Adolescents, Sex, and the Media

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Something’s in the air, and I wouldn’t call it love. Like never before, our kids are being bombarded by images of oversexed, underdressed celebrities who can’t seem to step out of a car without displaying their well-waxed private parts to photographers.1

One erect penis on a U.S. screen is more incendiary than a thousand guns.2p66

[My doctor’s] only gone to one medical school, but if you go online, you can get advice from all over the world.3p17

In the absence of effective sex education in the United States, the media have arguably become the leading sex educator for children and teenagers (Figure 1). Given the fact that American media are extremely suggestive and rarely responsible, this is not a healthy situation. Previous research was convincing in showing that the media contribute to teenagers’ sexual attitudes and beliefs about sex and sexuality.4 Now, new research is beginning to show that the media may contribute substantially in a cause-and-effect manner to the risk of early intercourse and even pregnancy among teenagers.5,6 Given the risks of early sexual activity—teen pregnancy, sexually transmitted infections (STIs), HIV and AIDS, and so forth—any factor that might have an impact and that could be lessened is important to consider.7

WHY IS THIS AN ISSUE?

Although the teenage pregnancy rate in the United States has declined significantly in the past 2 decades—34% between its peak in 1991 and 20058—it remains the highest in the Western world. It is 10–15 times higher than in other developed countries with the lowest birth rates.9 In 2009, approximately 410,000...
15–19-year-old female teens—4% of all female teens in that age group—gave birth.\textsuperscript{10} Most of these are unintended pregnancies,\textsuperscript{11} and the total cost of all such pregnancies in women of childbearing age is an estimated $11 billion a year.\textsuperscript{12} Approximately 18% of women having abortions in the United States are teenagers and one-third are young adults, ages 20–24 years.\textsuperscript{13}

Similarly, rates of adolescent sexual activity have leveled off but remain problematic. According to the 2009 Youth Risk Behavior Survey (YRBS)\textsuperscript{14}:

- In 2009, nearly half (46%) of all high school students reported ever having had sexual intercourse. This represents a decline from 54% in 1991.
- More than one-third had had sex in the previous 3 months. Six percent said that they had first had sex before age 13. Fourteen percent reported having had 4 or more sexual partners.
- Condom use at last intercourse has increased since 1991 but has plateaued at 61%; birth control pill use has decreased to 20%.

Rates of other sexual activities, especially oral sex, are less well investigated. The YRBS, for example, does not ask about oral sex. One study of 580 ninth graders found that 20% had had oral sex.\textsuperscript{15} A large 2002 study that included 10,000 15–19-year-olds in found that 55% had had oral sex by age 19.\textsuperscript{16}

With sexual activity obviously comes the risk of STIs, and teenagers and young adults have a disproportionate percentage. Of the 18 million STIs diagnosed annually in the United States, approximately half occur in young people aged 15–24 years, even though they represent only 25% of the sexually experienced population.\textsuperscript{17}
One might think that with all of these risks to young people's health, there might be a public health impetus to educate teenagers in an intensive and comprehensive way about sex. In the United States, however, that has not been the case. The first 8 years of the new millennium were devoted to abstinence-only sex education, which has been shown to be ineffective except with 12-year-old black boys in inner city Philadelphia. Congress has spent $1.5 billion on programs that don't work and are ineffective. Comprehensive sex education—which does work—has been marginalized. Although most of the nearly 2800 15–19-year-olds surveyed in the 2006–2008 National Survey of Family Growth reported receiving sex education, 30% of females and 38% of males reported receiving no information on methods of birth control.

Research shows that parent-child communication can clearly be effective in preventing early sexual activity among teenagers. But parents seem to be caught in the middle. Although the majority of parents favor sex education in schools—90% say it is very or somewhat important in one national survey of parents in 2004—half of parents of 10–12-year-olds have not talked about peer pressure to have sex or how to prevent pregnancy and STIs. In a separate Kaiser survey, two-thirds of parents said they are very concerned about their children being exposed to too much inappropriate content in the media, and 55% said that sex in the media was contributing a lot to teenagers’ behavior. As the senior vice president of the Kaiser Family Foundation noted, “The ‘big talk’ isn’t what it used to be. It now needs to be ‘supersized.’”

“NEW” MEDIA VERSUS “OLD” MEDIA

Despite the seeming tidal wave of “new” media in the past decade (Internet, cell phones, iPads, social networking sites, etc.) (Figure 2), “old” media—TV, movies, and videos—still predominate among children and adolescents. The 2009 Kaiser survey of more than 2000 8–18-year-olds found that they spent an average of more than 7 hours a day with a variety of different media, but TV remains predominant (Figures 3 and 4). What has changed is that TV and movies may no longer be viewed on a TV set but rather on a computer, cell phone, or iPad. Nielsen reports that time spent watching TV and video online rose 45% from 2010 to 2011. TV viewing is actually at an all-time high. Although teens watch less TV than adults (who average nearly 35 hours/week), they still watch an average of nearly 24 hours per week.

But there is no question that the topography of the media landscape is changing, particularly among teenagers:

- Teenagers watch an average of more than 7 hours of TV a month on mobile devices.
- Teens ages 13–17 send an average of 3364 texts per month and spend more time texting than talking on the phone. Although adults have caught up to
teens in social networking, teens are still heavier users—more than three-fourths of 12–17 year-olds have accessed social networks or blogs.

- American 18-year-olds average nearly 40 hours a week online from their home computers, including 5½ hours of streaming video.
- 93% of teenagers now use the Internet. In a 2009 survey, 7% of 12–17-year-olds owned a cell phone, and 80% owned an iPod and a game console.

**HOW MUCH SEXUAL CONTENT IS THERE IN THE MEDIA?**

Clearly, media and teens’ use of them are in a state of flux. Unfortunately, the last content analysis of sexual content on American TV was 6 years ago, but its findings are probably still relevant. More than 75% of primetime TV programs contain sexual content, yet only 14% of sexual references mention risks or responsibilities of sexual activity (Figures 5 and 6). Talk about sex on TV can occur as often as 8–10 times per hour, and the amount of sexual content continues to
Figure 3. Kaiser Media Use (Source: Report: Generation M²: Media in the Lives of 8- to 18-Year-olds. (#8010), The Henry J. Kaiser Family Foundation, January 2010. This information was reprinted with permission from the Henry J. Kaiser Family Foundation. The Kaiser Family Foundation, a leader in health policy analysis, health journalism and communication, is dedicated to filling the need for trusted, independent information on the biggest health issues facing our nation and its people. The Foundation is a non-profit private operating foundation, based in Menlo Park, California.)
rise. Remarkably, shows targeted at teens actually have more sexual content than adult shows.

Reality TV is also becoming more common and is often filled with sexual innuendo. In 1997, there were only 3 reality dating shows; by 2004 there were more than 30. Shows such as *Temptation Island* bring contestants together with the sole purpose of seeing who “hooks up.”

Several other “old” media popular with teenagers are also rife with sexual innuendo: In popular music, an analysis of the 279 most popular songs in 2005 revealed that 37% contained sexual references, many of which were degrading to women. Virtually every R-rated teen movie since the 1980s has contained at least 1 nude scene and often several references to intercourse. Teen magazines
devote an average of 2.5 pages per issue to sexual topics, but the primary focus seems to be on when to lose one's virginity. In mainstream advertising, women are as likely to be shown in suggestive clothing (30%), partially clothed (13%), or nude (6%) as they are to be fully clothed.

“New” media have brought new concerns to the forefront—among them, pornography, “sexting,” and displays of risky behavior on social networking sites. One national sample of 1500 10–17-year-olds found that nearly half of the Internet users had been exposed to online pornography in the previous year. One recent study of MySpace profiles revealed that nearly one-fourth of them referenced sexual behaviors. “Sexting”—or the transmission of nude pictures via text message—may not be as common as previously thought, however. A national survey of nearly 1300 teens in 2008 put the figure at 20%. However, a very recent national study of 1560 Internet users ages 10–17 puts the figure at 1% of youth who reported sending sexual images of themselves and 5.9% of youth who reported that they had received sexual images.
WHAT DOES THE RESEARCH SHOW?

Abundant research documents that the media can exert a powerful influence on children and teenagers.\(^4\) Probably the two main mechanisms are giving young people “scripts” of how to behave in novel situations (script theory)\(^48\) and by making certain risky behaviors seem normative (“super-peer theory”).\(^49,50\) Dozens of studies show that teenagers learn information and attitudes about sex and sexuality from the media (Figures 7 and 8), and that heavy consumers of media are more likely to think that real human behavior mimics behavior seen on TV and in movies (the “cultivation hypothesis”).\(^42,51,52\)

But most studies of teenagers and media are correlational—taking a sample at one point in time and investigating if heavily exposed subjects are affected more than lightly exposed subjects. Such research yields possible associations but not cause-and-effect. There are now 17 longitudinal correlational studies that allow cause-and-effect conclusions to be drawn, and virtually all of them show an impact of

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Figure 6. Kunkel, sex. (Source: Sex on TV 4: A Biennial Report to the Kaiser Family Foundation. (#7399), The Henry J. Kaiser Family Foundation, November 2005. This information was reprinted with permission from the Henry J. Kaiser Family Foundation. The Kaiser Family Foundation, a leader in health policy analysis, health journalism and communication, is dedicated to filling the need for trusted, independent information on the biggest health issues facing our nation and its people. The Foundation is a non-profit private operating foundation, based in Menlo Park, California.)
sexual content in the media on adolescents’ sexual behavior (Table 1). No study is perfect, however. The best study looked at the total media diet of teenagers (TV, movies, music, magazines) but omitted the Internet. Studies range from 1–3 years in follow-up and control for a whole host of other factors known to be associated with early sexual intercourse (eg, household composition, socioeconomic status, parental education, academic achievement, gender, pubertal status, parental styles, religiosity, etc.). Overall, the findings show a doubled risk for early sexual intercourse for teens exposed to more sexual content. Several studies have found that whites are affected and blacks are not, but the studies typically start assessing teenagers at age 14 and may miss the onset of sexual intercourse in blacks. Studies have also found a relationship between sexual content and noncoital behavior, multiple sexual partners, STIs, teen pregnancy, and sexual aggression.

The 14 studies vary in which media they assess. Most have assessed TV, a few have examined a variety of different media, two have examined rock music and music videos, one examined the protective role of parental co-viewing, and only three have examined Internet pornography and other X-rated material. To date, there are no longitudinal studies on the behavioral impact of sexting or displays of risky behaviors on teenagers’ social networking profiles.
Figure 8. ISIS (Source: Boyar R, Levine D, Zensius N. TECHsex USA: Youth Sexuality and Reproductive Health in the Digital Age. Oakland, CA: ISIS, Inc; 2011. Available at: http://www.isis-inc.org/)
Table 1. Recent Longitudinal Studies of the Impact of Sexual Content on Sexual Behavior

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>Media Type</th>
<th>Duration</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Wingood (2003)</td>
<td>480</td>
<td>14–18 years old Rap videos</td>
<td>1 year</td>
<td>Exposure to sexual rap videos predicted multiple partners females</td>
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<td>Collins (2004)</td>
<td>1792</td>
<td>TV</td>
<td>1 year</td>
<td>Sexual media exposure strongly predicted intercourse a year later</td>
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<tr>
<td>Martino (2005)</td>
<td>1292</td>
<td>TV</td>
<td>1 year</td>
<td>Exposure to popular teen shows with sexual content increased risk of intercourse 1 year later</td>
</tr>
<tr>
<td>Ashby (2006)</td>
<td>4808</td>
<td>Seventh-twelfth grades TV</td>
<td>1 year</td>
<td>&gt; 2 hours TV/day increased risk of intercourse by 1.35 times</td>
</tr>
<tr>
<td>Brown (2006)</td>
<td>1107</td>
<td>12–14 year olds Sexual media diet (TV, movies, magazines, music)</td>
<td>2 years</td>
<td>2 times increased risk of sexual intercourse for white teens with high sexual media diet</td>
</tr>
<tr>
<td>Martino (2006)</td>
<td>1242</td>
<td>12–17 year olds Music</td>
<td>3 years</td>
<td>Degrading sexual content predicted earlier intercourse</td>
</tr>
<tr>
<td>Bersamin (2008)</td>
<td>887</td>
<td>12–16 year olds TV</td>
<td>1 year</td>
<td>Parental coviewing of TV protective against early intercourse and oral sex</td>
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<tr>
<td>Bleakley (2008)</td>
<td>501</td>
<td>14–16 year olds TV, movies, magazines, music, video games</td>
<td>1 year</td>
<td>Positive and reciprocal relationship between media exposure and intercourse</td>
</tr>
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<td>Chandra (2008)</td>
<td>744</td>
<td>12–20 year olds TV</td>
<td>3 years</td>
<td>Sexual media exposure = a strong predictor of teen pregnancy</td>
</tr>
<tr>
<td>L’Engle (2008)</td>
<td>854</td>
<td>12–14 year olds Sexual media diet, including Internet</td>
<td>2 years</td>
<td>Peer and media exposure increased risk of early sex; stronger connection to parents and schools was protective</td>
</tr>
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<td>Peter (2008)</td>
<td>962</td>
<td>13–20 year olds Internet</td>
<td>1 year</td>
<td>Exposure to sexual content on the Internet increased sexual preoccupation</td>
</tr>
<tr>
<td>Brown (2009)</td>
<td>967</td>
<td>Seventh-eighth graders X-rated movies, magazines, Internet pornography</td>
<td>2 years</td>
<td>Early exposure to X-rated media predicts earlier onset of sexual intercourse and oral sex</td>
</tr>
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<td>Delgado (2009)</td>
<td>754</td>
<td>7–18 year olds TV, movies</td>
<td>5 years</td>
<td>Watching adult-targeted TV increases the risk of intercourse by 33% for every hr/day viewed at a young age</td>
</tr>
<tr>
<td>Hennessy (2009)</td>
<td>506</td>
<td>14–18 year olds TV, movies, magazines, music, video games, and media</td>
<td>2 years</td>
<td>Increased risk of intercourse for white teens</td>
</tr>
<tr>
<td>Bersamin (2010)</td>
<td>824</td>
<td>14–18 years old TV</td>
<td>1 year</td>
<td>Premium cable TV viewing associated with casual sex</td>
</tr>
<tr>
<td>Gottfried (2011)</td>
<td>474</td>
<td>14–16 years old TV—varying genres</td>
<td>1 year</td>
<td>No impact of overall sexual content found on sexual intercourse, but exposure to TV sitcoms did predict earlier sex</td>
</tr>
<tr>
<td>Ybarra (2011)</td>
<td>1159</td>
<td>10–15 year olds X-rated media (movies, magazines, Internet pornography)</td>
<td>3 years</td>
<td>Intentional exposure to violent X-rated material predicted a nearly 6 times risk of sexually aggressive behavior</td>
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This is difficult research to do, and it is instructive that there are more than 2000 studies on media violence but less than 100 on sexual content and adolescents’ attitudes and behavior. Parents and schools are shy about allowing access to adolescents, particularly young adolescents, for studies about sex, and both the federal government and private foundations have almost completely ignored funding for such research.

**CONTRACEPTIVE ADVERTISING**

One of the great paradoxes of American television is that sex is used to advertise everything from cars and shampoos to the new fall line-up of TV shows, but advertising contraceptives is nearly *verboten*. The United States is the only Western country that still subscribes to the myth that giving teenagers access to birth control—and media are one way of doing that—makes them more sexually active. In fact, one recent study found that 86% of the recent decline in teen pregnancies could be attributed to increased contraceptive use; only 14% was attributable to increased abstinence. There are now 8 peer-reviewed clinical studies that have found that giving teenagers freer access to condoms does not increase their sexual activity but does increase the use of condoms among those who are already sexually active. In 2007, both CBS and FOX refused to air a condom advertisement because it specifically mentioned preventing pregnancy rather than preventing HIV/AIDS. Two of the 6 major networks refuse to air condom ads, and 3 others air them only after 9 PM or 11 PM. Several networks also refuse to air ads for birth control pills, and the ones that do refuse to allow the words “prevent pregnancy” in such ads. This, despite the fact that a majority of American adults favor the advertising of condom ads on TV (71% of 1142 adults surveyed in a national sample done by Kaiser). In fact, more adults oppose beer ads (34%) than condom ads (25%).

**CAN MEDIA HAVE A POSITIVE IMPACT?**

Media represent just one avenue for sex education, but a potentially powerful one. The disconnect between sexual content and responsible sexual information seen in the 2005 Kaiser report (see Figure 6) is remediable. In fact, there have been several notable attempts by writers and producers to embed socially responsible information into mainstream programming (so-called “edutainment”):

- In 2002, *Friends* aired an episode about condoms. Twenty-seven percent of a national sample of teenagers reported seeing the episode and many talked with an adult about contraception as a result.
- The hit show *ER* featured storylines on emergency contraception and on HPV.
- A 2008 episode of *Grey’s Anatomy* explored the issue of treating HIV-positive women who are pregnant.
- Media giant Viacom has partnered with MTV to air public service announcements (PSAs) concerning HIV/AIDS and condom use.
Mass media have also been used to try to increase parent-child discussions about sex. In North Carolina, an intensive campaign of PSAs on radio, TV, and billboards delivered the message, “Talk to your kids about sex. Everyone else is.” A follow-up study found it to be effective.86

SOLUTIONS

If the United States and other Western countries are serious about lowering rates of teen pregnancy and nurturing sexually healthy adolescents, then the media and society’s use of media must change dramatically.

Clinicians

Clinicians are weighed down by many financial and time constraints. Nevertheless, the media have an impact on virtually every concern they have about teenagers: sex, drugs, aggressive behavior, obesity, eating disorders, sleep, school performance.87 Clinicians need to ask 2 media-related questions at every well-child and well-teen visit: (1) How much entertainment screen time do you spend, per day, on all possible screens? (2) Is there an Internet connection, TV, cell phone, or iPad in your bedroom? Research has shown that the presence of a bedroom TV increases the risk of substance use and early sexual activity by teens.88 According to a recent office-based study, just a minute or two of counseling about media could result in nearly 1 million more children and teenagers limiting their total media time.89 Clinicians can also use new media to access their patients in new ways: A $2 million grant from the National Institutes of Health is being used to produce twelve 20-minute soap opera vignettes that women can watch on their cell phones.90 Cell phone texts, social networking sites, and teen-friendly Web sites can be used to connect teenagers to much-needed health services.91,92

Parents

On a list of 100 problems parents want to fight with their children about, media usually would rank at about 112. Parents think their children and teenagers are “safe” if they are in their bedroom, watching TV or surfing online. The research says otherwise.87 Having clear rules about media, setting limits on screen time, and keeping media out of the bedroom are associated with fewer hours of media time for adolescents.93 Parents of younger children, especially preteens, need to understand that letting their children see PG-13 and R-rated movies may lead to harmful consequences.94,96 Parents also need to be more aware of social networking sites and maintain some vigilance.36,97,98

Parents also need to understand that sex education is not just a one-semester course taught in high school. It is a lifelong process—much of it nonverbal—and it includes how young parents refer to their baby’s genitalia when changing a
diaper, whether there is an “open bathroom door policy,” how parents are affectionate with each other, and how they react to something sexy on TV. Parents who understand media effects can use TV and movies wisely to replace “the big talk” with questions about what sexual content is being watched together (co-viewing).

Schools

With rare exceptions, schools have become relatively clueless in how to deal with “new” media and have done a poor job of sex education. Administrators seem to fear the aftershocks of permitting comprehensive sex education, yet the majority of American adults favor such programs over abstinence-only sex education. Schools also need to create intelligent rules to deal with Internet abuse and sexting. In particular, media literacy programs have been shown to be effective with both “old” media and “new” media.

Entertainment Industry

With the billions of dollars it rakes in every year, Hollywood needs to be more responsible in how it deals with the sensitive issues of sex and sexuality (Figure 9). Embedding prosocial health messages into mainstream programming does not interfere with anyone’s First Amendment or creative rights, yet it could potentially have major positive health consequences (Table 2). A dialogue between adolescent medicine clinicians; pediatricians; family practitioners; public health activists; and Hollywood writers, directors, and producers could be very useful.
Table 2.
Guide to Responsible Sexual Content in TV, Films, and Music

- Recognize sex as a healthy part of life
- Parent-child conversations about sex should be encouraged
- Demonstrate that not only the young, unmarried, and beautiful have sexual relationships
- Not all affection and touching must culminate in sexual intercourse
- Portray couples having sexual relationships with feelings of love and respect for each other
- Consequences of unprotected sex should be discussed or shown
- Use of contraceptives should be shown as a normal part of a sexual relationship
- Avoid associating violence with sex or love
- Miscarriage should not be used as a dramatic prop for resolving an unwanted pregnancy
- The ability to say “no” should be respected


Federal Government

From 2000–2008, the US government spent $1.5 billion on abstinence-only sex education, despite the fact that (1) multiple research studies showed it to be ineffective and (2) the media are hardly abstinence-only, and they have become an increasingly powerful sex educator in young people’s lives. Congress and the Federal Communications Commission (FCC) need to encourage the advertising of condoms, birth control pills, and even emergency contraception. Congress also needs to provide funding for more research into media effects. To date, there has been very little federal funding for media research and virtually no funding from private foundations. Given the impact that media have on young people’s lives, this lack of funding is extremely short-sighted.

Recommended Readings


References


