



Children and the media

The influence of the media on the psychosocial development of children is profound. Therefore, it is important for physicians to discuss with parents their child's exposure to media, and provide guidance on age-appropriate use of all media, including television, radio, music, video games and the Internet.

The objective of this statement is to address the beneficial and harmful effects of the media on children's mental and physical health, and to identify how physicians can counsel families and promote the healthy use of the media in their communities.

TELEVISION

Television has the potential to generate both positive and negative effects. There are much data about the impact of television on society, particularly on children and adolescents (1). An individual child's developmental level is a critical factor in determining whether the medium will have positive or negative effects. Not all television is bad, but the data showing the negative effects of exposure to violence, inappropriate sexuality and offensive language are very convincing. Other areas such as obesity and enhanced learning, however, still require more research before conclusions can be made; thus, there is a need for physicians to advocate for continuing research into the negative and positive effects of media on children and adolescents.

Current literature suggests the following.

- Physicians can change and improve children's television viewing habits (2).
- Canadian children watch excessive amounts of television (3).
- There is a relationship between watching television and an increase in the violent behaviour of children (4).
- Television contributes to the increased incidence of childhood obesity (5).
- Television may have a deleterious effect on learning and academic performance (6).
- Irresponsible sexual behaviour may be encouraged by television (7).
- Television is a very effective way of advertising products to children of various ages (8).

The average Canadian child watches 23 h of television each week, with some children watching up to 5 h of television daily (9).

By high school graduation, the average teen will have spent more time watching television than in the classroom. The average child spends more time watching television than performing any other activity, excluding sleep. Studies show how time spent watching television varies between different age groups and cultures (1,9). This is especially relevant when studying the effects of excessive television exposure on disadvantaged populations.

The amount of time that North American children currently spend watching television has not decreased significantly (10). If a child today continues to watch television at the same rate over a lifetime, he or she will have spent about seven years watching television by age 70 years. Strong data suggest that television's influence on children and adolescents is related to how much time they spend watching television (1,11). As a result, with prolonged viewing, the world shown on television becomes the real world (1).

Television viewing frequently limits children's time to develop vital activities such as playing, reading, learning to talk, spending time with peers and family, storytelling, participating in regular exercise, and developing other necessary physical, mental and social skills. In addition to the amount of time spent in front of the television, other factors that influence the medium's effect on children include the child's developmental level, individual susceptibility and whether children watch television alone or with their parents.

Learning

Television can be a powerful teacher (12). *Sesame Street* is an example of how toddlers can learn valuable ideas about racial harmony, cooperation, kindness, simple arithmetic and the alphabet through an educational television format. Some public television programs stimulate visits to the zoo, library, bookstores, museums and other active recreational settings, and educational videos can certainly serve as powerful prosocial teaching devices. In some disadvantaged settings, healthy television habits may actually be a beneficial teaching tool.

Mr. Rogers' Neighborhood is another example of educational television teaching the difference between make-believe and the real world, as well as good values such as honesty, care, love and patience. Some preliminary data show the advantages of humour in promoting healthy living, and while Norman Cousins' work (13) on the benefits of humour relates mainly to adults, it is possible that appropriate, humorous television may add to a child's well-being.

Some channels, such as *The Learning Channel*, have been recognized for their support in promoting learning through programs such as *Ready, Set, Learn*. Unlike the United States, Canada does not have any recent legislation requiring a minimum number of hours of educational television.

Watching television takes time away from reading and schoolwork. More recent and well-controlled studies show that 1 to 2 h of daily television viewing by school-aged children has a significant deleterious effect on academic performance, especially reading (6,14).

Violence

The amount of violence on television is on the rise. The average child sees 12,000 violent acts on television annually, including many depictions of murder and rape. More than 1000 studies confirm that exposure to heavy doses of television violence increases aggressive behaviour, particularly in males (15-17). Other studies link television or newspaper publicity about suicide to an increased suicide risk (18-21).

The following groups of children may be more vulnerable to violence on television:

- children from minority and immigrant groups;
- emotionally disturbed children;
- children with learning disabilities;
- children who are abused by parents; and
- children in families in distress (4).

Physicians who see a child with a history of aggressive behaviour should inquire about the child's exposure to violence portrayed on television.

Nutrition

Because television takes time away from play and exercise activities, children who watch a lot of television are less physically fit and tend to snack more regularly. Television viewing makes a substantial contribution to obesity because prime time commercials promote unhealthy

dietary practices (22). The fat content of advertised products exceeds the current average Canadian diet and nutritional recommendations, and most food advertising is for high-calorie foods such as fast foods, candy and pre-sweetened cereals. Commercials for healthy food make up only 4% of the food advertisements shown during children's viewing time. The number of hours of television viewing also corresponds with an increased relative risk of higher cholesterol levels in children (5). Television can also contribute to eating disorders in teenage girls, who may emulate the thin role models seen on television (5). Eating meals while watching television should be discouraged because it may lead to less meaningful communication and, arguably, poorer eating habits.

Sexuality

Television has become a leading sex educator in Canada today. The average teenager views more than 14,000 sexual references annually (1). Television exposes children to adult sexual behaviours in ways that portray these actions as normal and risk-free, sending the message that because these behaviours are frequent, 'everybody does it'. Sex between unmarried partners is shown 24 times more often than sex between spouses (23,24), while sexually transmitted diseases and unwanted pregnancy are rarely mentioned.

Some people believe that the media can influence sexual responsibility by promoting birth control, such as condom use. No current empirical evidence supports this concept; it is expected that the debate will continue.

Alcohol and smoking

Alcohol advertising in Canada totals \$900 million annually. On an annual basis, teenagers see between 1000 and 2000 beer commercials carrying the message that 'real' men drink beer. Convincing data suggest that advertising increases beer consumption (25). In countries such as Sweden, a ban on alcohol advertising has led to a decline in the alcohol consumption rate (26).

Tobacco products are not advertised directly on television in Canada. However, passive promotion occurs when, for example, a soap opera hero lights a cigarette in a 'macho' act, a Formula One race car has cigarette advertising on it, and sporting events carry the names of tobacco companies. Canadian tobacco manufacturers spend \$4.2 billion per year on print advertising because it increases consumption (25).

Television is not the only way a teenager learns about tobacco and alcohol use; the concern is that the consequences of these behaviours are not accurately depicted on television.

Commercials

Studies show that parents play an important role in their children's social learning (27). But if the parent's views are not discussed explicitly with children, the medium may teach and influence by default.

Advertising can have positive effects on children's behaviour. Some alcohol manufacturers spend 10% of their budget on advertisements warning about the dangers of drinking and driving. Although some physicians and other health care professionals disagree about the health benefits of appropriate milk use, milk consumption has increased as a result of print and broadcast advertisements.

The developmental stage of a child plays a role in the effect of commercials. Young children do not understand the concept of a sales pitch. They tend to believe what they are told and may even assume that they are deprived if they do not have advertised products. Most preschool children do not understand the difference between a program designed to entertain and a commercial designed to sell. A number of studies have documented that children under the age of eight years are developmentally unable to understand the difference between advertising and regular programming (8,28,29). The average child sees more than 20,000 commercials each year (8). More than 60% of commercials promote sugared cereal, candy, fatty foods and toys (8). Cartoon programs based on toy products are especially attractive.

The question of children being more resilient to the influence of television is debated frequently. Most studies show that the more time children spend watching television, the more they are influenced by it (2). Earlier studies have shown that boys may be more susceptible to television violence than girls (19).

High school programs to promote media awareness have been shown to be beneficial (2); they give students more understanding of how the media may affect them socially. Advertisements, especially those that target adolescents, are profoundly influential, particularly on cigarette consumption (2).

Relatively new technology, such as the V-chip, may be useful in filtering out undesirable programming. However, it may not always be successful and may even give parents a false sense of security. Parental involvement in determining desirable programming is the better choice. Parents have to monitor and control their children's viewing habits.

Other media, such as magazines, radio and the Internet, also have the potential to influence children's eating habits, exercise habits, buying habits and mental health. If children are allowed to be exposed to these media without adult supervision, they may have the same deleterious effects as television.

MUSIC VIDEOS

Music videos may have a significant behavioural impact by desensitizing viewers to violence and making teenagers more likely to approve premarital sex (30). Up to 75% of videos contain sexually explicit materials (30), and more than half contain violence that is often committed against women. Women are portrayed frequently in a condescending manner that affects children's attitudes about sex roles.

VIDEO GAMES

Some video games may help the development of fine motor skills and co-ordination, but many of the concerns about the negative effects of television (eg, inactivity, asocial behaviour and violence) also apply to excessive exposure to video games. Violent video games should be discouraged because they have harmful effects on a child's mental development (4). A rating system for video games would be helpful to parents.

INTERNET

The Internet has a significant potential for providing children and youth with access to educational information, and can be compared with a huge home library. But the lack of an editorial standard limits the Internet's credibility as a source of information, and there are other concerns.

The amount of time spent watching television and sitting in front of computers can affect a child's postural development (31). Excessive amounts of time at a computer can contribute to obesity, undeveloped social skills and a form of addictive behaviour. Although rare, some children with seizure disorders are more prone to have attacks brought on by a flickering television or computer screen. No data suggest that television viewing causes weakness of the eyes. It may be different when a child is exposed close to a computer screen for long periods, although there are no definitive references to support this.

Other concerns include pedophiles who use the Internet to lure young people into relationships. There is also the potential for children to be exposed to pornographic material. Parents should be encouraged to use technology that blocks access to pornography and sex talk on the Internet.

RECOMMENDATIONS

1. Physicians should regularly *inquire about television viewing* habits when taking the psychosocial history. They should also ask about video watching, the use of video games, time spent in front of the computer and radio programs, especially when dealing with aggressive and particularly vulnerable children and families (4).
2. Physicians should become more *aware about the kinds of programs* to which their patients may be exposed to, such as programs that portray irresponsible sex and violence. Physicians should become familiar with the content of these programs and the time of day that they air.
3. Physicians should *make parents aware of the significance* of television early in a child's life. By the end of the first year of a child's life, there should be ground rules for television viewing. Healthy viewing habits should be established in the second year of life. The parent handout "Promoting good television habits" that

accompanies this statement can be used to supplement teaching.

4. Physicians should continue to increase their own level of awareness of the most recent *data on the influence* of television, video games and computer games on the development of their patients' psychosocial health.

Physicians should encourage families to do the following.

5. Families should be encouraged to watch television together and use this time as an opportunity to *discuss the teaching value of the programs*. Children should be encouraged to criticize and analyze what they see on television. Parents should help the child differentiate between fantasy and reality. This is particularly important when it comes to sex, violence and advertising.
6. Television time and video time should be limited to less than 1 to 2 h per day. Instead of viewing television, families can spend time together visiting museums, zoos, playing outdoor games and *engaging in shared activities* such as cooking, story telling or hobbies.
7. Older children should be offered *an opportunity to make choices* by planning the week's viewing schedule in advance. Ideally, parents should supervise these choices. The parent should be able to explain to the child why some programs are not suitable. Children respond to praise, and parents should praise the child for making good and appropriate choices.
8. Families should *limit the use of television* as a diversion, substitute teacher or electronic nanny. It is also important for parents to ask alternative caregivers to maintain the same rules of television viewing in the parents' absence. A television in the child's bedroom, away and apart from the main family area, should be avoided.

Community involvement should include the following.

9. Physicians should provide parents with *resources and information* to promote good media awareness programs in their communities and schools. For example, the Association for Media Literacy (telephone 416-696-7144, e-mail aml@interlog.com, interact.uoregon.edu/MediaLit/FA/MLAML), has an excellent newsletter, *Mediacy*, available by subscription. Other lobby groups and resources include the Canadian Radio-television and Telecommunications Commission (CRTC) www.crtc.gc.ca, the Alliance for Children and Television, Media Awareness Network (Réseau éducation-médias), www.media-awareness.ca, and the Action Group on Violence and

Television, consisting of people in the broadcast industry.

10. Physicians should promote the *implementation of high school programs* in media awareness. These programs have proven to be beneficial (2).
11. Physicians and parents should find ways of *expressing support for good television*. In addition to writing to stations that broadcast responsible and good television programs, physicians and parents should continue to support legislation making more responsible television a reality. The use of the V-chip should be supported, even though there remains a debate about its true usefulness.
12. Physicians should support efforts to *eliminate alcohol advertising* on television with the same enthusiasm that led to the elimination of tobacco advertising.
13. Physicians should consider *accepting invitations to talk* to parent groups, school boards and other organizations about the topic of media and children. The American Academy of Pediatrics has a kit that includes a fully scripted text, colourful slides, a fact sheet and audience handouts. The handout "Promoting good television habits" that accompanies this statement can also be used to teach or counsel parents and other caregivers.
14. Physicians and their professional organizations should participate in the ongoing debate on how television programs are to be *rated* with regard to their impact on children and adolescents. Current rating systems in North America can, arguably, be improved. Recent changes in both the United States and Canada created much controversy. The physician's role is to fight for what is best for the child, particularly when backed up by data from academic sources.
15. Further research concerning the impact of television, music videos, music lyrics and the Internet on the mental and physical well-being of children and adolescents should be developed and supported.

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PSYCHOSOCIAL PAEDIATRICS COMMITTEE

Members: Drs Anne C Bernard-Bonnin, Département de pédiatrie, Hôpital Sainte-Justine, Montréal, Québec; T Emmett Francoeur, Westmount, Québec (director responsible); Sally Longstaffe, Child Development Clinic, Children's Hospital, Winnipeg, Manitoba; William J Mahoney, Children's Hospital – Hamilton Health Sciences Centre, Hamilton, Ontario (chair); Peter Nieman, Calgary, Alberta (principal author); Sarah Emerson Shea, IWK-Grace Health Centre, Halifax, Nova Scotia

Consultants: Drs Katerina Haka-Ikse, Toronto, Ontario; Rose Geist, The Hospital for Sick Children, Toronto, Ontario (representing the Canadian Academy of Child Psychiatry)

Liaisons: Drs Mark Wolraich, Vanderbilt Child Development Center, Nashville, Tennessee (American Academy of Pediatrics, Committee on Psychosocial Aspects of Child & Family); Diane Marie Moddemann, Child Development Clinic, Children's Hospital, Winnipeg, Manitoba (representing the Canadian Paediatric Society Developmental Paediatrics Section)

The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate.

Internet addresses are current at the time of publication.