce availability of self-help materials and events; reinforce instruction provided by community programs, schools, and so forth.

6. Apply behavior change models—begin by increasing awareness and move on to increase knowledge and change beliefs, teach new skills, and sustain behavior change.

7. Evaluate, with attention to complex media effects, not only behavior change, but also collecting data on other indicators, preferably using a control group.

**References**


