ABSTRACT

An appreciation of the value of providing adolescents with appropriate healthcare has grown in the United States and internationally over the past 40 years. Provision of such care can be challenging due to a variety of factors related both to the adolescent patient population and the provider. Defined as the time between the beginning of puberty and maturity, the adolescent years are characterized by extreme growth and change. The provider must consider the cognitive, social, and physical developmental status of individual adolescent patients. Confidentiality and prevention are the cornerstones of adolescent medicine and should be conveyed to the adolescent and his or her parent(s)/guardian(s) in a manner that the adolescent can comprehend.

A high incidence of morbidity and mortality is associated with risky behaviors commonly undertaken by adolescent patients. Many of the behaviors and habits adolescents develop are carried forward into adulthood, making screening, education, and intervention at the adolescent juncture critical. Many adolescents are not appropriately counseled on a variety of health issues. The overall goal of clinicians providing health services to adolescents should be to improve access to quality care, including preventive and screening efforts.

(REV) S122-S127)

REVIEW

ADOLESCENT CARE: WHAT ARE THE CHALLENGES?

Jonathan Ellen, MD*
Adolescence is defined as the time period between the beginning of puberty and maturity. Because this development is a gradual process that varies among individuals, no specific age or chronological limits are practical in defining adolescence. The age group, however, is commonly thought of as ages 13 to 18 years, and because of changing societal conditions, many of the common challenges faced by adolescents extend this age group to 24 years. Adolescence is characterized by extreme growth and change, both physiologically and psychologically. Patients in this exciting period of their lives often experiment with a variety of behaviors and make decisions that might shape their individual character and health habits for the rest of their lives. \(^5\) The successful provision of appropriate healthcare to adolescents requires an understanding of these complex patients and their challenging issues.

**Complexity of the Subjects**

Adolescence is unique, both biologically and psychosocially, and is distinct from childhood and adulthood. \(^6\) This period of life is associated with special vulnerabilities, such as cognitive and biologic changes, that make a person more susceptible to particular risky behaviors.

**Basics of Adolescent Cognitive, Social, and Physical Development**

Providers must assess the developmental status of individual adolescent patients in order to give effective healthcare to members of this population. Medical care of adolescents requires a biobehavioral approach to problems. Such an approach necessitates that the provider possess knowledge about the development of the adolescent and awareness of both psychosocial and physical factors in the etiology of disease. \(^7\) Appropriate assessment of the developmental stage of the adolescent facilitates the clinician in retrieving sensitive information, promoting healthy behaviors, and reducing the risk of untoward events. \(^3\)

Three general categories of the developmental status of adolescent patients have been described: early, middle, and late. \(^8\) Early adolescence is differentiated from childhood by a change in interests and activities. Those in early adolescence tend to be preoccupied with their bodies and are concerned with being "normal." Middle adolescence is characterized by experimentation and is generally a time of peak parental conflict. Patients in this stage of development should be advised about healthy versus unhealthy risk taking. Additionally, the promotion of decision-making skills is valuable for teens in middle adolescence. Adolescents who are able to consider long-term health consequences of risky behaviors and have a more secure identity have entered the stage of late adolescence.

The behavior of adolescents is influenced by several factors, including parents, peers, communities, the media, and society. These influences make providing healthcare to adolescents challenging. In addition, adolescent patients have a high incidence of risk-taking behaviors and need services that have been adapted to their age and cognitive, psychosocial, and developmental status.

**Issues of Trust/Confidentiality/Family Supervision**

Appropriate screening and treatment of adolescent patients requires confidentiality. \(^9,11\) Adolescents who understand that a healthcare visit is confidential are more willing to disclose personal information. \(^10,12\) A survey of African American adolescents seeking care for sexually transmitted diseases demonstrated a tendency to prefer concerned providers, easily accessible visit sites, and confidential care. \(^13\) Unfortunately, there is no clear answer on how to best structure the healthcare system to maximize privacy and confidentiality for all youth.

Healthcare providers should educate adolescent patients and their parents about the confidentiality of the healthcare visit. \(^1\) It is best to disclose the confidentiality policy to both the parent(s) and the adolescent up front. The terms of this explanation should be in a format appropriate for the developmental status of the adolescent. For example, telling the patient, "What you tell me will stay with only me and I won't disclose it to anyone without your permission," might be a good way to explain what is meant by confidentiality.

Explaining the conditional nature of confidentiality is equally important. Identification of risk for imminent physical harm or suspicions of abuse are exceptions to confidentiality and should be explained in terms easily understood by the adolescent patient. Providers should make sure they spend some time during the healthcare visit with only the adolescent. When meeting alone with adolescents, providers should reiterate the terms of confidentiality and what they mean. Providers should save questions about sensitive topics, such as sexual history and drug use, for these times.
**The Looming Threat of Risky Behaviors**

The adolescent years are characterized by experimentation and separation from the parental unit; therefore, patients in this age group are likely to engage in risky behaviors. Most of the deaths in adolescents are a result of 1 of 3 types of risky behaviors: those that result in injury (both unintentional and intentional), alcohol and other drug use, and sexual behaviors (Figure 1).6,14 The mortality rates of black teens and white teens aged 15 to 19 years are essentially the same.15 The actual causes of death for these teenagers, however, are quite different; the homicide rate for blacks is 5 times greater than that for whites, and mortality due to motor vehicle injury in whites is nearly 3 times that in blacks. Intervention aimed toward preventing the serious consequences of risky behaviors is clearly important.

Many of the behaviors and habits—both risky and healthy—developed in adolescence are carried over into adulthood. Adolescence therefore provides a premium opportunity for encouragement of healthy behaviors and prevention of risky habits. Fortunately, adolescent years are a time when attitudes and behaviors can be changed swiftly, making intervention critical.6

**What Works for Practitioners**

The clinical setting for adolescent healthcare should be inviting to this age group. The atmosphere of the clinic, including magazines and decor in the waiting room, should be age appropriate, scheduling should be flexible without the requirement of extreme advanced notice, and perhaps most important, the setting should convey the confidential nature of the visit.

It is important that the parent or guardian is absent from the room during at least a portion of the interview of the adolescent patient.5 When conducting the adolescent interview, clinicians need to modify their customary technique for adult interviews according to the developmental status of the patient. For example, adult patient interviews may be started with a question such as, “Why are you here today?” The adolescent interview should be started more casually.16 Rather than a pointed question, which is quite appropriate for adults, adolescents tend to relax after some brief conversation. Opening statements that comment on the patient’s clothing or light conversation about the day’s events can give the practitioner insight into the patient’s personality and interests.

**What Our Healthcare Settings Offer**

**Low Rates of Service Use and Low Rates of Prevention**

Current clinical guidelines recommend that adolescents have an annual, confidential, preventive services visit.12 These yearly interactions are prime occasions for physicians to screen, educate, and counsel the adolescent patient. Data suggest, however, that adolescents are
receiving preventive services at a rate far below recommendations. Advice about smoking cessation or counseling about HIV transmission is occurring in only 1% of adolescent office visits. Alarming, in about two thirds of office visits, no counseling on weight, cholesterol level reduction, smoking cessation, HIV transmission, or breast self-examination takes place.

Many factors may contribute to the low rates of implementation of clinical preventive services for adolescents. These include predisposing factors (negative attitudes regarding the importance of preventive services), enabling factors (perceived self-efficacy by the adolescent, lack of skills by the healthcare provider), and reinforcing factors (positive reinforcement of the risky behavior). In an effort to improve access to healthcare for adolescents, the SAM has outlined factors to be considered in assessing healthcare services provided to these patients. These factors include availability, visibility, quality, affordability, flexibility, and coordination (Table 1).

THE NEED FOR A BETTER OUTREACH EFFORT

The US population of adolescents aged 10 to 19 years grew by about 3 million from 1990 to 2000. In 2000, there were 39.9 million adolescents; it is anticipated that this age group will grow by another 2 million by 2010. This trend is expected to continue, with a projected 53.2 million adolescents by 2050. Despite these increases in the adolescent population, other age groups are projected to grow at a much faster rate, resulting in a decrease in the percentage of the adolescent population as a proportion of the total US population. In addition, the US population is aging. These facts indicate that healthcare resources in the future will likely be directed away from adolescents. Educating the public about youth-related health issues is therefore of growing importance.

Not only is the adolescent population projected to grow, but it is also projected to undergo a shift in racial and ethnic composition (Figure 2). A decrease in the percentage of white adolescents as a proportion of the population is anticipated, along with a change in the predominant minority group from black to Hispanic. These statistics suggest a need for improved intervention efforts, as black and Hispanic youth have higher school dropout rates, are more likely to live below poverty levels, and are more likely to be from a single-parent household than whites—all factors that are associated with increased risk of social and health challenges for the adolescent.

IMPORTANCE OF BETTER PREVENTIVE/EDUCATIONAL PRACTICES AND IMPORTANCE OF THE ADOLESCENT HEALTHCARE PROVIDER

Many high-risk adolescents have trouble integrating with the adult world. It is therefore logical to reason that they might also experience difficulty using traditional health services. To be most effective, healthcare professionals caring for adolescents should work with the parents and schools to provide a variety of services within the community.

Clinicians caring for adolescents must be able to discuss general medicine, infectious disease, sexually transmitted diseases (STDs), and gynecology and be able to provide psychosocial assessment. Preventive healthcare for the adolescent patient requires a dynamic relationship with a healthcare provider who is able to respond to the needs of the patient while promoting health. Primary care physicians have reported that lack of training is the leading barrier to providing preventive health services to adolescents. Didactic training is a good method for developing the appropriate skills in adolescent medicine but should be coupled with role playing (skills-based training) for the best results. Such training should cover a large range of risk behaviors and must specifically address confidentiality issues. Skills-based training of clinicians has been associated with an improvement in screening and counseling for the most risky behaviors in adolescents (Table 2).

Figure 2. Racial/Ethnic Distribution of US Population by Age, 2000 and 2020

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THE OPPORTUNITIES

Practitioners are offered many opportunities to provide proactive health services to adolescents, including well visits.

Managed Care Organizations. The underlying philosophy of the managed care organization includes preventive medicine. Prepaid coverage, a feature of this type of healthcare delivery system, facilitates confidentiality and use by teens without having the patient worry about billing issues.

School-Based Health Clinics. School-based health clinics are associated with high utilization, but the mere presence of such a program does not ensure that the services provided will be comprehensive. In order to be successful, these health clinics need to have programs that address health education and social services.

Well Visits. Adolescent patients frequently visit pediatricians and family practice physicians for well care. Sports physicals and middle-school entry visits are examples of these well-care office visits. These healthy visits are terrific opportunities for screening/educational efforts.

Immunizations. Visits to the clinic for immunization are potential opportunities for the physician to provide preventive services while cultivating a trustworthy physician-to-adolescent patient relationship.

Family Planning Settings. Clinicians who care for adolescents in a family planning setting should include educational discussions regarding morbidity caused by unprotected adolescent sexual activity. Potential topics could include STDs, pelvic inflammatory disease, chronic pelvic pain, unintended pregnancy and parenthood, ectopic pregnancy, and cervical cancer.

Emergency Departments. Discussions regarding risky behaviors might be appropriate for adolescent patients presenting to the emergency department; however, research on the impact of such counseling remains unclear.

Outreach Programs. Three types of prevention in adolescent medicine have been described. Primary prevention is directed toward a behavior before it occurs. Secondary prevention, often called outreach support, strives to stop behaviors from recurring. Once adverse health outcomes have been experienced or after risky behaviors are in place, tertiary prevention strategies make every effort to reduce harm.

An example of a prevention program is the Teen Outreach Program, a school-based program supervised by community volunteers who provide intervention to prevent teen pregnancy and school dropout for high-risk adolescents. In this program, high risk includes a history of class failure, school dropout, or suspension; involvement with a pregnancy; being black or Hispanic; being an adolescent mother; or having academic difficulties. Supervised community service, classroom discussion of service experience, and discussion and activities related to key social and developmental tasks of adolescents are the 3 interrelated components that make up this outreach program. Good outcomes have been observed with Teen Outreach in national sites that promoted, through associated programs, autonomy and a sense of relatedness with other students and Teen Outreach facilitators.

CONCLUSION

Adolescents engage in risky behaviors that might have serious consequences. Providers of adolescent healthcare are uniquely positioned to screen patients at risk for unhealthy/unsafe behaviors and might therefore provide anticipatory guidance and counseling. These early interventions require an appreciation of the developmental changes in this population.

Fortunately, patients in this age group can readily change behaviors and tend to be open to educational efforts. Many opportunities for screening and educating adolescent patients are available and should be

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**Table 2. Average Percentage of Adolescents Who Received Brief Counseling Pretraining and Posttraining from Their Clinicians**

<table>
<thead>
<tr>
<th>Brief Counseling Variable</th>
<th>Clinicians (n)</th>
<th>Pretraining Mean %</th>
<th>SD</th>
<th>Posttraining Mean %</th>
<th>SD</th>
<th>Paired t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helmet</td>
<td>63</td>
<td>25</td>
<td>32</td>
<td>43</td>
<td>35</td>
<td>3.98*</td>
</tr>
<tr>
<td>Seatbelt</td>
<td>62</td>
<td>36</td>
<td>35</td>
<td>51</td>
<td>37</td>
<td>3.39*</td>
</tr>
<tr>
<td>Tobacco</td>
<td>61</td>
<td>60</td>
<td>37</td>
<td>69</td>
<td>33</td>
<td>1.71†</td>
</tr>
<tr>
<td>Alcohol</td>
<td>62</td>
<td>51</td>
<td>35</td>
<td>61</td>
<td>34</td>
<td>1.63</td>
</tr>
<tr>
<td>Sexual behavior</td>
<td>60</td>
<td>42</td>
<td>34</td>
<td>58</td>
<td>36</td>
<td>3.47*</td>
</tr>
</tbody>
</table>

* P < .001; † P < .10.

used to the fullest extent. Interventions that enhance adolescent development have been shown to make sustained differences. The overall goal of clinicians providing health services to adolescents should be to improve access to quality care, including preventive and screening efforts.

REFERENCES


6. Irwin CE Jr, Burg SJ, Uhler Cart C. America's adolescents: where have we been, where are we going? J Adolesc Health. 2002;31(suppl 6):91-121.


