PEDIATRICS PERSPECTIVES

HEADS[4]: Social Media Screening in Adolescent Primary Care

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Social media intertwines itself with the adolescent experience in our country. Friendships, family ties, romantic relationships, academic pursuits, and even dining all have an inseparable electronic component for this generation. Social media is defined as electronic communication, especially applications and Web sites, through which users create and share information, ideas, and personal messages in an online community.[1] The most prominent platforms for this activity are Facebook, Instagram, Twitter, and Snapchat. Research regarding the merge of social media and clinical practice has grown in the last decade, and we've now learned that there are clear correlations between patients' mental health and social media usage. Aberrant and/or excessive social media usage may contribute to the development of mental health disturbance in at-risk teenagers, such as feelings of isolation, depressive symptoms, and anxiety.[2,3] In addition, many mentally ill teenagers express their daily thoughts and stressors via social networking platforms. Thus, gathering information on teenagers' social media activities may provide a more complete picture of their psychosocial risk profile.

NORMALIZED ADDICTION

Social networking media involves active and passive consumption that can directly influence, if not replace, face-to-face contact. Usage patterns among adolescents resemble the progressive, withdrawal-producing, and dose-dependent symptoms of substance addiction. The average child opens her first social media account at 11.4 years, and the usage of social media progressively increases into adulthood.[4] The average child between 10 and 12 years of age uses social media for 16 minutes per day, which increases to 71 minutes per day in her teen-aged years. Female teenagers report the highest engagement, with daily users averaging 142 minutes per day.[5] As adolescents gradually increase the amount of time spent on these platforms, they also increase the likelihood of experiencing anxiety during periods of withdrawal from their devices. Eighty percent of college students report feeling agitated when their phone is not in sight, and time spent on social networking applications is a good indicator for these feelings.[6]

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Social media usage resembles a normalized addictive behavior, proportional to overall screen media usage. Current guidelines encourage at-home limits on usage, but high-use teenagers may be refractory to those methods. Moreover, social media is a powerful determinant of teen-aged mental health. Teenagers engaging in low levels of social media reap positive benefits of social connection and access to information,[2] but those in the top 10% of time on social networking platforms are at increased risk for many negative consequences, including cyberbullying (electronic communication with the intention of belittling, intimidating, or taunting another user), unauthorized distribution of sexting (photographic or written electronic communications of a sexual nature), depressive symptoms, and decreased self-worth.[2,3] Thus, a primary care or adolescent medicine clinician could miss important information about a teenager's psychosocial history if aberrant social media usage patterns are not identified and directly addressed.

SOCIAL MEDIA SCREENING FOR ALL ADOLESCENT PATIENTS

Because aberrant social media use may mirror addiction, management may warrant approaches typically used in substance abuse care, such as screening, brief intervention, and referral to treatment.[7] The current standard for adolescent psychosocial screening is use of the standardized assessment tool HEADSSS.[8] The acronym cues the practitioner to ask questions regarding home life, education, activities, drugs, sexual activity, safety, and suicide and/or depression. It is routinely performed with the parent or legal guardian absent from the examination room. Updates to this framework encourage discussion of screen media habits[8] but lack a dedicated section for social media and its unique effects.

All pediatric patients > 11 years should be asked the following:

1. Which social media sites and/or apps do you regularly use?
2. How long do you spend on social media sites and/or applications in a typical day?
   - *Concerning response: > 120 min per day.*
   - *Practical tip: most smartphones track the total time spent in each application. Ask the patient if they would be willing to follow these instructions to get a more accurate response.*
     - *iOS instructions: Settings-> Battery-> clock icon-> scroll down to "Battery Usage". May also download the applications listed below from the App Store.*
     - *Android instructions: will need to download an application that tracks usage. Free options in the Google Play store include QualityTime, BreakFree, and Checky.*
3. Do you think you use social media too much?
   - *If yes, ask if they have tried any strategies to remedy it.*
4. Does viewing social media increase or decrease your self-confidence?
5. Have you personally experienced cyberbullying, sexting, or an online user asking to have sexual relations with you?
   - *Depending on the patient, the clinician may need to describe what these are.*

FIGURE 1
HEADSSS-"S": social media extension.

Because social networking has emerged as a potentially addictive cornerstone of teen-aged life, it now warrants systematic assessment by practitioners. Although the HEADSSS algorithm remains helpful and needed in the care of adolescents, this assessment could be enhanced by adding a fourth "S" for social media usage questions. A potential framework of questions to assess patients' social media practices can be seen in Fig 1.

This systematic screening will benefit both the practitioner and the patient. It can operate as a tool for patient education and risk stratification. It will be used to raise awareness of the addictiveness, risks, and repercussions of aberrant social media use. In addition, the more subjective questions could open a dialogue on the emotional effects of site usage. This screening also aids the practitioner in identifying at-risk patients to consider for further attention. There is little risk to the patient-physician relationship by asking these questions, yet the opportunity for patient education and risk identification is a strong potential benefit. Thus, we believe that social media questions should be implemented into the routine clinical assessment of adolescents.

NEXT STEPS

If screening raises concern, potential next steps may include the following: (1) crafting a family media plan, (2) follow-up appointments, or (3) behavioral health referral. The family media plan and follow-up appointments represent Brief Intervention steps of the Screening, Brief Intervention, and Referral to Treatment model, whereas the Referral to Treatment step may occur at a behavioral health clinic. Family media plans are agreements between parents and children on the times, locations, platforms, and devices permitted for media usage.[2] Unfortunately, the plan often depends on the parent's perspective of the adolescent's screen media usage, which may not be accurate because adolescents spend significant portions of their day without parental supervision (eg, school, extracurricular activities, social gatherings, inside their bedroom). These unsupervised periods may coincide with the adolescent having access to a smartphone, therefore parents may not be aware of the full extent of their adolescent's social media use. If a smartphone application is used to provide objective usage data, as suggested in Fig 1, this could be used

to provide realistic information on the teenager's current social media use and enable creation of realistic and achievable limits. If social media behaviors are the primary concern, an informed family media plan could bring the caregivers on board, encourage adolescents to grow cognizant of daily usage, and set attainable goals to assess at future visits. Although some adolescents will resist adherence to a family media plan, this is inevitable for any behavior modification strategy (eg, nutrition, physical exercise). Although the plan's efficacy may decrease for less-cooperative patients, the primary care provider should continue to encourage healthy social media practices at each visit. Follow-up appointments can be used to hold the adolescent accountable for working toward their personalized goals and provide additional time to address deeper concerns associated with the aberrant social networking usage. Finally, if the interview uncovers mental health disturbances resulting from or contributing to media usage, a behavioral health referral would be a useful resource.

ABBREVIATION

HEADSSS: home life, education, activities, drugs, sexual activity, safety, and suicide and/or depression

REFERENCES

1. Merriam-Webster. Social media. 2017. Available at: https://www.merriam-webster.com/dictionary/social%20media. Accessed October 7, 2017
2. Reid Chassiakos YL, Radesky J, Christakis D, Moreno MA, Cross C; Council on Communications and Media. Children and adolescents and digital media. *Pediatrics*. 2016;138(5):e20162593
3. Lin LY, Sidani JE, Shensa A, et al. Association between social media use and depression among US young adults. *Depress Anxiety*. 2016;33(4):323–331
4. Influence Central. Kids & tech: the evolution of today's digital natives. 2016. Available at: http://influence-central.com/kids-tech-the-evolution-of-todays-digital-natives. Accessed October 7, 2017
5. Common Sense Media. Social Media. In: *The Common Sense Census: Media Use by Tweens and Teens*. New York, NY: Common Sense Media; 2015:39–41
6. Roberts JA, Yaya LH, Manolis C. The invisible addiction: cell-phone activities and addiction among male and female college students. *J Behav Addict*. 2014;3(4):254–265
7. McCance-Katz EF, Satterfield J. SBIRT: a key to integrate prevention and treatment of substance abuse in primary care. *Am J Addict*. 2012;21(2):176–177
8. Klein D, Goldenring J, Adelman W. HEADSSS 3.0: the psychosocial interview for adolescents updated for a new century field by media. *Contemporary Pediatrics*. January 1, 2014. Available at: http://contemporarypediatrics.modernmedicine.com/contemporary-pediatrics/content/tags/adolescent-medicine/heeadsss-30-psychosocial-interview-adolesce?page=full. Accessed October 11, 2017

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