

The Media, Children, and Adolescents

American College of Pediatricians – February 2014

ABSTRACT

The media, especially visual media and most particularly television, play a substantial role in the lives of children and adolescents in the United States. This powerful tool can be used to exert positive, as well as negative, influences. Studies show that audiences tend to absorb information from television even though they forget the source, and sometimes cannot recall whether the events were real or simulated.¹ Young children are especially vulnerable since they are less able to discriminate reality from fiction.² The American College of Pediatricians encourages parents to become media literate and limit screen time for their children. The College also encourages pediatricians to discuss the impact of media with all families, and calls upon the media industry and sponsors to act responsibly to promote the physical and emotional health of children and families.

TRENDS IN USE OF MEDIA

Children and adolescents' use of media has greatly increased in the past 5 – 10 years, which has been documented in numerous Kaiser Family Foundation Studies. The most recent 2010 report regarding 2002 behavior of 8 – 18 year olds showed that the average child spent 7.5 hours each day using media. However, because of multi-tasking, the child actually crammed 10.75 hours of media use into that 7.5 hour period of time. Approximately 4.5 hours were spent on television viewing and one plus hour playing video games.³ Of concern, nearly two-thirds of all TV programs contain violent scenes, including so-called children's programs, and it is well documented that children imitate behavior seen on television, including such media violence.^{4,5}

Excessive viewing of television, movies, computer, and video games also results in increased tobacco and alcohol use.^{1,6} A recent study documented that when parents restrict viewing of R-rated movies, children have a reduced risk of trying smoking in the future.⁷ In addition, the negative associations between excessive media exposure and academic performance, body concept, and nutrition have been well documented.⁸ Children with a television in their bedroom are known to score 7 to 8 points lower on standardized tests for mathematics and reading than those without a television in their bedroom.⁸

IMPACT OF MEDIA ON SUBSTANCE ABUSE, VIOLENCE AND SEXUAL RISK BEHAVIORS

Another development over the past 25 years has been the increased access children have to the Internet and video games. Children using the Internet and video games add, at a minimum, one hour more daily to time spent engaged in media use. This time must be taken from other activities of the day, interfering for many children and adolescents with adequate quantity (duration) and quality (nighttime waking, nightmares, irregular bedtimes) of sleep. In addition to the well-known problems associated with inadequate sleep, poor quantity or quality of sleep is associated with impaired immune function, and impaired regulation of metabolism.⁹ Sleep deprivation has also been reported to be associated with obesity, diabetes, school failure, and behavior problems including hyperactivity.⁹

The human brain undergoes significant growth and development during the first three years after birth. Longitudinal studies have shown that early television exposure (pre-school children who watch more than two hours of television a day), is associated with attention problems at age seven.¹⁰

Another problem is the sexual messages prevalent in film, television, and music, which are explicit, and oftentimes inaccurate and misleading; however these messages are frequently accepted as truth by young people. Both programming and advertising are highly sexualized in their content. Teens rank the media as the second leading source of information about sexual behavior (The first is school sex education).¹¹ Studies now reveal that the more an adolescent watches television programming featuring sexual content, the more likely that adolescent is to initiate sexual activity. Teens exposed to a high level of sexual content were also twice as likely to experience a pregnancy within the next three years as compared to those teens who viewed less sexualized programming.^{12,13} These studies also documented that teens who were exposed to talk about sex on television experienced risks similar to those teens who viewed actual sexual behavior.¹²

A related serious challenge facing children, adolescents, and their parents is cybersex. Cybersex or Internet sex is a virtual sex encounter between persons remotely connected via a computer network. It is a form of role-playing; the participants pretend they are having sexual relations. These computer sites are available to all who desire access, including children. The Internet also plays a growing role in sex crimes committed against children. These crimes range from sexual exploitation, such as child pornography, to actual assault against a victim identified through the Internet.¹⁴

IMPACT ON SLEEP, NUTRITION AND ACADEMIC PERFORMANCE

Video games deserve special mention, as even parents of toddlers are utilizing the games on their smartphones to entertain their young children. Children and adolescents who spend more time playing video games (especially violent games) are more likely to have difficulties paying attention in school; act aggressively toward others; interpret others' behaviors more negatively; have decreased empathy; have less pro-social behavior; and respond more violently when confronted.^{15,16,17} Unfortunately the top selling video games are those that are the most violent, and parents provide less oversight for video games than they do for television viewing. Ninety percent of adolescents in grades 8 – 12 reported their parents never check the ratings of video games prior to purchase and 89 percent stated their parents never limited time playing video games.¹⁷

Internet bullying (cyber bullying) is common and has serious consequences. Over half of today's adolescents state they have been bullied online and over 25 percent of adolescents state they have been bullied repeatedly through the Internet or on cell phones. However, only 1 in 10 teens will tell a parent about the bullying.¹⁸ Sadly some victims of cyber bullying resort to suicide to escape the embarrassment. A review of 37 studies found a definite relationship between cyber bullying and suicidal ideation and behavior.¹⁹

It is also important to mention the impact not only of media content but also of sponsors, i.e., advertisers. Advertising is a powerful force in American culture. The preeminent advertising medium is television. The principal goal of most children's television is to sell products to children and their families. The television commercial is likely the single most influential source of information to which the young are exposed. The average American child will have viewed approximately 500,000 television commercials by the end of high school. Numerous studies have documented that the young child is often unable to understand the intent of advertising and usually accepts the advertising claim as true.²⁰ One could argue that responsibility is shared by sponsors, which explicitly or indirectly endorse certain programming decisions.

Among products seen on television, food is the most widely advertised. In children's shows, 50 percent of advertisement time is devoted to foodstuffs. Most of these ads are for products that nutritionists argue

should be consumed occasionally and/or in small portions. Only 15 percent of food ads targeting children include reference to an active lifestyle. Public service announcements (PSAs) on fitness and nutrition are very few. TV stations donate an average of only 17 seconds per hour to PSAs; moreover, 46 percent of all PSAs air after midnight. Children under 8 years-old see one PSA on fitness and nutrition for every 26 food-related advertisements.^{21,22} In addition, the sedentary hours spent viewing media take away from outdoor activities that might promote a healthy lifestyle and counter the rising incidence of obesity. Young children (at the mean age of 8) have been shown to select food products that they have seen advertised over those that were not.²³

Finally, we would like to emphasize the positive and critical role of media education. Media education is defined as the study and analysis of mass media. A media-educated public is better able to understand the message and its purpose. A media-educated person understands that all media messages are constructed, that media messages shape our understanding of the culture, and that mass media has powerful economic implications. It is essential that all parents become media literate. Parents should be aware of program ratings and monitor programs that their children watch.²⁴ Software that allows the adult to block undesirable programs is also a helpful tool. The mass media must be held accountable to the principles of the Children's Television Act of 1990 and 1996. Enforcement of the Children's Television Act will help ensure that children's programs are truly designed for them. Media education of children has been accomplished as early as elementary school. It has been incorporated into school curricula in Canada, Australia, and Brazil. As a result of this intervention, children have demonstrated the ability to evaluate programs and advertising more critically.²⁵

In summary, the media have a substantial influence on today's children and adolescents. At the current time, disappointingly, parents cannot confidently look to the media for a consistent menu of high quality programming. Pediatricians and parents must do their part, ideally working with the media, to secure opportunities for educating children that facilitates the best outcomes for children. We urge them to do so.

RECOMMENDATIONS

1. Discourage TV viewing and all screen exposure (including on smartphones and iPads) for all children under the age of two.²⁶
2. Limit all media exposure (television, movies, computer/video games, and music) to 1-2 hours per day for children over two years of age. (The American College of Pediatricians encourages parents to specifically limit television viewing to one hour or less per day.)²⁶
 - a. Turn the television off during meal times.
 - b. Do not allow your child or adolescent to have a television, computer, or Internet access in the bedroom.
3. Encourage alternate forms of entertainment especially those involving physical activity and/or the participation of all family members.²⁶
4. Parents should screen the media viewing of their children and adolescents.
 - a. Watch television with your child so you know what programs your child is watching and what lessons your child is receiving. Every television program and video game will teach your child something. Choose programs and games that support your family's values.
 - b. Ask your child questions while watching the program. Does your child understand what is happening? Does he think what is happening is real or possible? (Young children often cannot understand the story's idea – they just see the action.)

- c. Explain commercials to your child. Commercials are made to encourage us to spend money. Children can understand that we do not need a certain product to really be happy. Ask your child questions that stimulate conversations about the commercials.
5. Parents should also be aware of the video game rating system – and know the rating of the games their children play.
- a. Video games often become more violent at higher levels. Parents need to see the higher levels of the games their children are playing.
 - b. Set limits on video game play just as with television viewing.
 - c. Disallow play of video games on the Internet with unknown players.
6. Pediatricians and parents should become media literate – and should be good role models in their use of media
- a. Parents should limit their use of media – turn off smartphones and computers during meal times.
 - b. Don't text / talk on cell phones while driving.
 - c. Think of other ways to entertain your child while traveling – listen to or sing songs together, make up stories, bring books for your child to read.
 - d. Parents should be encouraged to consider utilizing internet filters such as “Covenant Eyes” or internet provider services such as “Integrity Online” to decrease the likelihood of inappropriate access.
7. Pediatricians should routinely provide anticipatory guidance that addresses media exposure as a part of the health maintenance visit.
8. Pediatricians and parents should discuss the profound influence the mass media has on a child’s well-being and actively work together towards improving the overall quality of media content as well as reducing the child’s exposure to cyber bullying.
- a. Encourage parents to discuss this topic with their children and adolescents.
 - b. Limit younger adolescents’ access to social media.
 - c. Encourage parents to monitor social media sites.
9. The media industry should consider the substantial influence that programming and advertising have on children and adolescents. We call upon the media industry and their sponsors to act responsibly. This would include limiting the portrayal of unhealthy behaviors including violence, smoking, overeating, eating high sugar/high fat foods, sexual behavior between unmarried individuals, and sexual innuendoes or frank references. Instead, increase portrayals of healthy behavior to include families engaging in physical activities together, healthy eating, and respectful dialogue between individuals.

Originally posted as Children, Adolescents, and the Media on October 24, 2005
Updated February 2014 by Jane Anderson, MD

The American College of Pediatricians is a national medical association of licensed physicians and healthcare professionals who specialize in the care of infants, children, and adolescents. The mission of the College is to enable all children to reach their optimal, physical, and emotional health and well-being.

Other Recommended Reading:

According to the study [Media Violence and the American Public: Scientific Facts Versus Media Misinformation](#), the link between children's exposure to violent media and violent behavior in real life is stronger than the relationship between calcium intake and bone mass; stronger than the relationship between condom use and the risk of contracting HIV; and stronger than the exposure to second-hand smoke and the risk of lung cancer.

American Medical Association, Physician Guide to Media Violence, 1996

Neil Postman, Amusing Ourselves to Death, Penguin Books USA Inc., 1985

Neil Postman and Steve Powers, How to Watch TV News, Penguin Books USA Inc., 1992

REFERENCES

1. American Academy of Pediatrics, Committee on Public Education. Children, adolescents, and television. *Pediatrics*. 2001; 107(2):423-425.
2. Policy Statement from the American Academy of Pediatrics. Media use by children younger than 2 years. *Pediatrics*. 2011; 128:1040-1045.
3. Generation M2 – Media in the lives of 8 – 18 year olds. A Kaiser Family Foundation Study. <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8010.pdf>. Published January 2010. Accessed on August 29, 2013.
4. American Academy of Pediatrics, Committee on Public Education. Media violence. *Pediatric* 2001; 108 (5):1222-1226.
5. American Academy of Pediatrics. Media violence – council on communications and media. *Pediatrics*. 2009; 124:1495-1503.
6. Gidwani PP, et al. Television viewing and initiation of smoking among youth. *Pediatrics*. 2002; 110 (3): 505-508.
7. Sargent JD, et al. Effect of =parental R-rated movie restriction on adolescent smoking initiation: A prospective study. *Pediatrics*. 2004; 114(1): 149-155.
8. Orzekowski D, et al., TV in the bedroom may hurt school achievement. *Arch Ped Adol Med*. 2005; 159.
9. Zimmerman, FJ. Children's media use and sleep problems: Issues and unanswered questions. *Research Brief, Kaiser Family Foundation*. 2008. www.kff.org.
10. Christakis DA, et al. Early television exposure and subsequent attentional problems in children. *Pediatrics*, 2004; 113(4):708-713.
11. American Academy of Pediatrics, Committee on Public Education. Sexuality, contraception, and the media. *Pediatrics*. 2001; 107(1): 191-194.
12. Collins RL, et al. Watching sex on television predicts adolescent initiation of sexual behavior. *Pediatrics* 2004; 114(3): e280-e289.

13. Escobar-Chaves SL, et al. Impact of the media on adolescent sexual attitudes and behaviors. *Suppl to Pediatrics*. 2005; 116(1): 297-331.
14. Wolak, J, et al. *Internet sex crimes against minors: The response of law enforcement*. Crimes Against Children Research Center, University of New Hampshire, National Center for Missing and Exploited Children. 2003.
15. Gentile, D A, Lynch, P, Linder, J, Walsh, D. The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance. *Jof Adol*. 2004; 27: 5-22.
16. Anderson, CA, Shibuya A, et al. Violent video game effects on aggression, empathy, and prosocial behavior in eastern and western countries: A meta-analytic review. *Psychol Bull*. 2010; 136:151-73.
17. Anderson CA, Bushman BJ. Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psych Sci*. 2001; 12:353 – 359.
18. Cyberbullying statistics. <http://www.bullyingstatistics.org/content/cyber-bullying-statistics.html> Accessed August 29, 2013.
19. Kim YS, Leventhal B. Bullying and suicide: A review. *Intl J of Adol Med Hlth*. 2008; 20; 133 – 154.
20. American Academy of Pediatrics, Committee on Communications. *children, adolescents, and advertising*. Pediatrics. 1995; 95(2): 295-297.
21. Kaiser Family Foundation Executive Summary. Food for thought: Television food advertising to children in the United States. 2007. www.kff.org.
22. Graham, R, Kingsley, SW, *Study finds television stations donate an average of 17 seconds an hour to public service advertising*. 2008. www.kff.org.
23. Chernin, A. The effects of food marketing on children's preferences: Testing the moderating roles of age and gender. *Ann Amer Acad Polit Soc Sci*. 2008; 615: 102-118.
24. Cheng TL, et al. Children's violent television viewing: Are parents monitoring? *Pediatrics*. 2004; 114(1): 94-99.
25. American Academy of Pediatrics, Committee on Public Education. *Media education*. Pediatrics. 1999; 104(2): 341-343.
26. Gentile DA, et al. Well-child visits in the video age: Pediatricians and the American Academy of Pediatrics' Guidelines for children's media use., Pediatrics. 2004; 114(5): 1235-1241.

OTHER RECOMMENDED READING

- American Medical Association, Physician Guide to Media Violence, 1996
- Neil Postman, Amusing Ourselves to Death, Penguin Books USA Inc., 1985
- Neil Postman and Steve Powers, How to Watch TV News, Penguin Books USA Inc., 1992

