Concerns Regarding Social Media and Health Issues in Adolescents and Young Adults

ABSTRACT: Although there are many positive aspects of social media for adolescents and young adults, there are also risks. Adolescence is a time of significant developmental changes, during which adolescents exhibit a limited capacity for self-regulation and an increased risk of susceptibility to peer pressure and experimentation. Social media can be harmful, and obstetrician–gynecologists may screen their adolescent and young adult patients for high-risk sexual behaviors, especially if sexualized text communication (sexting), exposure to pornography, online dating, or other risk-taking behaviors are present. Victims of cyberbullying and those who engage in sexting are at increased risk of sexually transmitted infections and pregnancy. The effect of social media may be considered in the differential diagnosis of myriad health problems during adolescence. Referrals to mental health care providers or providing outside resources may be indicated. A multidisciplinary approach to address these issues can include the obstetrician–gynecologist, guardians, and school officials and personnel. Knowledge of resources, including those within the schools and community, allows the obstetrician–gynecologist to provide support to adolescents facing these issues.

The American College of Obstetricians and Gynecologists recommends that obstetrician–gynecologists consider the following issues when working with adolescent and young adult populations:

- Adolescents and young adults can benefit from the use of social media in multiple facets of their lives, including personal, social, and physical aspects.
- Victims of cyberbullying and those who engage in sexualized text communication (sexting) are at increased risk of sexually transmitted infections (STIs) and pregnancy.
- Social media can be harmful, and obstetrician–gynecologists may screen their adolescent and young adult patients for high-risk sexual behaviors, especially if sexting, exposure to pornography, online dating, or other risk-taking behaviors are present.
- The adverse health risks of Internet addiction
- Sleep problems due to use of electronic media
- The consequences of exposure to online pornography
- The legal, social, and psychological risks of sexting
- The role of guardians in monitoring text and e-mail use by their minor children

Social media, understood as the use of electronic media to connect socially with peers and as a source of entertainment, is highly prevalent in U.S. society and is used commonly by adolescents and young adults. In the United States, 90% of adolescents have used social media, and one third of adolescents visit social media sites multiple times per day (1). Among adolescents aged 12–17 years, 95% use the Internet, and 74% have access to mobile Internet devices (2). Although there are many positive aspects of social media for adolescents and young adults, there are also risks. Adolescence is a time of significant developmental change, during which adolescents exhibit a limited capacity for self-regulation and an increased risk of susceptibility to peer pressure and experimentation.
Potential Positive Aspects of Social Media

Adolescents and young adults can benefit from the use of social media in multiple facets of their lives, including personal, social, and physical aspects. With most adolescents logging onto social media web sites and apps more than once a day, the Internet has become a place of social connection, affording adolescents the opportunity to connect with friends and to expand their circle of acquaintances, improve socialization skills, and foster creativity and open discourse. Technology is also a powerful tool for learning more about health. Studies show that adolescents’ use of mobile technologies results in improved medication adherence, fewer missed health care appointments, and a better understanding of their health. Those with chronic or acute diseases can connect with others through the Internet, which may offer a source of anonymous support for coping with various conditions (3, 4).

Although more than one half of high school students report using the Internet as a regular resource for health information (5), the potential influence of social media on digital health education is unclear. For example, a systematic review of studies looking at the effect of digital media-based interventions on adolescent sexual health showed that such interventions had mixed results (6). Several studies have shown that computer- and Internet-based interventions contribute to improved sexual health outcomes for this population, including improved condom use and improved knowledge of human immunodeficiency virus (HIV) and other STIs, contraception options, and pregnancy risk (7–9). Other studies showed that use of social media increased early onset of sexual activity (6, 10). Additional challenges of adolescents turning to the Internet for sexual health information include exposure to incomplete or inaccurate information and lost opportunities for health care providers to offer contraception and STI screening. More research is needed to determine whether specific interventions have a positive effect on adolescent sexual health (11).

Cyberbullying

Cyberbullying is defined as aggressive and repetitive acts meant to hurt someone and involves an imbalance of power inflicted through electronic media (12). According to one study, 20–40% of adolescents report having been victims of cyberbullying (13). Traditional bullying and cyberbullying are associated with increased anxiety, depression, and low self-esteem in adolescents (14). Bullying also has been associated with other physical health effects, including stomachaches, sleep problems, headaches, tension, bed-wetting, fatigue, and poor appetite (15). A meta-analysis of 33 studies concluded that being a victim of bullying is a risk factor for lower grades and standardized test scores (16). More recent studies have shown that bullying is associated with increased substance use, violent behavior, unsafe sexual behavior, suicidal behavior, and likelihood to carry a weapon (17).

Internet Addiction

Internet addiction is defined as uncontrollable use of the Internet that results in excessive time consumption or social dysfunction (5). Internet addiction has a similar pathology to other addictions, which result in interpersonal, family, and social problems. In adolescents, Internet addiction has been linked to depression, self-injurious behaviors, sleep disturbances, increased alcohol and tobacco use, and obesity (5). Additionally, studies have found microstructural changes in the brains of adolescents with Internet addiction, including a decrease in gray matter volume and alterations in neurotransmitters (18).

Sleep Deprivation

Higher rates of depression, suicidal ideation, obesity, and poorer school performance have been demonstrated in sleep-deprived adolescents, especially in those getting 6 hours or fewer of sleep per night. In addition to distraction and less sleep because of time spent on social media, the electronic devices themselves may be contributing to poor sleep quality in adolescents. Studies have shown that the light emitted from most electronic screens can disrupt circadian rhythms by delaying the release of melatonin, resulting in sleep disturbances (19). Adolescents have a natural forward shift in their circadian rhythms, often resulting in a tendency to stay up later and difficulty falling asleep; the added effects of electronic media can exacerbate these sleep problems. Adolescents should be advised to aim for 9 hours of sleep per night and to avoid using electronic devices before bed to improve sleep quality.

Digital Footprint

The term “digital footprint” refers to the data left behind by users of electronic media. This ongoing record of web sites visited, pictures and videos posted, and personal information shared online cannot be removed and can lead to long-term implications if inappropriate information is shared. Adolescents and young adults need to be aware of the information recorded in cyberspace because colleges and employers increasingly are looking at a candidate’s digital footprint when considering college and job applications. Privacy issues, including identity theft and other fraud, are also a growing concern with adolescents’ use of electronic media, particularly because adolescents are more likely to share private information online, such as their full name, date of birth, and address (20). Adolescents can help protect themselves by keeping passwords private, not sharing personal information on any electronic media, and sharing only positive electronic media.
**Pornography**

Exposure to pornographic material on the Internet is common, with 70% of adolescents aged 15–17 years reporting accidental exposure and 72% of college students reporting exposure before age 18 years (21, 22). Gynecologists should be aware of the significant health implications for adolescents because exposure to pornography has been linked to a more permissive attitude towards unprotected sex and high-risk sexual behaviors, including having multiple partners, anal sex, and using alcohol and drugs during sex (5). Exposure to violent pornographic material has been linked to sexually aggressive behaviors; data have shown that boys exposed in early adolescence are more likely to engage in sexual harassment in middle adolescence (23). Pornography also has been shown to have a negative influence on attitudes and ideas toward women, sexuality, and healthy relationships (11).

**Sexting**

A trend of sexualized text communication (referred to as "sexting") has emerged. Sexting is the act of sending sexually explicit messages or suggestive images by cell phone (24). One adverse outcome of sexting is the potential for inadvertent public dissemination of sexual images. Although the resulting embarrassment and humiliation may be temporary, in the long term, such disclosure can interfere with future educational and employment opportunities (see "Digital Footprint"). Other adverse outcomes include the potential for physical or emotional harm to self or others (24, 25). A 2008 survey showed that 19% of females (aged 13–19 years) and 32% of women (aged 20–26 years) had sent nude or seminude pictures, and 31% of the former group and 46% of the latter group had received such pictures. A study of college-aged individuals found those reporting sexting also were more likely to report other high-risk behaviors, including multiple sexual partners over the past 3 months, unprotected sex, sex after alcohol or drug use, a higher number of total sexual partners, and a higher likelihood of STIs (24).

Sexting images of minors can have significant legal consequences. The Protection of Children Against Sexual Exploitation Act prohibits visual depiction of minors engaged in sexually explicit conduct. Under current child pornography laws, the dissemination of images of a juvenile to another person is prohibited and can result in prosecution (26). Although several states have laws specific to sexting, some states consider sexting among minors a felony, and high school students have been charged with felony counts of pornography for sexting. The gynecologist’s office is a setting in which sexual health matters are discussed routinely. Such conversations provide an opportunity to educate the adolescent or young adult on the harms and consequences associated with sexting and also to encourage guardians to monitor the text and e-mail use of adolescents. Monitoring or limiting an adolescent’s text messaging has been linked to low incidence of sexting (24).

**Internet Dating**

Internet dating has been used by adolescents as a way to explore new relationships. Many web sites specifically designed for adolescent dating have been created. Although many of these sites warn against sharing personal information, this advice often is ignored. The Internet allows adolescents to explore sexual interest with anonymity, perceived safety, and hidden identity. This anonymity can embolden adolescents to engage in language and actions they might not engage in during face-to-face encounters. Adolescents who have participated in online dating have been shown to have an increased risk of STIs and high-risk sexual behaviors (11). In addition, dating violence has been associated with Internet dating in adolescents (11).

**Summary**

Electronic media can have positive and negative effects on adolescents. Overall, electronic media use is positive when used for education, access to positive health information, and developing and sustaining social connections. Despite these benefits, electronic media can be harmful and can have negative health consequences. Social media use may be a proxy for other high-risk behaviors and may alert an obstetrician–gynecologist to the need to discuss other issues surrounding sexuality, STI prevention, and contraception.

The effect of social media may be considered in the differential diagnosis of myriad health problems during adolescence. Referrals to mental health care providers or providing outside resources may be indicated. A multidisciplinary approach to address these issues can include the obstetrician–gynecologist, guardians, and school officials and personnel. Knowledge of resources, including those within the schools and community, allows the obstetrician–gynecologist to provide support to adolescents facing these issues.

**For More Information**

These resources are for information only and are not meant to be comprehensive. Referral to these resources does not imply the American College of Obstetricians and Gynecologists' endorsement of the organization, the organization's web site, or the content of the resource. The resources may change without notice.

ACOG has identified additional resources on topics related to this document that may be helpful for ob-gyns, other health care providers, and patients. You may view these resources at www.acog.org/More-Info/TeenSocialMediaConcerns.

**References**


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