SEX, SEX, AND MORE SEX – OH, DID I MENTION SEX?

ADOLESCENTS, SEX, AND THE MEDIA

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ABSTRACT

In the absence of effective sex education in the U.S., the media have arguably become the leading sex educator for children and teenagers. Considerable research now exists that attests to the ability of the media to influence adolescents’ attitudes and beliefs about sex and sexuality. In addition, new research has found a significant link between exposure to sexual content in the media and earlier onset of sexual intercourse. Although there is little research on the behavioral effects of “new” media, they are discussed as well. Suggestions for clinicians, parents, the Federal government, and the entertainment industry are provided.
"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.”  -- Lead article, Newsweek, February 12, 2007(1)

“One erect penis on a U.S. screen is more incendiary than a thousand guns.”  
-- Newsweek critic David Ansen (2, p. 66)

"[My doctor's] only gone to one medical school, but if you go online, you can get advice from all over the world.” (3, p. 17)

In the absence of effective sex education in the U.S., 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, etc. - any factor which might have an impact and which could be lessened is important to consider.(7)

Why is this an issue?

Although the teenage pregnancy rate in the U.S. has declined significantly in the past two decades - 34% between its
peak in 1991 and 2005 (8) -- 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.(10). Most of these are unintended pregnancies,(11) and the total cost of all such pregnancies in women of childbearing age is an estimated $11 billion a year.(12) Approximately 18% of women having abortions in the U.S. are teenagers and one-third are young adults, ages 20-24 years.(13)

Similarly, rates of adolescent sexual activity have leveled off but remain problematic. According to the 2009 Youth Risk Behavior Survey (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 three months. Six per cent said that they had first had sex before age 13. Fourteen per cent reported having had four 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 9th graders found that 20% had had oral sex.\(^{(15)}\). A large 2002 study that included 10,000 15-19 year-olds found that 55% had had oral sex by age 19.\(^{(16)}\)

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 U.S., approximately half occur in young people aged 15-24 years, even though they represent only 25% of the sexually experienced population.\(^{(17)}\)

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.\(^{(18)}\) In the U.S., however, that has not been the case.\(^{(19)}\) The first 8 years of the new millennium have been devoted to abstinence-only sex education, which has been shown to be ineffective \(^{(20,21)}\) except with 12 year-old African-American boys in inner city Philadelphia.\(^{(22)}\) Congress has spent $1.5 billion on programs that don’t work and are ineffective.\(^{(19)}\) Comprehensive sex education – which \underline{does} work \(^{(21)}\) – has been marginalized.\(^{(23)}\) 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. (24)

Research shows that parent-child communication can clearly be effective in preventing early sexual activity among teenagers. (25) But parents seem to be caught in the middle. While 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 (26) – half of parents of 10-12 year-olds have not talked about peer pressure to have sex or how to prevent pregnancy and STIs (27). 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 (28). 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.’” (29)

**“New” media vs. “old” media**

Despite the seeming tidal wave of “new” media in the past decade (Internet, cell phones, iPads, social networking sites, etc. – see FIGURE 2), “old” media – TV, movies, and videos – still predominate among children and adolescents. The 2009 Kaiser survey of > 2,000 8-18 year-olds found that they spent an average of > 7 hours a day with a variety of different media but TV remains predominant (FIGURES 3 + 4). (30) 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 > 7 hours of TV a month on mobile devices.
- Teens ages 13-17 send an average of 3,364 texts per month and spend more time texting than talking on the phone.
- While 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 5 ½ 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, 6). (37) Talk about sex on TV can occur as often as 8-10 times per hour, and the amount of sexual content continues to rise. (38) Remarkably, teen shows actually have more sexual content than adult shows. (37)

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 > 30. (39). Shows like 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. (40) Virtually every R-rated teen movie since the 1980s has contained at least 1 nude scene and often several references to intercourse. (4) 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. (41, 42). 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.(43) "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.(44) One recent study of MySpace profiles revealed that nearly one-quarter of them referenced sexual behaviors.(45) "Sexting" – or the transmission of nude pictures – may not be as common as previously thought, however. A national survey of nearly 1300 teens in 2008 put the figure at 20%.(46) However, a very recent national study of 1560 Internet users ages 10-17 puts the figure at 1% for youth reporting sending sexual images of themselves and 5.9% of youth reporting they had received sexual images.(47).

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 via 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 7,8), 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 14 longitudinal correlational studies which allow cause-and-effect conclusions to be drawn, and virtually all of them show an impact of sexual content in the media on adolescents’ sexual behavior (TABLE 1)(6,53-66). No study is perfect, however. The best study (55) 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 (e.g., 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.(6) 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
Studies have also found a relationship between sexual content and noncoital behavior, (53,55), multiple sexual partners,(52), STIs (52), teen pregnancy,(57) and sexual aggression (66).

The 14 studies vary in which media they assess. Most have assessed TV (53,54,57,58,63,65), a few have examined a variety of different media (55,59,64), two have examined rock music and music videos (52,56), one examined the protective role of parental co-viewing (59) and only three have examined Internet pornography and other x-rated material (61,62,66). To date, there are no longitudinal studies on the behavioral impact of sexting or displays of risky behaviors on teenagers' social networking profiles.

This is difficult research to do, and it is instructive that there are >2,000 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. (42) The U.S. 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 – will make 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. (67) 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. (68-75) In 2007, both CBS and FOX refused to air a condom advertisement because it specifically mentioned preventing pregnancy rather than preventing HIV/AIDS. (76) Two of the 6 major networks refuse to air condom ads, and 3 others air them only after 9 p.m. or 11 p.m. 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. (77) This, despite the fact that a majority of American adults favor the advertising of condom ads on TV (71% of 1,142 adults surveyed in a national sample done by Kaiser). In fact, more adults oppose beer ads (34%) than condom ads (25%). (78)

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 (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. (79)

- The hit show *ER* has featured storylines on emergency contraception and on HPV. (80)

- A 2008 episode of *Grey’s Anatomy* explored the issue of treating HIV-positive women who are pregnant. (81)

- Media giant Viacom has partnered with MTV to air public service announcements (psa’s) concerning HIV/AIDS and condom use. (82)

Mass media have also been used to try to increase parent-child discussions about sex. In North Carolina, an intensive campaign of psa’s 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. (83)

Solutions

If the U.S. 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. 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 (including 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. 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. 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 12 20-minute soap opera vignettes that women can watch on their cell phones. Cell phone texts, social networking sites, and teen-friendly websites can be used to connect teenagers to much-needed health services.

Parents. On a list of 100 problems parents want to fight with their children about, media usually would rank at about
#112. Parents think they’re children and teenagers are “safe” if they are in their bedroom, watching TV or surfing online. The research says otherwise. (84) 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. (90) 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. (91-93) Parents also need to be more aware of social networking sites and maintain some vigilance. (36,94,95)

Parents also need to understand that sex education is not just a 1-semester course taught in high school. It is a lifelong process – much of it non-verbal – 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. (96) Administrators seem to fear the aftershocks of permitting comprehensive sex education,
yet the majority of American adults favor such programs over abstinence-only sex ed. (26) 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 (97, 98) and “new” media. (99)

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 pro-social 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). (100) A dialogue between adolescent medicine clinicians, pediatricians, family practitioners, public health activists and Hollywood writers, directors, and producers could be very useful.

Federal Government. From 2000-2008, the US Government spent $1.5 billion on abstinence-only sex education, despite the fact that (a) multiple research studies showed it to be ineffective (5) and (b) 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**


**FIGURES**

1= Big Talk cartoon (Caption: Copyright © Stahler, Cincinnati Post. Reprinted with permission.)

2=Pew, gadgets (Caption: contained in Figure)

3,4 = Kaiser Media Use (Caption: From Ref. #30. Used with permission.)

5,6 = Kunkel, sex (Caption: From Ref. # 37. Used with permission.)

7,8= ISIS (Caption: From Ref. #3. Used with permission.)

9- NotMyFaultywood cartoon (Caption: Copyright © Jim Borgman. Reprinted with permission.)

**TABLES**

1=Longitudinal studies

2=Appropriate Sexual content
### 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>
</tr>
</thead>
<tbody>
<tr>
<td>Wingood</td>
<td>480</td>
<td>Rap videos</td>
<td>1 yr.</td>
<td>Exposure to sexual rap videos predicted multiple partners</td>
</tr>
<tr>
<td>(2003)</td>
<td>14-18y. females</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collins</td>
<td>1792</td>
<td>TV</td>
<td>1 yr.</td>
<td>Sexual media exposure strongly predicted intercourse a year later</td>
</tr>
<tr>
<td>Ashby</td>
<td>4808</td>
<td>TV</td>
<td>1 yr.</td>
<td>&gt; 2 hrs. TV/day increased risk Of intercourse 1.35x</td>
</tr>
<tr>
<td>Brown</td>
<td>1107</td>
<td>Sexual media diet (TV, movies, mags., music)</td>
<td>2 yrs.</td>
<td>2x increased risk of sexual intercourse for White teens with high sexual media diet</td>
</tr>
<tr>
<td>Martino</td>
<td>1242</td>
<td>Music</td>
<td>3 yrs.</td>
<td>Degrading sexual content predicted earlier intercourse</td>
</tr>
<tr>
<td>Author</td>
<td>Year</td>
<td>Medium/Activities</td>
<td>Duration</td>
<td>Findings</td>
</tr>
<tr>
<td>----------</td>
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<tr>
<td>Bersamin</td>
<td>2008</td>
<td>TV</td>
<td>1 yr.</td>
<td>Parental coviewing of TV protective against early intercourse and oral sex</td>
</tr>
<tr>
<td>Bleakley</td>
<td>2008</td>
<td>TV, movies, mags., music, video games</td>
<td>1 yr.</td>
<td>Positive and reciprocal relationship between media exposure and intercourse</td>
</tr>
<tr>
<td>Chandra</td>
<td>2008</td>
<td>TV</td>
<td>3 yr.</td>
<td>Sexual media exposure = a strong predictor of teen pregnancy</td>
</tr>
<tr>
<td>Peter</td>
<td>2008</td>
<td>Internet</td>
<td>1 yr.</td>
<td>Exposure to sexual content on the Internet increased sexual preoccupation</td>
</tr>
<tr>
<td>Brown</td>
<td>2009</td>
<td>X-rated movies, magazines, Internet pornography</td>
<td>2 yr.</td>
<td>Early exposure to x-rated media predicts earlier onset of sexual intercourse and oral sex</td>
</tr>
<tr>
<td>Delgado</td>
<td>2009</td>
<td>TV, movies</td>
<td>5 yr.</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>Study</td>
<td>Sample Size</td>
<td>Media Content</td>
<td>Duration</td>
<td>Findings</td>
</tr>
<tr>
<td>-----------</td>
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</tr>
<tr>
<td>Hennessy</td>
<td>506</td>
<td>TV, movies, mags.,</td>
<td>2 yr.</td>
<td>Increased risk of intercourse for White teens and media</td>
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<tr>
<td>(2009)</td>
<td>14-18y.</td>
<td>music, video games</td>
<td></td>
<td></td>
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<tr>
<td>Bersamin</td>
<td>824</td>
<td>TV</td>
<td>1 yr.</td>
<td>Premium cable TV viewing associated with casual sex</td>
</tr>
<tr>
<td>Ybarra</td>
<td>1159</td>
<td>X-rated media</td>
<td>3 yrs.</td>
<td>Intentional exposure to violent x-rated material predicted a nearly 6x risk of sexually aggressive behavior</td>
</tr>
<tr>
<td>(2011)</td>
<td>10-15y.</td>
<td>(movies, mags.,</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Internet pornography)</td>
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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

Adapted from Haffner DW, Kelly M. Adolescent sexuality in the media. SIECUS Rep. March/April, 1987, pp. 9-12.