ABSTRACT. This statement describes the possible negative health effects of television viewing on children and adolescents, such as violent or aggressive behavior, substance use, sexual activity, obesity, poor body image, and decreased school performance. In addition to the television ratings system and the v-chip (electronic device to block programming), media education is an effective approach to mitigating these potential problems. The American Academy of Pediatrics offers a list of recommendations on this issue for pediatricians and for parents, the federal government, and the entertainment industry.

ABBRVIATIONS. AAP, American Academy of Pediatrics; MTV, Music Television; E/I, educational/informational.

For the past 15 years, the American Academy of Pediatrics (AAP) has expressed its concerns about the amount of time children and adolescents spend viewing television and the content of what they view.1 According to recent Nielsen Media Research data, the average child or adolescent watches an average of nearly 3 hours of television per day.2 This figure does not include time spent watching videotapes or playing video games3 (a 1999 study found that children spend an average of 6 hours 32 minutes per day with various media combined).4 By the time the average person reaches age 70, he or she will have spent the equivalent of 7 to 10 years watching television.5 One recent study found that 32% of 2- to 7-year-olds and 65% of 8- to 18-year-olds have television sets in their bedrooms.4 Time spent with various media may displace other more active and meaningful pursuits, such as reading, exercising, or playing with friends.

Although there are potential benefits from viewing some television shows, such as the promotion of positive aspects of social behavior (eg, sharing, manners, and cooperation), many negative health effects also can result. Children and adolescents are particularly vulnerable to the messages conveyed through television, which influence their perceptions and behaviors.6 Many younger children cannot discriminate between what they see and what is real. Research has shown primary negative health effects on violence and aggressive behavior7–12; sexuality7,13–15; academic performance16; body concept and self-image17–19; nutrition, dieting, and obesity17,20,21; and substance use and abuse patterns.7

In the scientific literature on media violence, the connection of media violence to real-life aggressive behavior and violence has been substantiated.8–12 As much as 10% to 20% of real-life violence may be attributable to media violence.22 The recently completed 3-year National Television Violence Study found the following: 1) nearly two thirds of all programming contains violence; 2) children’s shows contain the most violence; 3) portrayals of violence are usually glamorized; and 4) perpetrators often go unpunished.23 A recent comprehensive analysis of music videos found that nearly one fourth of all Music Television (MTV) videos portray overt violence and depict weapon carrying.24 Research has shown that even television news can traumatize children or lead to nightmares.25 In a random survey of parents with children in kindergarten through sixth grade, 37% reported that their child had been frightened or upset by a television story in the preceding year.26

According to a recent content analysis, mainstream television programming contains large numbers of references to cigarettes, alcohol, and illicit drugs.27 One fourth of all MTV videos contain alcohol or tobacco use.28 A longitudinal study found a positive correlation between television and music video viewing and alcohol consumption among teens.29 Finally, content analyses show that children and teenagers continue to be bombarded with sexual imagery and innuendoes in programming and advertising.14,30,31 To date, there are no data available to substantiate the behavioral impact of this exposure.31

The new television ratings system and the v-chip are tools that can help protect children from potentially harmful content. All new television sets with screens measuring 13 inches or greater contain a v-chip that enables parents to program televisions to block out any shows that they deem inappropriate for their children.32 To block out television shows, parents must use the television ratings system, which has age and content descriptors for violence, sexual situations, suggestive dialogue, and adult language. Although the ratings system and the v-chip can assist parents, ongoing evaluation is necessary to ensure that these tools are as effective as possible.33–35 For example, the ratings should be applied uniformly and listed in television guides, newspapers, and journals so parents know what they mean.

Besides the v-chip, there are other means of protecting children from what is on television. Evidence

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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now shows that media education can help mitigate the harmful effects of media violence\textsuperscript{36-40} and alcohol advertising\textsuperscript{41,42} on children and adolescents. Media education programs have been included in the school curricula beginning in early elementary school in many states across the United States.\textsuperscript{43} 

Furthermore, continued support of the Children’s Television Act of 1990\textsuperscript{44} and additional regulations made in 1996\textsuperscript{45} will help to ensure the airing of television programs specifically designated for children. The act requires broadcasters to air educational and informational programming for children at least 3 hours per week and to limit the amount of advertising time allowed during children’s programming. The shows must be labeled E/I (for educational and informational) on the television screen.

**RECOMMENDATIONS**

The following recommendations are given for pediatricians and other health care professionals:

1. Remain knowledgeable about the effects of television, including violent and aggressive behavior, obesity, poor body concept and self-image, substance use, and early sexual activity, by becoming involved in the AAP *Media Matters* campaign.\textsuperscript{46} Educate patients and their parents about these effects.
2. Use the AAP *Media History* form\textsuperscript{46} to help parents recognize the extent of their children’s media consumption.
3. Work with local schools to implement comprehensive media-education programs that deal with important public health issues.\textsuperscript{36}
4. Serve as good role models by using television appropriately and by implementing reading programs using volunteer readers in waiting rooms and hospital inpatient units.
5. Become involved in the AAP’s Media Resource Team (contact the Division of Public Education), and learn how to work effectively with writers, directors, and producers to make media more appropriate for children and adolescents. Contact networks and producers of television programs with concerns about the content of specific shows and episodes.
6. Ensure that appropriate entertainment options are available for hospitalized children and adolescents. Work with child life staff to assemble a screening committee that selects programs for closed circuit broadcast or a video library. Develop institution-specific, formal guidelines based on the established ratings system (which takes profanity, sex, and violence into account), and screen for content containing ethnic and sex role stereotyping. Considerations should also be made to avoid themes hospitalized children might find upsetting, and efforts should be made to enforce the ratings system in the hospital setting.
7. Support the Children’s Television Act of 1990 and its 1996 rules by working to ensure that local television stations are in compliance with the act and by urging local newspapers to list ratings and E/I denotations of programs.
8. Monitor the television ratings system for appropriateness and advocate for substantive, content-based ratings in the future.

Pediatricians should recommend the following guidelines for parents:

1. Limit children’s total media time (with entertainment media) to no more than 1 to 2 hours of quality programming per day.
2. Remove television sets from children’s bedrooms.
3. Discourage television viewing for children younger than 2 years, and encourage more interactive activities that will promote proper brain development, such as talking, playing, singing, and reading together.
4. Monitor the shows children and adolescents are viewing. Most programs should be informational, educational, and nonviolent.
5. View television programs along with children, and discuss the content. Two recent surveys involving a total of nearly 1500 parents found that less than half of parents reported always watching television with their children.\textsuperscript{5,47}
6. Use controversial programming as a stepping-off point to initiate discussions about family values, violence, sex and sexuality, and drugs.
7. Use the videocassette recorder wisely to show or record high-quality, educational programming for children.
8. Support efforts to establish comprehensive media-education programs in schools.
9. Encourage alternative entertainment for children, including reading, athletics, hobbies, and creative play.

Pediatricians should lead efforts in their communities to do the following:

1. Form coalitions including libraries, religious organizations, and other community groups to broaden media education beyond the schools.
2. Organize activities promoting media education, such as letter-writing campaigns to local television stations to advocate for better programming for children, and developing local TV turnoff week projects.\textsuperscript{48}

Pediatricians should work with the Academy and local chapters to challenge the federal government to do the following:

1. Initiate legislation and rules that would ban alcohol advertising from television.
2. Fund ongoing annual research, such as the National Television Violence Study, and fund more research on the effects of television on children and adolescents, particularly in the area of sex and sexuality.
3. Assemble a *National Institutes of Health Comprehensive Report on Children, Adolescents, and Media* that would bring together all of the current relevant research.
4. Work with the US Department of Education to support the creation and implementation of media-education curricula for school children.
Pediatricians should work with the Academy and local chapters to challenge the entertainment industry to do the following:

1. Take responsibility for the programming it produces.
2. Adhere to the current television ratings system, and label programs conscientiously.
3. Convene with other public health advocates to convene a series of seminars with writers, directors, and producers to discuss ways to make media more appropriate for children and adolescents.
4. Produce more educational programming for children and adolescents, and ensure that the programming it produces is of higher quality, with less content that is gratuitously violent, sexually suggestive, or drug oriented.

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REFERENCES
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ADDENDUM

A policy statement on “Developmental Anomalies of the External Genitalia in the Newborn” has recently been published (Pediatrics. 2000;106:138–142). The purpose of this review is to identify which newborns among those with abnormal genital development need to be screened for intersexuality, to outline the investigations necessary, and to suggest indications for referral to a center with experience in the diagnosis and management of these disorders.

The 1996 policy on Timing of Elective Surgery states that “children whose genetic sexes are not clearly reflected in external genitalia (ie, hermaphroditism) can be raised successfully as members of either sex if the process begins before the age of 2 years” [see the heading under Body Image and Sexual Development]. The 2000 policy on Developmental Anomalies of the External Genitalia acknowledges the considerable recent debate about the appropriate gender assignment of newborns with the most extreme forms of genital ambiguity, and notes that some have suggested that the current early surgical treatment be abandoned in favor of allowing the affected person to participate in gender assignment at a later time.

This controversy about gender reassignment does not invalidate the other recommendations about the timing of elective surgery on the genitalia of male children with particular reference to the risks, benefits, and psychological effects of surgery and anesthesia that are present in the 1996 statement.
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