

Internet interactions

Adolescent health and cyberspace

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While the Internet presents unprecedented opportunities for rapid and efficient access to information, entertainment, and social interaction, it also affects the health and well-being of users. Adolescents are heavy Internet users, and physicians should be aware of the health-related implications of Internet communication. This editorial focuses on the potential risks of Internet communication and on physicians' important role in addressing these risks in clinical practice and their primary role in health promotion.¹

Exploitation of teens by on-line contacts

The Internet has become integral to adolescent life. Teens develop and maintain contacts, and many anonymously discuss intimate topics in the privacy of their rooms, without their parents' knowledge.²⁻⁵ "Hanging out" in chat rooms has become commonplace.

While some adults are still adjusting to the explosion of on-line information and communication,⁶ it is common for adolescents to communicate and to seek health information or information for homework assignments on-line.^{7,8} Concern has been expressed in the medical literature about risky on-line behaviour, particularly teen-to-stranger Internet contact. One study revealed that 74% of teenage respondents reported e-mail or chat room contact with a stranger.¹⁰ A Canadian-government survey found that most teenagers had visited adult-only chat rooms and that 15% had met personally with at least one person whom they had first encountered in cyberspace.³ While not all interactions with strangers have negative implications, there is increasing evidence that the absence of basic social cues, such as age, and the common

use of constructed identities in on-line interactions could facilitate exploitative relationships.¹¹⁻¹⁴

Certain Internet forums also provide a supportive social context for adults interested in sexual contact with children.^{13,14} Jaffe and Sharma, in their study of people who seduce minors in chat rooms, were "surprised at the large number of individuals who are charged with cyberkidding [on-line interaction of a sexual nature between an adult and a minor] who have no past history of sexual deviancy."¹² Exposure of young people to sexual content in cyberspace is not limited to those who converse with strangers on-line; 25% of respondents in a national survey of 10- to 17-year-olds had unwanted Internet exposure to sexual images in the previous year.¹⁵

While most parents are aware of the need to "street proof" children, many are unaware of their children's on-line activities and of the potential dangers of cyberspace. Because "many young people who use the Internet encounter unwanted sexual overtures, [physicians] and parents should be prepared to educate youth about how to respond to online sexual solicitations, including encouraging youth to disclose and report such encounters and to talk about them."¹⁶

Risk for sexually transmitted diseases

Recent studies report that increasing numbers are acquiring new sexual partners through Internet chat rooms and that those who seek partners on the Internet have higher rates of sexually transmitted diseases (STDs).¹⁷⁻¹⁹ Young adults who seek sex partners on-line are "at significantly greater risk for sexually transmitted diseases than their peers."¹⁸ This trend represents a serious public health challenge. Information on partners is commonly

incomplete and might be limited to knowledge of on-line nicknames, making it difficult to trace the sexual partners of people with serious STDs.¹² Accelerated intimacy and increased disinhibition are commonly experienced in on-line relationships and on-line sexual activity has a high likelihood of resulting in off-line sexual contact.²⁰⁻²² It is critical that, without vilifying the medium, physicians discuss these risks with patients²³ and provide information on risk reduction.

Cyberbuddies: an unseen peer group

Peer influence has a profound effect on the attitudes, choices, and behaviour of teens²⁴⁻²⁷ and "one of the strongest predictors of adolescent behavior is the perceived or actual behavior of friends."²⁶ The pediatric literature strongly recommends that physicians encourage parents to monitor their children's friends and to discourage close friendships with peers who exhibit problem behaviour.²⁸ The Internet, however, makes this difficult. Parents should be made aware of the potential influence of cyberbuddies and should be encouraged to talk to their children about on-line activities.

Although research on the influence of on-line peers is just emerging, it is clear that the Internet provides access to a variety of social supports. While personal sharing in cyberspace provides emotional support for some teens,²⁹ there is evidence that on-line peer support could reinforce off-line anti-social behaviour. In the first recorded on-line suicide, 21-year old Brandon Vedas consumed a lethal dose of drugs and alcohol as he was egged on by chat room "friends" who had logged onto his webcam.³⁰ Health professionals, educators, and parents should remember that, despite the technological savvy of many young people, discussion related to safe Internet interactions and relationships should be an integral part of teen guidance.

Physicians' roles

Family doctors should understand the health-related risks stemming from some on-line activities

and be prepared to become involved in educating children, adolescents, and parents.^{31,32}

Parent education is perhaps the most realistic approach for physicians, as adolescents rarely visit doctors regularly,^{33,34} and parents can have great influence on teenagers' attitudes and behaviour.^{29,35-37} Parents should be encouraged to teach their children critical thinking and viewing skills, to discuss Internet use and the dangers of communicating with strangers on-line and meeting Internet contacts off-line, and to have computers in open areas in the home.

Conclusion

Communicating in cyberspace has become a normal part of daily living for many people. On-line behaviour must be considered by physicians as they endeavour to promote all aspects of health. While it is vital that health concerns related to on-line activities do not demonize the Internet, it is equally critical that the risks emerging within this still-novel environment be seriously evaluated and that measures be taken to educate young people about the importance of safe navigation in cyberspace. ❁

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The opinions expressed in editorials are those of the authors and do not imply endorsement by the College of Family Physicians of Canada.

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