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MEDIA
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NETWORK

MediaPulse

Measuring the media in kids' lives

A guide for
health practitioners



The Media Awareness Network and the Canadian Paediatric Society are proud to present *MediaPulse: Measuring the Media in Kids' Lives, A Guide for Health Practitioners*. This guide is part of the *MediaPulse* project that includes a professional-development workshop, a media-themed issue of *Paediatrics & Child Health* (May/June 2003) and online resources for health practitioners, their patients and their patients' families.

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For more information contact:

Media Awareness Network
1500 Merivale Road, 3rd Floor
Ottawa, ON K2E 6Z5
Tel: (613) 224-7721
www.media-awareness.ca
mediapulse@media-awareness.ca

Canadian Paediatric Society
100-2204 Walkley Road
Ottawa, ON K1G 4G8
Tel: (613) 526-9397
www.cps.ca; www.caringforkids.cps.ca
info@cps.ca

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MediaPulse Partners



The **Media Awareness Network** (MNet) is a non-profit Canadian organization whose mission is to support media education and its widest possible integration into Canadian schools, homes and communities. MNet's aim is to help people, particularly children and youth, to develop an informed and critical understanding of the nature of

the media, the techniques used in creating media products, and the media's role and influence within society.



The **Canadian Paediatric Society** (CPS) is a national organization, founded in 1922, that represents more than 2,000 paediatricians, paediatric residents and paediatric subspecialists across Canada. The CPS promotes the health needs of children and youth

through public and professional education, research, advocacy, and the support of its membership. Some of the CPS priority areas include healthy active living for children and youth, immunization and physician resource planning.

Dear Colleague:

Canadian children and youth are exposed to messages and images in mass media every day — including television, movies, music, music videos, video games, magazines and the Internet.

The media world that children and youth enjoy so much has a profound influence on their views of both themselves and the world around them. While much of this exposure is positive, links have been made to public health concerns such as aggressive behaviour, substance use and abuse, poor nutrition, obesity, unhealthy body image and risky sexual behaviour. In some areas of study, the evidence is irrefutable. In other areas, while so-called “common sense” indicates a strong correlation, more research is needed.

As conscientious child- and youth-health professionals, we need to be aware of the ubiquitous and powerful influence of media in our young patients' lives. We urge you to become familiar with the research that does exist, to encourage critical thinking about media messages and to incorporate media awareness into the practice setting. Adopt the media history form included in this booklet and use it as a tool to raise awareness about the impact media has on health, attitudes and behaviours. Visit the Web sites of the Media Awareness Network (www.media-awareness.ca) and the Canadian Paediatric Society (www.cps.ca) to learn more and to share your feedback with us.

Most clinicians agree that the influence of media is a public health issue but few receive any formal training. The *MediaPulse* project, a joint initiative of the Media Awareness Network and the Canadian Paediatric Society, affords a unique opportunity to inform paediatricians, family physicians and other health professionals. We are honoured to be involved in this important professional-development initiative.



Simon Davidson MD, FRCPC
Child Psychiatrist
Children's Hospital of Eastern Ontario
Ottawa, Ontario



Arlette Lefebvre MD, FRCPC
Child Psychiatrist
Ontario Hospital for Sick Children
Toronto, Ontario



Patricia Morris MD, CCFPC
Family Physician
Ottawa Hospital (Civic Site)
Ottawa, Ontario



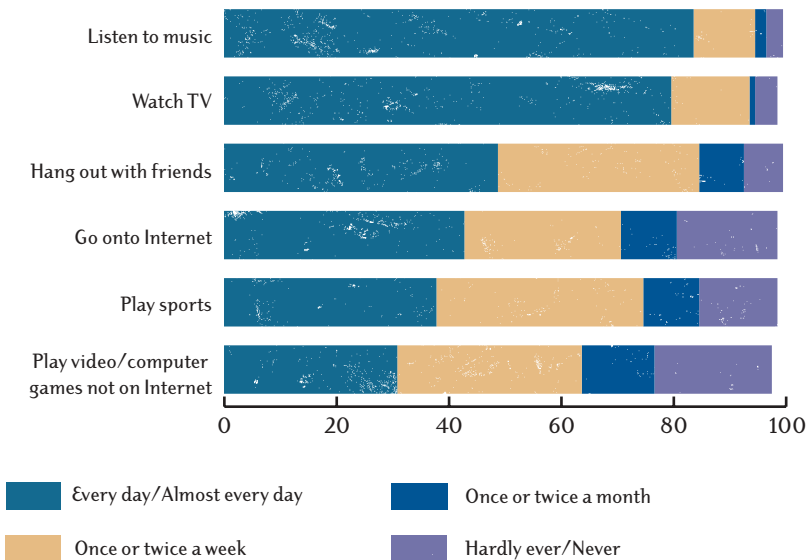
Peter Nieman MD, FRCPC
Paediatrician
Alberta's Children's Hospital
Calgary, Alberta

Through the media, young people today have incredible opportunities for learning, growth, communication and entertainment. Over the past several decades, however, health researchers and communications researchers alike have raised concerns about the influence media have on the physical and mental health of children and adolescents and the degree to which some media legitimize, glamorize or otherwise encourage a variety of health-related risky behaviours.

Much of the research focuses primarily on older technologies such as television and, as a consequence, is now quite dated. With new technologies evolving at lightning speed, it's not surprising that research into media's influence on the health and well-being of children and youth has not kept pace. Clearly, more research is needed.

Today's digital-media environment provides easy access to television, movies, music, music videos and written material from around the world via the Internet, wireless and a host of other emerging technologies. This means that the responsibility for ensuring that

Favourite after-school activities, 9–17 year olds



children and youth enjoy a positive, enriching media experience with age-appropriate content is rapidly shifting from traditional regulators to individual parents and caregivers.

Are parents prepared for these additional responsibilities? Judging by the results of two national surveys^{1, 2} carried out by the Media Awareness Network — one that involved 6,000 Canadian students and one that involved 1,100 parents — the short answer is no. The surveys, the first of their kind in Canada, investigate Internet use among Canadian youth, exploring what they do online, how they perceive the Internet and what they know about it.

The initial analysis revealed that Canadian youth are highly engaged participants in the online world, using new technologies and ways of communicating such as e-mail, instant messaging and electronic chat effortlessly — the Internet has become a routine part of their everyday lives. In fact, most children and youth are way ahead of their parents — and very much on their own — in their online explorations. The data also revealed a substantial discrepancy between what parents *think* their children are doing online, and what their children are *actually* doing online.

A second release of data from this survey analyzed areas of risk such as children and youth using private and adult chat rooms, meeting Internet acquaintances in person, being exposed to sexually explicit and hateful material and sharing personal information. These results also reveal the importance of household rules around the use of the Internet and other types of media and illustrate the importance of adult involvement and supervision.

Given the pervasiveness of media in our young patients' lives, it would make sense to ask about media use and media-consumption habits. Yet, how many health professionals include this line of questioning in patient histories or psychosocial assessments? A survey of paediatric residency programs in the United States found that despite increased awareness of media influences on child health, less than one-third of paediatric residency programs teach about media exposure.³

By asking the right questions, health professionals can play an important role in helping to ensure that media are positive forces in young people's lives.

The Media Awareness Network and the Canadian Paediatric Society have teamed up to develop this guidebook to familiarize physicians with the research data, to demonstrate the links between media exposure and specific health issues, to provide tools for assessing media use and to offer practical tips for physicians and parents alike.

Media and Obesity

In Canada, the prevalence of overweight among boys increased from 15 percent in 1981 to 29 percent in 1996 and from 15 percent to 24 percent among girls. The prevalence of obesity in children more than doubled over that period, from 5 percent for both boys and girls to 14 percent for boys and 12 percent for girls.⁴ Watching television, playing video games and chatting to friends over the Internet are all sedentary activities that are often carried out at the expense of more active pastimes. A study of U.S. children, aged 8 to 16 years, found that children who watch 4 or more hours of television per day had a higher body mass index and thicker skinfolds than those who watched less than 2 hours per day. Moreover, the fattest children were those with low rates of vigorous activity and high rates of television watching.⁵

Physical-activity guidelines for children and youth, developed jointly by Health Canada and the Canadian Society for Exercise Physiology, were introduced in April 2002. Endorsed by both the Canadian Paediatric Society and the College of Family Physicians of Canada, the guidelines recommend that inactive children and youth increase the amount of time they currently spend being physically active by at least 30 minutes per day while decreasing the time they spend watching television, playing computer

What can physicians do?

- *Regularly inquire about media habits.*
- *Use Canada's Physical Activity Guides for Children and Youth to promote physical activity.*
- *Counsel families to turn the television off during mealtimes.*

games and surfing the Internet by at least 30 minutes per day. Over several months, children and youth should strive to accumulate at least 90 minutes of physical activity per day and decrease by at least 90 minutes per day the amount of time spent on non-active activities such as watching videos or sitting in front of a computer.^{6, 7}

The Canadian Association for Health, Physical Education, Recreation and Dance (CAHPERD) advocates that all school-aged children, from kindergarten through Grade 12, participate in at least 30 minutes of physical education each day, yet Canadian schools average only 60 minutes of physical education each *week*.⁸ Clearly, families need to find other opportunities, outside of school, for physical activity for their children. In a study of six communities in Nova Scotia, children and youth consistently identified watching television and playing computer and video games as a barrier to their own physical activity.⁹

Media can play a role in childhood obesity through aggressive marketing campaigns for junk food, as well. Most food advertising on children's television promotes fast foods, candy and pre-sweetened cereals. Commercials for healthy food make up only 4 percent of the total advertisements shown.¹⁰ Moreover, fast-food commercials during kids' programming on Saturday mornings are pitching bigger and

bigger portions, a trend that researchers link to the alarming rise in obesity among young people.¹¹ These problems are only exacerbated by eating in front of the television or computer, a habit proven to dull the normal satiety response.¹²

What can parents do?

- *Encourage healthy eating.*
- *Balance media use with other activities such as sports, hobbies and active, creative play.*
- *Discuss ways advertisers market food products to kids.*

Media and Body Image

Physicians are seeing increasing numbers of children and teens with eating disorders such as anorexia nervosa and bulimia¹³ and these disorders are evident in younger and younger children. Research has linked the thin

female beauty ideal and the muscular male body ideal portrayed in the media with a range of health problems including body dissatisfaction and eating disorders.^{14, 15}

These cultural ideals may explain why so many adolescents dissatisfied with their body image are willing to try a variety of potentially dangerous weight-loss practices, muscle-building regimes and even cosmetic procedures in their quest for the perfect body. A survey of girls in Grades 5 through 12 in the United States revealed that the prevalence of those dissatisfied with their body shapes (59 percent) and those wanting to lose weight (66 percent) were higher than the prevalence of those who were actually overweight (29 percent). A total of 69 percent of the girls reported that magazine pictures influenced their idea of the perfect body shape, and 47 percent reported wanting to lose weight because of magazine pictures.¹⁶

The early teen years are considered a crucial time for the development of healthy self-esteem. Insecurities over attractiveness and weight are heightened during this period. As teens are voracious media consumers, there exists the potential for them to be more vulnerable to images of impossible thinness and beauty. Physicians should be aware of how media influence young patients' perception of the ideal body shape and size. It's important that young people understand that most of the images they see in the media are unrealistic and unattainable.

What can physicians do?

- *Discuss unrealistic and unhealthy body images with young patients.*
- *Offer magazines in your waiting room that promote healthy eating, a healthy body image and physical activity.*

What can parents do?

- *Examine your own attitudes about body size and shape.*
- *Talk to your child about unattainable body images they see in the media.*
- *Look for positive images of healthy bodies.*



Media and Violence

Much of the research on media violence has focused on whether or not increased media consumption is linked to increased aggression in children and adults. Scientific opinion about the strength of the link between the two variables is mixed.¹⁷ However, researchers are noting a change in the nature and pervasiveness of media violence, and the ways in which it is shaping the child's social environment.

Research indicates that violence in traditional media, such as movies and television, is becoming more graphic, sadistic and sexualized,¹⁸ but those trends reveal only part of the picture. As telecommunications continue to reshape the media landscape, children and youth are being exposed to increasing levels of violence in the video games they play,¹⁹ the music they listen to,²⁰ and the Web sites they frequent²¹ — and much of this exposure occurs off the parental radar screen.²²

Some children and youth are also using new media in ways that amplify traditional forms of bullying and aggression.²³ Hateful comments posted in online discussion fora and personal Web sites as well as threatening e-mail messages, often mean victims are unable to find refuge from schoolyard bullying, even at home.

Media portrayals of psychological violence are increasing

Between 1993 and 2001, incidents of physical violence on six major Canadian television networks increased by 387 percent. A disturbing increase in psychological violence has also been noted. Although incidents of psychological violence remained relatively stable between 1993 and 1999, they increased 325 percent from 1999 to 2001. Psychological violence now occurs more frequently than physical violence on both English-language and French-language television networks.²⁴

Media violence stimulates fear in some children

A number of studies have reported that watching media violence frightens young children and that the effects of this may be long-lasting.

Incidents of psychological trauma — including anxiety, depression and post-traumatic stress — have been found to increase in proportion to the number of hours of television watched each day.²⁵ The presence of a

television in a child's bedroom increases the likelihood that the child will suffer from sleep disturbances, including nightmares.²⁶

The effects of exposure are also surprisingly long-lasting. A 1999 study found that 90 percent of participants continued to experience fright effects — ranging from sleep disturbances to steadfast avoidance of certain situations — from images they viewed years before as children.²⁷

A Dutch study of children between the ages of 9 and 12 found that children often confuse realistic programs with the real world. When they are unable to integrate the violence in these shows because they cannot follow the plot line, they are much more likely to become anxious.²⁸ This finding is particularly problematic, given the trend to increasingly realistic portrayals of violence in all forms of media, from television to video games.

Media violence affects brain activation patterns in both aggressive and non-aggressive youth

Functional magnetic resonance imaging (fMRI) indicates that violent video games affect brain activation patterns in both aggressive and non-aggressive youths.

What children find frightening

Ages 2 to 7 years

- Scary visual images: vicious animals; monsters; and grotesque, mutilated or deformed characters.
- Stories involving the death of a parent.
- Stories involving natural disasters, shown vividly.

Ages 8 to 12 years

- More realistic threats and dangers, especially things that can happen to a child.
- Violence or the threat of violence.

Ages 13 years and older

- Realistic physical harm or threats of intense harm.
- Molestation or sexual assault.
- Threats from aliens or occult forces.

Source: Joanne Cantor. *Mommy, I'm scared: How TV and movies frighten children and what we can do to protect them.* (New York: Harcourt Brace & Company, 1998).

Researchers have found that the brains of aggressive adolescents, especially in the frontal lobes, are less active while they play video games than the brains of non-aggressive players. In addition, non-aggressive players who have consumed high levels of violent media prior to the experiment have different brain activation patterns than non-aggressive players with low violent-media exposure.²⁹

Media violence desensitizes people to real violence

Some research indicates that people who are repeatedly exposed to media violence tend to be less disturbed when they witness real-world violence. This research also indicates that these people have less sympathy for its victims.³⁰ In addition, children are more likely to tolerate aggressive behaviour in the real world if they first watch television shows or films that contain violence.³¹

Paradoxically, other studies show that the more media individuals consume, the more likely they are to believe that the world is more dangerous than it is in reality. As viewers' perceptions of the world come to conform to the depictions they see in the media, they become more passive, anxious and fearful.³²

Family attitudes to violent content are more important than the images themselves

A number of studies suggest that media is only one of a number of variables that put children and youth at risk of aggressive behaviour.

For example, a Norwegian study of at-risk teenaged boys found that the lack of parental rules regulating what the boys watched was a more significant predictor of aggressive behaviour than the amount of media violence they watched. It also indicated that exposure to real-world violence, together with exposure to media violence, created an "overload" of violent events. Boys who experienced this overload were more likely to use violent media images to create and consolidate their identities as members of an anti-social and marginalized group.³³

On the other hand, researchers report that parental attitudes toward media violence can mitigate the impact it has on children. Huesmann and Bacharach conclude that “Family attitudes and social class are stronger determinants of attitudes toward aggression than is the amount of exposure to television, which is, nevertheless, a significant, but weaker, predictor.”³⁴

What can parents do?

- *Limit your child’s exposure to violence in the media.*
- *Build your own videotape library of quality programs.*
- *Avoid buying action figures based on violent programs or movies.*
- *Become familiar with the Canadian and U.S. rating systems for movies and video games.*
- *Check out movies and video games before you buy or rent.*
- *Pay close attention to what children see in the news. Children are more fearful of violence in news coverage than in any other media content.*

Media and Sexual Behaviour and Attitudes

Consistently, youth rank media among their leading sources of information on sex and sexuality,³⁵ yet media often portray sexual behaviours without the known consequences of unintended pregnancy, HIV or other sexually transmitted diseases.³⁶ Numerous studies illustrate the powerful influence of mass media on adolescents at the very time they are developing their values and beliefs around gender roles, sexual behaviours and attitudes.³⁷

Sexual content in movies, television and music is not only more prevalent than ever before, the messages in the dialogue, lyrics and behaviours depicted are much more explicit. Between 1976 and 1996, there has been a 270 percent increase in sexual interactions during the family hour of 8:00 p.m. to 9:00 p.m.³⁸ Nearly one-third of family-hour shows contain sexual references and the incidence of vulgar language is increasing.³⁹

Advertising is another source of significant sexual imagery, including the inappropriate early sexualization of children, particularly girls.⁴⁰ Sex is used to sell everything from shampoo to cars. Increased exposure to sex in the media has been associated with an increased perception of the frequency of sexual activity in the real world, normalizing and encouraging these behaviours in young teens.⁴¹

The new media environment offers easy — and sometimes unintended — access to sexually explicit content that is clearly not intended for children. One quarter of the respondents to the Media Awareness Network's survey indicated that they intentionally visit pornographic Web sites regularly. Over half report ending up on a pornographic site unintentionally with some frequency. A more recent study⁴² in Australia states that 84 percent of boys and 60 percent of girls have been exposed accidentally to pornographic material. A U.S. study⁴³ conducted at the same time found that 25 percent of all 10- to 17-year-olds had unwanted exposure to sexual pictures while online. The Internet is not the sole domain of explicit sexual content accessible by children and youth, as video games, music videos and advertisements exploit sexual imagery — some of it violent — to sell a product.

What can physicians do?

- *Encourage parents to talk to their kids about sexual images, attitudes and beliefs.*
- *Provide quality resources to parents and teens about healthy sexuality.*
- *Encourage parents and teens to discuss contraception and safe sex practices.*

Media and Tobacco, Alcohol and Other Drugs

Mainstream television programming contains large numbers of references to cigarettes, alcohol and illicit drugs.⁴⁴ One-fourth of all MTV videos contain alcohol or tobacco use.⁴⁵ In movies rated PG-13, the most popular, youth-oriented category, smoking has actually increased by 50 percent despite a 1998 master settlement agreement between the tobacco industry and 48 states in the U.S. that forbids the placement of tobacco products in movies.⁴⁶ Eighty-two percent of PG-13, youth-oriented movies contain tobacco use.⁴⁷

A study examining smoking behaviours in popular movies before and after this settlement found that smoking and smokers continue to be portrayed in popular films in a positive light and as successful and powerful characters. Fewer films feature negative statements about tobacco use and several films showed identifiable, brand name cigarette packs. Studies demonstrate that young people are influenced by the smoking behaviour of their favourite stars, both on and off the screen, and many current films feature big-name stars who smoke.⁴⁸

The marketing of tobacco has been the focus of government regulation for some time now in Canada. Tobacco products have not been advertised directly on television or radio since the early 1970s, “lifestyle” product advertising in magazines and newspapers is prohibited, and

the promotion of tobacco company sponsorships will end in 2003. Canadian children and youth are still exposed to tobacco advertising however, whether in popular American magazines and movies or on the unregulated Internet.

Alcohol producers spend millions of dollars per year in Canada on advertising and the advertisements that children and teens see often fall into the “lifestyle” genre, promoting the message that “real” men drink beer, have fun and are successful. The true consequences of drinking and smoking — addiction, disease and death — are seldom depicted.



Over one-third (39 percent) of the 15- to 17-year-old respondents to the Media Awareness Network's survey had "often" or "sometimes" visited a Web site sponsored by a beer or alcohol company. Commercial Web sites based on adult products such as cars and alcohol are designed to build brand recognition and loyalty among young people — especially pre-teen and teenaged boys.

The idea of building product loyalty with teens is not new. In 1999, the Center for Media Education found that 62 percent of beer and alcohol Web sites displayed what they called "youth-oriented features," activities designed specifically to appeal to adolescents. Unenforceable age disclaimers serve only to increase the teen appeal. Research has found that constant exposure to alcohol products — often from an early age — is the first step toward acceptance of positive expectations about drinking.¹⁹

Media and Risk-Taking Behaviour

A fairly new focus of media studies relates to the portrayal of injury-prevention practices. One such study examined 25 G- and PG-rated movies with the highest domestic box-office grosses and found that only 27 percent of motor vehicle occupants wore seat belts, 18 percent of pedestrians looked both ways before crossing the street, 16 percent of pedestrians used a crosswalk, 6 percent of cyclists wore helmets and 17 percent of boaters wore life jackets.⁵⁰ Unsafe driving behaviours, such as impaired driving and speeding, are often glamorized in popular movies.

More affordable video cameras and the popularity of extreme sports and reality television are drawing more and more young people to video "scrapbooking," a trend police say began with graffiti vandals taping one another spray painting buildings and trains.⁵¹ Now, it includes young people videotaping each other imitating risky stunts and then posting — and, in some cases, even selling — these videos online.⁵²

What can physicians do?

In your practice...

- Adopt the media history form in this guide or select key questions as part of a routine medical history.
- Inquire regularly about the types of programs, video games, music, music videos and Web sites your patients are exposed to.
- Talk to your patients and their parents about the significance of media influences on health and lifestyle choices.
- Counsel families to balance their use of media with other physical activities and to monitor their children's media use.
- Encourage parents to visit the Web sites of both the Media Awareness Network (www.media-awareness.ca) and the Canadian Paediatric Society (www.cps.ca) for more information.

In your community...

- Share this guide with your colleagues and encourage them to become familiar with the research on media's influence on health and well-being.
- Use the Media Awareness Network's online *MediaPulse* resources to raise awareness about this issue. Visit the site (www.media-awareness.ca) and look for the *MediaPulse* link on the home page.

MediaPulse – Tips to manage media use in the home

- Start when your children are young. It's best to develop good media habits well before children start school. As they grow older, it will be more difficult to enforce restrictions or influence their choices.
- Take a good hard look at your own media habits and change them if necessary. Remember, you are the most important role model in your child's life.
- Make sure your child's media use is balanced with sports, hobbies, creative play and playing outdoors and that late-night chatting and surfing are not cutting into important sleep time.
- Get involved in your child's media — watch, play and listen with them.
- Encourage your children to sample a variety of quality media experiences. Guide them to make good media choices.
- Learn about the Canadian and U.S. ratings systems for television, music, movies and video games. They can be helpful when choosing appropriate media for your child.
- Talk to your child about stereotypical and violent images in the media and about strategies advertisers use to market to children.
- Limit the amount of violent content your children are exposed to and monitor their behaviour after watching scary or violent shows or playing videogames.
- Keep television, Internet-connected computers and gaming equipment out of your child's bedroom.
- Make your voice heard. If any media content strikes you as inappropriate or offensive, it's important to speak out to the media industries. It's equally important to speak out in support of quality entertainment.

Visit the Web sites of the Media Awareness Network (www.media-awareness.ca) and the Canadian Paediatric Society (www.caringforkids.cps.ca) to find out more.



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