
1

Health, Illness, and Disability During Adolescence

Adolescence is a time that represents profound physical, cognitive, emotional, and social change. For some adolescents, this period in their development is exciting and happy; for others, it is a roller-coaster ride of ups and downs; and yet for others, it is tumultuous and confusing. One thing is certain: As adolescents move through this developmental period, the adults in their lives are often caught in the wind of their sails, making it necessary for both adolescents and adults to change the way in which they relate to each other. During this time, adolescents prepare and practice for the coming role of young adulthood.

Teachers might spend more time with adolescents than do even their own parents. Adolescents are a captive audience throughout a long school day, leaving the school and the people who work there partly responsible for dealing with the multitude of potential and real problems that are inherent in this age group. Many of the health problems for this age group are directly related to adolescents' behaviors. For instance, adolescents who are depressed may be vulnerable to sleep disorders, eating disorders, and accidents. Adolescents who are active in sports may be more prone to orthopedic injuries.

Adolescents who have a chronic disease such as diabetes may rebel against doing those things that are necessary to keep them healthy. In part, understanding adolescent growth and development is akin to understanding the health-related issues of adolescence. More than ever before, the literature is rich with research about this developmental period and provides us with a glimpse into the adolescent world.

This chapter provides an overview of adolescent growth and development. In addition, it provides an introduction to common health care problems and addresses the impact of chronic illness and disability on the developmental stage as well as the effects of hospitalization.

Adolescent Growth and Development

Physical Development

After infancy, adolescence is the second greatest growing period in a person's life. Many of the physical changes can be attributed to the gradual but considerable increases in the various hormones. These hormonal changes produce the manifestations of puberty, leading to the development of primary and secondary sex characteristics. The primary sex characteristics are those related to reproduction, and the secondary sex characteristics are those related to the distribution of muscle and fat tissue, the development of breasts and hips in girls, and the voice changes and growth of facial hair in boys. For girls, the onset of menarche occurs during this time. The onset of a girl's period is a complex biological and psychosocial process but seems to occur earlier in age than ever before, with the average age being approximately 13 years. Sex hormones increase gradually throughout adolescence. The sex drive is triggered by these hormones, which are higher during adolescence than during any other time of life. It seems that boys are more aroused by external sexual stimuli than are girls, who seem to often connect sex with love.

Often, adolescents will experiment with their sexual selves. Masturbation is common in both sexes during the middle adolescent years and is considered a normal behavior. It is also not uncommon for some adolescents to question their own sexual orientation and consider the possibility that they are homosexual. In some cases, these are transient thoughts, feelings, and behaviors; in others, the adolescents' sexual orientation is already predetermined. It is very important that if adolescents ask for support while experiencing these feelings, they get a calm and well-balanced perspective.

Although most of the physical changes that occur during this developmental period seem to be taken in stride, it is important for adults to understand that these changes are sometimes psychologically uncomfortable for growing adolescents. Body image is strongly affected by puberty. When adolescents deviate from what they consider the norm, they often feel unhappy and lose their confidence. The rapid skeletal growth during this period often leads to clumsiness, and adolescents sometimes feel outside of their own bodies. Actions that are sometimes viewed as carelessness by adults are frequently the result of adolescents becoming accustomed to their own bodily changes. A calm noncritical response is more helpful to maintaining self-confidence than is criticism. A sense of humor also helps.

Cognitive Development

Cognitive development during adolescence marks a time when there are significant changes in how adolescents are able to think and problem solve. During this time, adolescents develop important new skills. Piaget viewed adolescents as moving to a qualitatively new level of cognitive development. Adolescents are able to apply logical thought to more complex problems. They are able to look beyond the present and into the future and begin to explore the possibilities of what might be, not just what is. Piaget called this hypothetico-deductive reasoning. This means that adolescents can think of hypothetical solutions to problems and choose which solutions best fit the problems. Adolescents' ability to think more logically and systematically simultaneously gives them the ability to construct logical arguments themselves and to question the illogical arguments of others. This is difficult for adults who are often used to dealing with the more concrete thinking of school-age children.

Adolescents are also able to begin to see the connections between abstract concepts. This is one reason why they are able to learn advanced mathematical skills. Because of this ability, adolescents are able to start developing a philosophy or ideology of life. They start to develop their own ideas about life, morality, relationships, fairness, love, good, and evil. It is not unusual to see adolescents become very passionate about a particular issue. They no longer depend on others to define their views on certain things. This is not to say adolescents are not influenced by others; rather, it means they are capable of independent thought.

An additional aspect of cognitive development is that adolescents develop an egocentrism, believing that they are unique and that no

one else has experienced the thoughts and feelings that they have. They believe that this is particularly true of adults; therefore, they do not share these thought with adults. In part, this might explain the secretiveness of adolescents, but consequently, it deprives them of an alternative perspective. This is frustrating for adults but is consistent with the task of adolescents forming independent self-identities.

Emotional Development

The major task of adolescence is to develop a secure sense of self. This involves the process of understanding self, understanding one's relationships with others, and understanding one's roles in society. Eventually, adolescents must synthesize all of their past experiences into integrated, well-formed, personal identities. As adolescents move through this developmental stage, their sense of self is at first very fragile but grows with maturity. It is postulated that one of the reasons why adolescents do not share things with adults is because their emerging self-identities are fragile and so adolescents feel a need to protect it. Young adolescents often believe that if they share too much information, adults will be able to see through them, leaving their self-concepts vulnerable to attack. It is further thought that adolescents' tendency to view themselves as indestructible is actually a defense of their fragile but emerging self-concepts. Older adolescents have a more developed sense of self than do younger adolescents and are also better at viewing others as unique.

Some adolescents have a more difficult time than others in resolving the identity crisis that is part of adolescent development. Adolescents are said to be in a state of identity diffusion when they are not engaged in exploring their own identities. Many times, these teens find the thought of moving forward in life as overwhelming. These feelings are sometimes exhibited as behaviors that focus on the here and now, that is, a focus on the immediate with no emphasis on future goals and plans. Identity diffusion is normal during early adolescence but should resolve itself as adolescents move toward young adulthood.

All adolescents need ample opportunity to develop their self-identities. According to Erikson, adolescents need two things to develop a well-integrated sense of identity. First, adolescents must carry forward from their earlier developmental years a sense of confidence, competence, autonomy, trust of others, and initiative. Second, adolescents need time to practice and experiment with new roles and need to receive support from parents and others while they

do this. A warm and supportive environment leads to increased opportunity for identity development.

Social Development

Peer group relationships are extremely important to developing adolescents. Being a member of a peer group also contributes to identity formation. Due to adolescents' greater cognitive abilities, peer relationships become more complex and relationships grow deeper. There is a movement away from the same-sex relationships of middle childhood toward having to coordinate same-sex relationships with opposite-sex relationships.

The school environment in one sense fosters a separation from family. In many families, the home provides the base of operation but most activities occur in the school environment, with peers becoming the most important relationship. As adolescents move to separate from parents, they often become more dependent on peers. Adults sometimes feel frustrated by the notion that peers have more influence on their adolescent children than they do. The truth is probably somewhere in the middle. Adolescents tend to rely on their peers for advice and support, but this does not negate their need for involved families and adults in their lives that buffer the outside world.

Common Health Problems During Adolescence

In the absence of chronic disease and disability, the problems that adolescents face are usually directly related to their developmental stage and related behaviors. Adolescent health issues are typically of the crisis type such as pregnancy testing, birth control information, testing for sexually transmitted diseases, sports injuries, and injuries resulting from accidents.

Risky Behaviors

Despite good parenting techniques and role-modeling by adults, adolescence is frequently a time for experimenting with risky behavior. The reasons for risk-taking behavior can include poor self-esteem, identity crisis, group dynamics (e.g., peer pressure), and the perception of adolescents that they are invulnerable to harm. Teenagers can also be faced with an array of family problems, such as domestic violence, child abuse, separation, and divorce, that can contribute to this

problem. Adolescent depression places adolescents at risk for an array of serious problems, including suicide.

Substance Abuse

Substance abuse remains a serious adolescent problem. Alcohol is one of the most widely used substances by this age group. Although the use of cocaine is declining, marijuana is still the most popular adolescent drug. Many adolescents do not view marijuana as a drug. Designer drugs such as ecstasy are also problematic and sometimes life-threatening. In addition, despite media campaigns, tobacco use is still prevalent among teens. Substance abuse is associated with an array of health risks such as unsafe sex, unwanted pregnancy, driving under the influence, automobile accidents, and criminal activity.

Sexual Experimentation

Sexual experimentation can also lead to an array of health problems for adolescents. The sexually active teenager is a reality. Teenagers need access to information that is honest and frank. Each year, approximately 1 million girls get pregnant in the United States. Adolescents are vulnerable to sexually transmitted diseases, including AIDS. Information about "safe sex" practices, contraception, sexually transmitted diseases, peer pressure, and cultural definitions of gender roles needs to be disseminated to the adolescent population in a factual and nonjudgmental way.

Body Image and Eating Disorders

Body image and the associated problems can lead to other serious health risks. Behaviors such as crash dieting, the development of eating disorders, obesity, the use of diet pills, and the use of steroids all have serious health consequences. Through media exposure, young people are barraged with images of thin women and muscular men. Beauty is associated with happiness, success, and affluence, causing young people to judge their own body images against what they perceive as the ideal. Diseases such as anorexia nervosa and bulimia are difficult to treat and can lead to serious health problems or even death. Obesity is becoming a serious problem in our society; it leads to the development of chronic diseases and is further correlated to poor self-esteem. The use of diet pills and steroids also creates dangerous health risks. Programs that teach good nutrition, exercise, stress reduction, and the health risks associated with artificial diet

aids are needed. Furthermore, providing opportunities for teens to explore their own identities and build self-esteem is essential.

Depression and Suicide

One of the most serious problems of adolescence is depression. Depression is often difficult to identify in adolescents. It is generally thought that this is due to the fact that adolescents often self-medicate their own feelings of sadness. Learning to cope with the disappointments of life is part of adolescent development; unfortunately, some adolescents feel overwhelmed and are not able to cope. Suicide is the third leading cause of death among adolescents, and during the past 25 years there has been a 25% increase in suicides among adolescents. Because of the seriousness of this problem, both parents and teachers must be able to recognize the danger signs associated with severe depression and potential suicide. If you suspect that an adolescent is depressed and may be contemplating suicide, you should look for the following signs:

- Loss of interest in previously pleasurable activities
- Sudden and striking personality changes
- Neglect of appearance
- Withdrawal from family activities
- Isolation from friends and social activities
- Noticeable changes in eating and sleeping habits
- Physical complaints such as stomachache and headache
- Decline in school performance
- Drug and alcohol abuse
- Unusual rebellious behavior
- Angry and/or violent outbursts
- Giving away of prized possessions
- Talking or joking about suicide
- Writing notes, poems, or essays about suicide
- Creating artwork that depicts depressive scenes
- A previous suicide attempt

Suicide attempts can be prevented when the involved adults act quickly. If it is suspected that an adolescent might be suicidal, the following interventions are appropriate:

- Share your observations with the adolescent. Do not be afraid to say the word *suicide*. This brings the unspeakable out into the

open and may help the teen to feel that someone has heard his or her cry for help.

- Ask the teen to talk about his or her feelings, listen carefully, and do not dismiss problems or get angry.
- Do not judge the severity of the problem from an adult perspective.
- Never agree to keep discussions of suicide secret.
- Acknowledge the adolescent's fear, despair, and sadness.
- Provide reassurance that problems can be handled, but do not dismiss the problem.
- Do not ignore the warning signs of suicide.
- Get professional help immediately.
- Do anything necessary to protect the safety of the adolescent.

Accidents and Injuries

Despite stricter laws regarding automobile safety, 78% of all unintentional injuries among adolescents are due to motor vehicle accidents. Three-fourths of all motor vehicle fatalities are males. The death rate from motor vehicle accidents is the highest in youth age 19 years or under than in any other age group in the United States. The use of alcohol while driving a vehicle (*see* Alcohol Abuse) significantly contributes to these alarming statistics. Given the seriousness of this problem, extensive educational strategies, coupled with parental involvement that not only focuses on preventive information but also targets specific behaviors and underlying etiologies, need to be implemented in our school systems across the country.

The Centers for Disease Control and Prevention, in its 2001 report on *School Health Guidelines to Prevent Unintentional Injuries and Violence*, provides guidance for the prevention of accidental injuries in the school setting. Some of these guidelines include the following:

- Establish a social environment that promotes safety and prevention of unintentional injuries.
- Implement health curricula and instruction that advocate health and safety. Through this provision, students develop the knowledge, attitudes, behavioral skills, and confidence necessary to adopt and maintain safe lifestyles.
- Provide safe physical education and extracurricular physical activity programs.
- Arrange for programs that teach and encourage all school personnel ways in which to promote safety and prevent accidents.

These are just a few examples of health problems encountered by teachers in their day-to-day interactions with adolescents. Each day, teachers must understand the health concerns of these young people and often must make independent decisions regarding the management of these problems. In some instances, teachers play a vital role in reducing occurrences of health problems or even deaths of adolescents through preventive measures. In other situations, teachers initiate or follow through on strategies to manage health problems and bolster learning and academic success.

Chronic Illness in the Inclusive Classroom

Federal mandates of laws of inclusion, advancing technology, and improved treatment regimens in the health care field have significantly increased the number of adolescents facing the challenges of living with a chronic illness while attending schools of learning.

Approximately 11 million adolescents live with chronic illness in the United States, representing about 31% of the population. Adolescents living with chronic illness have significantly more obstacles to overcome, and these barriers may severely interfere with the normal tasks of adolescents. These hurdles may include alterations in normal growth and development, exclusion from certain classrooms, social acceptance, a sense of being different from one's peers, overcoming feelings of dependency at a time when autonomy is valued, and excessive absences from school. Teachers who are knowledgeable about the unique health and educational challenges are able to respond sensitively and appropriately to students with chronic illness.

Not surprisingly, adolescents who have excessive absences from school face more challenges in meeting academic standards and outcomes. The school environment not only provides opportunities for learning but also encourages adolescents to interact, work together, resolve conflict, and solve problems. As a result of this process, adolescents develop a growing independence and a sense of the *who* that they are becoming. Any student who misses school due to chronic illness is deprived of these invaluable experiences.

Asthma, one example of a chronic illness, is the most common long-term respiratory illness for this age group (*see* Asthma). It is the leading cause of health-related absenteeism, with more than 10 million school days missed per year. When young people experience breathing difficulties, their attention is focused on their bodies and their anxiety levels increase. Inattention and anxiety interfere with the ability to

learn. When this becomes a frequent or chronic situation, adolescents with asthma may be at increased risk for learning problems. Developmentally, adolescents do not want to be considered different from their peers, so they may refrain from using their medications in front of others or avoid informing teachers that they are in need of some assistance. Knowledgeable teachers are attuned to these problems and may be able to intervene before such situations worsen.

For adolescents with chronic illness, access to understanding teachers is critical for a positive school experience and academic success. For those students who do not experience any health problems, the sensitivity and role-modeling by teachers often makes the difference between acceptance and rejection of these vulnerable adolescents. Teachers can gain knowledge regarding health problems from school health personnel, communication with parents/caregivers/children, this text, and resources available on the Web. Knowledgeable teachers are less likely to act on the basis of their own bias and prejudices and are more likely to create a sensitive and caring school environment.

Disabilities in the Inclusive Classroom

There are several labels that refer to the process of integrating young people with disabilities into the regular classroom. This concept has been identified by some school systems as “mainstreaming,” “regular education initiative,” “full inclusion,” “partial inclusion,” and/or “inclusion.” Regardless of the selected terminology, current federal laws such as the Individuals with Disabilities Education Act (IDEA) mandate that any child with a disability has a right to attend free and appropriate public education in the least restrictive environment provided by his or her local school system. In a response to these legislative directives and considerable commitment of some school districts, tremendous strides have been made in overcoming challenges in providing disabled adolescents with access to education.

The U.S. Bureau of the Census indicates that 6.5 million children have some type of disability and that 96% of these students attend regular schools with their nondisabled classmates. Based on these statistical data, it is vital that all teachers have an understanding of adolescents’ abilities and disabilities as well as the unique needs inherent in being disabled. A knowledgeable and sensitive teacher, who understands each student’s individualized education program and meets the student’s needs, will do much in creating a classroom environment where “inclusion” is a positive experience for children with and without disabilities.

Common disabilities seen in adolescents include learning problems and impairments of speech, hearing, and sight. In addition, some students have activity limitations and restrictions such as confinement to a wheelchair and use of a cane or walker. Regardless of the source of these disabilities, teachers working with these young people can significantly affect the adolescents' ability to achieve the developmental task of gaining a sense of identity. A focus on these adolescents' strengths or abilities, rather than on their disabilities, may give the adolescents a new perspective of what they believe they can accomplish and foster a sense of self-worth. Adolescents who attend school have the advantages of learning and socializing with a diverse group of peers as well as the disadvantage of confronting that they are "different" and may be the focus of ridicule and exclusion by their classmates. A knowledgeable teacher, who is sensitive to what it means to live with a disability, plans activities in which all adolescents can participate and models acceptance of differences that may have a significant impact on these adolescents' sense of belonging while enhancing nondisabled students' understanding of disability.

The adolescent living with disability brings to the classroom a vast array of concerns to be addressed by his or her school system. In addition to educational issues, these concerns include the following:

- Arranging for a safe exit from the classroom in case of an emergency situation
- Sensitizing nondisabled students to promote "inclusion" without embarrassing or breaching the confidentiality of the disabled adolescent
- Developing learning strategies that take into consideration the disabled adolescent's frequent absenteeism and energy level
- Planning a classroom schedule that meets the unique health needs of the adolescent

The teacher will need to communicate with parents/caregivers, school health and educational personnel, and the adolescent to better understand these concerns. Enhanced understanding will ensure appropriate planning for the disabled adolescent's successful integration into the classroom.

In addition to educational and safety concerns, teachers have identified fears related to appropriately responding to medical emergencies associated with specific disabilities in adolescents. Classroom emergencies such as seizures (*see* Epilepsy and Seizure Disorders), a sudden onset of flushed and sweating skin in a child with spinal cord

injury (*see* Spinal Cord Injury: Long-Term Care), and difficulty in breathing in a child with cystic fibrosis (*see* Cystic Fibrosis) require knowledgeable teachers who understand both the significance and the urgency of responding to these situations. Access to information, training, and identification of resource personnel are crucial in addressing these issues and in decreasing the worries of teachers.

The importance of school in the lives of all children is well known. For adolescents living with disabilities, being in school serves to afford them a sense of normalcy and acceptance. Therefore, teachers play a significant role in enhancing disabled adolescents' self-esteem and assisting them with having a positive view about attaining an education.

The incorporation of a healthy lifestyle during adolescence will provide benefits not only during the teenage years but also during adulthood.

Hospitalization

Hospitalization can be a difficult experience for adolescents. Adolescents who are hospitalized may experience a variety of feelings that are connected to their developmental stage. Because adolescents often see themselves as invulnerable to harm, hospitalization can be difficult for them to understand. Most adolescents do not believe that bad things can happen to them or their friends. When their belief is proven to be wrong, they sometimes need additional support to adapt.

Adolescents are not yet adults but are not still children. Because of their size, most people expect them to act like adults, forgetting that they have not yet developed the range of coping skills that adults have developed. During an episode of hospitalization, adults must remember that an adolescent might not be able to act as "adult" as they would expect. Psychosocial responses of the adolescent during hospitalization might include periods of rebelliousness where the adolescent will attempt to maintain his or her autonomy. Conversely, the adolescent might display signs of regression where he or she will display more childlike behaviors. Both responses are consistent with normal adolescent development. Adults need to meet the adolescent on his or her own terms and at his or her level of functioning at this time and place.

Additional psychosocial responses are typical of any person who is hospitalized. Feelings of anxiety, helplessness, frustration, and anger are normal responses to hospitalization. These feelings

reflect a perception of threat to identity and body image, a sense of powerlessness, and a sense of loss of control. Anxiety related to environmental changes, pain, and special procedures is also common.

Adolescents need to be treated with respect and be involved in their own care. They need to be listened to and allowed to put their feelings into words. Positive coping mechanisms need to be reinforced and encouraged. Hospitalization constitutes a crisis that can serve to increase adolescents' coping repertoire for the future. As with adults, some adolescents have better coping skills than do others. Emphasizing positive experiences in coping may serve to increase adolescents' sense of well-being and may negate some of the unpleasant effects associated with the hospital experience.