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Review Article

Harmful Effects of Media on Children and Adolescents

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Children and adolescents spent a considerable portion of their time watching television, movies, playing videogames and on the internet. Media has proved to be a very useful tool in the fields of education, arts, science, sports, and culture. Over the past few decades, there has been a surge in the use of media by the younger generations and concern has been raised about the impact of media on children because of research reports of long term harmful effects. Media use is a double edged sword with both merits and demerits and it is therefore imperative for parents to understand the effect of media exposure on children in order to understand and handle problems resulting from this exposure better.

Extent of media use by children and adolescents

Children today grow up in a world saturated with media use. A national survey in the US found that children aged 8 to 18 years had an average media usage time of 7 hours and 38 minutes every day [1]. The average American youngster spends one-third of each day with some form of electronic media [2]. There are not many studies on media exposure in Indian children and adolescents, but the scenario in India shows a similar trend with Indian children spending more than two hours of their time on the television daily [3]. This increased exposure to the media has profound effects on the development and functioning of children and adolescents today. Media has been found to have a negative

impact on the physical, psychological and social development of children. In particular, the effect of media in the areas of violence and aggression; obesity, nutrition, and eating disorders; substance use and early sexual initiation have to be taken into special consideration.

Media and violence

The National television violence study, carried out to understand the content of American television, showed that there was an alarming amount of violence present in the programs watched by children and adolescents. Young people view an average of 10,000 acts of violence per year with 61% of the shows containing violence of some kind. In general, violence on television and in movies often conveys a model of conflict resolution. It is efficient, frequent, and inconsequential. Among violent programs only 15% carried any sort of advisory or content code. The study concluded that television violence contributes to antisocial effects on viewers. The prime effects seen were 1. learning aggressive behaviour and attitudes 2. desensitization to violence and 3. fear of being victimized by violence [4]. A study on the content of music videos found that nearly one fourth of all Music Television videos portray overt violence and depict weapon carrying [5]. The research on the effect of media on violent behaviour is extensive and a cause-and-effect relationship between media violence and real-life aggression has been consistently shown to exist [6–11]. Another source of exposure to violence is the Internet and video games. Studies on the relationship between exposure to violence on the Internet and real life aggression are few. However, concern about internet sites that may advocate violence, provide information on the creation of explosive devices, or reveal how to acquire firearms is very real. Research shows that there is an increased risk of risk taking and aggressive behaviour in children exposed to violent video games [11, 12].

Children cannot discriminate between reality and fantasy. They lack adult reasoning abilities and may perceive TV shows as being realistic and shape their behaviours accordingly. Media violence cannot be considered a lone cause of violence in the youth of today. But the use of violence to achieve goals and to settle conflicts is learned behaviour. Adolescents who are exposed to violence or are victims of violence in their

homes or communities are more likely to use violence themselves [14, 15]. This goes to show that witnessing of violence is an important determinant of violent behaviour and media violence represents the witnessing of violence in a very explicit and graphic fashion.

Media and substance abuse

Studies have examined the relationship between TV advertising of alcohol and drinking knowledge, beliefs and intention to later drinking in children. The results showed that children with more exposure to advertisements of alcohol held more favourable beliefs about drinking and more frequently intended to drink as adults. The positive effects attributed to drinking included romance, sociability and relaxation [16]. Recent studies have also shown that exposure to alcohol advertising and TV programming is associated with positive beliefs about alcohol consumption [17]. A content analysis of music videos showed that one fourth of music videos commonly aired on television contain alcohol or tobacco use [18]. An independent association between marijuana use and music video exposure has also been shown [19]. Research has demonstrated an association between exposure to certain mass media messages and smoking in adolescents. For instance, more than half of adolescent smoking initiation has been linked to watching smoking in movies [20].

Media and risk of early sexual initiation and sexual promiscuity

A very important factor contributing to early sexual initiation in adolescents is exposure to sexually explicit content in the media. Over the past few decades, there is increased and more explicit portrayal of sexual material in the media. There is however very little information about the risks associated with early sexual initiation and indiscriminate sexual behaviour like unwanted pregnancies and the risk of contracting sexually transmitted diseases. Content analysis of sexually explicit material on television showed that more than 50% of shows and 66% of prime time shows contain sexual content, only 9% contain any reference to possible risk or responsibilities of sexual activity or any reference to contraception or safer sex [21]. A study examining the relationships between amount of television viewing and parental regulation of content on sexual initiation observed that watching two or more hours of television per day and lack of parental

regulation of television programming were each associated with increased risk of initiating sexual intercourse within a year [22].

The Internet offers easy and private access to very sexually explicit content with just a few keystrokes. The net also poses other sexual risks to adolescents like risks from stalkers and paedophiles, lack of privacy, sharing too much information, or posting inappropriate photos of themselves on the net especially on social networking sites [23]. Swift, widespread distribution of such photos via cell phones and computers may result in dire, unforeseen consequences.

Media and obesity

Children today tend to spend their leisure time on the television, computer or video games rather than playing or indulging in other physical activities. Studies have reported a strong causal link between television viewing and the risk of developing obesity [24-26]. There is a significant association between playing electronic video games and obesity with a twofold increased risk of obesity for every hour spent playing electronic games daily [27]. Studies have also shown an inverse relationship between the time spent using video games and daily physical activity [28]. The mechanism of effect of media exposure on obesity may also operate through the extensive advertising messages for unhealthy foods targeted at children [29].

Media and other behavioural problems

The time spent on the television and other forms of entertainment media significantly reduce a child's time for activities necessary for the healthy development like playing, reading, storytelling and spending time with peers and family [30]. Studies have demonstrated a deleterious effect of watching more than one to two hours of television per day on academic performance [31]. Excess television viewing causes poor peer relationships and thereby increases the risk of social isolation, anxiety disorder and agoraphobia [32]. Studies have shown that TV viewing may play an exacerbating, if not causal, role in the development of attention-deficit/hyperactivity disorder [33] and that excessive TV viewing in adolescence is a risk factor for development of depression in young adulthood. [34].

Recommendations and conclusion

Considering the profound role of the media on various facets of a child's development, the need of the hour is to find ways to promote the healthy use of the media in the community. This requires the combined efforts of physicians, educators, parents and policy makers. Physicians, in their role as health promoters, should become more active in sensitising the media to its impact on youth. Programming decisions should be made with potential consequences to the viewing audience kept in mind. When violence is present, there should be adequate warnings like need for parental guidance made available. Physicians should make parents and schools "media literate," meaning they should understand the risks of exposure to violence and other inappropriate sexual content. The parents should also monitor what programs their children are viewing and should also limit the time spent watching the same. Children should be taught how to interpret what they see on television and in the movies, including the intent and content of commercials without blindly copying or imitating the same. In doing so, children may be increasingly able to discern which media messages are suitable. Research in ways to maximise the positive use of the media and minimise its harmful effects will help in its optimal use.

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