Our school nurse is really great. She answers our questions about diabetes without making us feel like we’re different than other kids. We can keep equipment like syringes in her office and she helps us to program our insulin pumps.

Jessalyn, age 12, child with diabetes

LEARNING OBJECTIVES

- Apply knowledge of school-age growth and development to identify needed assessment of nutrition and physical activity.
- State components of self-concept for school-age children.
- Describe the growing importance of peers in planning teaching strategies with school-age children.
- Use knowledge of the major injury risks of school-age children to plan nursing interventions that contribute to their prevention.
- Identify the major health concerns of the adolescent years.
- Apply communication skills to interactions with adolescents and their families.
- Apply assessment skills to plan data-gathering methods for nutrition, physical activity, and mental health status of youth.
- Intervene with adolescents by integrating activities to promote health and to prevent disease and injury.

MEDIAlINK

CD-ROM
- Video: Teen Mental and Spiritual Health
- NCLEX-RN® Review
- Audio Glossary

Companion Website
- NCLEX-RN® Review
- MediaLink Applications:
  - Develop a Teaching Plan: Smoking Education
  - Case Study: Immunization Update
HEALTH PROMOTION AND HEALTH MAINTENANCE
OF THE OLDER CHILD

The older childhood years span the time when most children enter kindergarten at about 5 years of age, and progress until about 12 to 13 years of age when adolescence begins. Even though health promotion and health maintenance needs continue during this time, less frequent visits to the pediatric healthcare home are recommended. In addition, most children are relatively healthy and need few immunizations, which may lead to only sporadic visits for care. Whenever older school-age children are seen in healthcare, even for illness or emergency care, it is wise to ask when the last “well-child” or health supervision visit was scheduled. Encourage the parents to make an appointment if the child is due for a visit. Visits are generally recommended at about 5 years of age, when most children are going to kindergarten, and then at 6 to 8 years, at 8 to 10 years, and at 10 to 12 years. The visits during this time will focus on establishing good health habits related to important issues such as nutrition, physical activity, and mental health; learning the importance of avoiding tobacco and drugs; ensuring success in school, family, and extracurricular activities; and fostering good decision-making and problem-solving skills.

GENERAL OBSERVATIONS

The first school-age visit usually occurs just before entry into kindergarten. During this visit the child has a thorough examination to be certain that physical development is normal, developmental milestones have been met for fine and gross motor skills, school readiness is displayed in social skills and language, and final sets of basic immunizations are completed. The child is often excited about the visit because it is associated with beginning school; some anxiety is often felt as it may be the first time the child is aware of getting “shots.” As with earlier visits, the nurse’s observations begin as the child is called in for the visit. It is wise to speak to the child first, introducing yourself and welcoming the child and parents to the office or clinic. Many children of this age actively participate in conversations, making teaching and gathering data easy. For children who are quiet or look to the parents, allow more time for them to get to know the personnel, directing most initial questions to parents. This may be the first visit where the child is old enough to be a partner in the healthcare visit. Establishing positive rapport with the child will be more likely to enhance efforts designed to teach about health.

Observe if the child brought a book, toy, or some other object to the visit. How are the parents interacting with the child? What types of speech tones are used? Is there mutual respect or are parents and child ignoring each other or having disagreements? The child should walk showing symmetry and ease of movement, follow instructions about where to go and taking off shoes for weighing, and demonstrate clear language skills with parent or healthcare personnel.

By the time children come for the 6- to 8-year visit and 8- to 10-year visit, they are expected to be increasingly active in sports, school activities, music, or other interests. Look for clues about their interests as they arrive. Did they bring books or a CD player? What are the book topics or favorite types of music? Ask what they are doing during the summer, or what their two favorite after-school activities entail. Have them describe a typical day to obtain clues about their life.

Some children do not commonly come to clinics, offices, or other settings for health supervision visits. School nurses or nurse practitioners in school-
based clinics sometimes offer health promotion/health maintenance activities in the school setting. A major focus of school nurses is making the environment conducive to health for groups of children. School nurses may offer some parts of examination to individual children, such as growth and developmental surveillance; may conduct health screening, such as vision, hearing, or scoliosis; may work with food service personnel and administration to improve meal and snack quality and minimize unhealthy choices in vending machines; and may work with teachers to integrate concepts such as physical activity and self-esteem into classroom activities (Wainwright, Thomas, & Jones, 2000). The nurse often links children with healthcare needs to other community services.

During health supervision visits, watch the parents’ responses as children answer questions. Be alert for the parent who interrupts the child or constantly “corrects” what is said. Some comments by the parent should involve praise of the child or looking to the child for opinions on certain topics. This indicates that a partnership is developing in the family and that family members work together and value each other. Direct some questions to the parents also. Ask if they came with specific questions or concerns that should be addressed. If the child has an individualized education or health plan (see Chapter 39 ∞), ask if the parent brought a copy, if the plan is still appropriate, or if it needs updating. Allow the parent an opportunity to meet with the physician, nurse practitioner, or other professional in a private place and without the child present if desired. Be alert for family dynamics that can influence mental health status. Ask if there have been any important changes in the family and how they have influenced the child. During conversations, be alert for reports of separation, divorce, remarriages, ill siblings or grandparents, recent or upcoming moves, parent job changes, substance abuse, incarceration of family members in jail, custody disputes, or other issues. Such topics can be followed up with further questions, as described later in the mental health section, to learn how they influence the child.

GROWTH AND DEVELOPMENTAL SURVEILLANCE

As the child comes into the health supervision site, height and weight are measured. Be sure to have the child remove shoes and coats. Ask the child and parents if they know the child’s current height and weight, and if they have any questions. Plot the percentiles for these measurements, calculate body mass index (BMI) and its percentile, and explain the meaning of these findings later in the visit. Recognize that children do not grow uniformly; they have periods of slow growth followed by fast spurts. Similar to earlier ages, watch for children who have changed channels on a growth grid, and for those above the 85th percentile or below the 3rd percentile for body mass index, and gather additional nutritional data in these cases (see Chapter 34 ∞).

School-age children have logical thought processes and are learning about their bodies. They should be active participants in the physical examination. Explain what you are doing and why. A head-to-toe examination is carried out, with particular attention to systems and skills that influence success in school. Vision, hearing, muscular strength, and coordination are examples of areas that affect school performance. See Chapter 35 for detailed information about the physical examination. ∞ Remember to provide feedback about the findings; families appreciate knowing that the child’s vision is normal and strength is well developed. They should be told what is normal as well as areas that may need more assessment or intervention. Inquire about the child’s sleep patterns. During the examination, ask for a description of any illnesses the child has had. Children of school age are generally healthy, with only a few upper respiratory infections or other minor illnesses annually. Unusual complaints may indicate a need for further testing; examples will be discussed in the disease prevention section later in this chapter.

School-age children frequently have minor injuries. These might include falls from bicycles, skin rashes from exposure to plants on a hiking trip, bruises from a ball sport, and other minor mishaps. Be alert for more serious problems that may indicate a need for additional detailed data gathering and teaching. Examples will be discussed in the injury prevention section.

Developmental surveillance continues to be an important part of the examination for school-age children. Some milestones can be observed during the visit while other information is obtained by report of parent and child. This information is combined with reports about school and other activities in order to establish that the child is developing as desired.

Desired outcomes for growth and developmental surveillance include normal progression with developmental tasks, absence of physical and psychosocial abnormalities or trauma, and integration of safe practices into daily life.

NUTRITION

Key concepts related to nutrition in school-age children are independence and formation of habits that influence the future. First, children are increasingly independent in food choices. They usually have strong likes and dislikes for certain foods. They may come home alone and prepare snacks. During school, they choose what to eat from the school lunch or the sack lunch sent by family. They may even have access to vending machines or sales of snacks during school hours. While independence in food choices is growing, the child is greatly influenced in those choices...
by friends and the media. Foods that may be rejected often include fresh vegetables and fruits, since they get little media attention, and friends may not prefer them.

At a time when the child chooses many of the foods in the daily diet, habits are being formed that will affect nutrition and health in general in the years to come. Good choices will help to promote health—to maintain weight at a recommended level, provide nutrients for adequate growth and activity, and prevent onset of some chronic diseases. Conversely, poor choices can lead to overweight and its accompanying problems, lack of adequate calcium and resultant osteoporosis, eating disorders, or lack of energy for brain growth and optimal performance in school. The patterns established during this period are often influential in later nutritional status. Knowledge about foods, family participation in good nutritional practices, and access to healthy foods can all be enhanced by nursing intervention during this critical formative period.

The first nutritional status assessment includes height and weight measurement, body mass index calculation, and examination of percentiles for each measurement on growth grids. Slow, steady growth is the norm during the early school-age years; it will be followed by a growth spurt when the child nears puberty.

During the visit, observations provide information about nutritional status. What is the condition of the nails, skin, and hair? What is the energy level and reported physical activity? Does the child look lean or overweight? As the child nears puberty, there may be an increase in fat stores as a preparation for the pubertal growth spurt (Story, Holt, & Sofka, 2002). Integrate some questions for the parent and child into the visit that provide clues about diet. While observing the child and family and asking dietary questions, list risks and protective factors related to nutrition. Perhaps protective factors relate to adequate access to nutritious foods, a family garden, and weight and height within normal limits. Reinforce the positive practices of the family and inform the child of how food choices relate to energy level, school performance, and general health. Risk factors become the basis for teaching and planning with the family for necessary change. It is difficult to tackle several nutritional changes at one time, so concentrate on those most needing attention, and on those the family agrees are important. Provide information about healthy snacks to keep at home, ways to improve calcium intake, the importance of getting at least five fruit/vegetable servings daily, limitation of soda pop to one can daily, and the importance of family meals (Figure 38–1). Desired outcomes for health maintenance include absence of overweight and future chronic disease, adequate intake of all nutrients, and increasing child and family knowledge about nutrition.

PHYSICAL ACTIVITY
Just as food choices during the school-age years are likely to influence the child’s future nutrition, physical activity during these years is often crucial to development of lifelong exercise. During these years, the child who is physically active continues to refine skills such as eye-hand coordination, muscular strength, agility, and speed. Some children become skilled at ball sports such as basketball, football, soccer, or baseball. Others focus on gymnastics, wrestling, horseback riding, or hockey (Figure 38–2). Some do not like team or organized sports but choose skateboarding, skiing, or biking. Whatever the interest, it is important that children identify some physical activity and continue to develop motor skills. The benefits include socialization, positive sense of accomplishment and self-esteem, weight control, and increasing physical ability (Figure 38–3). Children who do not have an activity of importance often fall behind their peers in agility and skill, making future attempts at an activity very difficult and less likely to be successful.

Similar to earlier periods in life, the nurse lists risk and protective factors related to school-age physical activity (Table 38–1). Families are often significant in promoting physical activity for children. Find out what the parents do for physical activity and how often. Do they attend a sports
Everyone needs to be physically active. Some children participate in school sports. Others, such as these boys playing hockey, choose a sport that is available in the community. Other children prefer to walk, ride a bike, or engage in other more solitary activities. Determine what is enjoyable for a particular child and provide assistance in integrating desired activity into daily routines.

School-age children often enjoy hikes with family, clubs, or other groups. What are the physical and mental health benefits from this activity?

| FIGURE 38–2 |
| FIGURE 38–3 |

### TABLE 38–1 Risk and Protective Factors Regarding Physical Activity in School-Age Children

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited role modeling of daily physical activity by parents and other family members</td>
<td>Expected developmental skill level</td>
</tr>
<tr>
<td>Limited facilities in the neighborhood to encourage activity, such as parks, skateboard facilities, rinks, ball courts</td>
<td>Feels self-confident in ability and physical appearance</td>
</tr>
<tr>
<td>Inadequate financial resources to join clubs or pay for organized sports</td>
<td>Willing to try new activities</td>
</tr>
<tr>
<td>School cuts to physical education programs and recess</td>
<td>Sets goals for learning physical skills</td>
</tr>
<tr>
<td>School tryouts for sports that eliminate all but the best players in certain sports</td>
<td>Parents exercise daily and exercise with the child some of this time in a setting the child can see</td>
</tr>
<tr>
<td>Reluctance to try new activity</td>
<td>Parents set expectation that everyone in family will choose a physical activity and engage in it regularly</td>
</tr>
<tr>
<td>Worry about competence and physical appearance</td>
<td>Schools provide physical education each day with a variety of offerings; student gets to choose and set goals for some activities</td>
</tr>
<tr>
<td>Television viewing or other screen activities for more than 2 hours daily</td>
<td>Schools schedule recess or physical activity breaks twice daily</td>
</tr>
<tr>
<td>Developmental delay and special needs</td>
<td>Sports teams are leveled so that all students desiring to play a particular sport, such as soccer, are able to do so</td>
</tr>
<tr>
<td></td>
<td>Adequate safety gear that properly fits child is available</td>
</tr>
<tr>
<td></td>
<td>Neighborhood provides access to parks, skateboard facilities, rinks, ball courts, and other facilities</td>
</tr>
<tr>
<td></td>
<td>Family has adequate financial resources to pay for health club or organized sports</td>
</tr>
<tr>
<td></td>
<td>Television viewing and other screen activities limited to no more than 2 hours daily</td>
</tr>
</tbody>
</table>

younger child often is encouraged to develop skills in the same sport.

The child spends much of the day in school, and so this setting is important to consider. In an effort to conserve financial resources, some schools have decreased physical education (PE) programs. Children may not have regular PE classes, and there may be few standards of performance. In addition, many states and provinces have established tests and standards for performance in certain cognitive areas. In an attempt to increase teaching time to meet standards, some schools have cut out recess and other breaks. Some schools are located in unsafe areas and outside recreation is not advisable. It is unrealistic to expect children to sit for long periods without physical activity, and such practice reinforces the poor habits of inadequate exercise among children.

Nurses are influential members of school committees and can encourage the integration of activity in the school day. They may be able to serve on a school or community committee, informing other committee members of the benefits of exercise to enhance cognitive performance and general health. Teachers and school administrators can be supplied with models of successful school activity programs. Nurses can often be influential in finding community volunteers to work with teams of students. Student nurses, physical education students, senior citizens, and others in the community may be able to help young children play baseball, tennis, or soccer. Other volunteers may teach stretching or warmup activities. Community partners such as businesses may provide protective gear or uniforms for school sports, especially if the business name can be displayed. In addition, schools can offer alternative activities that some children might prefer to traditional organized sports.

It is essential to consider physical activity for the child who has special healthcare needs. It may be difficult for schools to plan an activity for the child with cerebral palsy, visual impairment, or developmental delay. Search for other community resources and help the family to access them. There may be programs for children to ride horses, swim, ski, and engage in other physical activities. Imagine the thrill that waits a child who has rarely moved quickly when riding a sled or sliding on skis. In summary, the nurse plays an important role in meeting desired outcomes of health promotion by suggesting activities that parents can do together, becoming active in physical education programs in schools, acting as a positive role model, and helping interested children to partner with community resources for activity. Health maintenance outcomes include use of safety gear and correct techniques to prevent injury from sport participation.

ORAL HEALTH

Many changes occur in the mouth during the school-age years, necessitating periodic examination. About 6 years of age, most children lose a tooth, usually in the front. Following that, all 20 of the deciduous or primary teeth will be lost, and the permanent teeth will simultaneously begin to erupt. See Chapter 35 for the schedule of tooth loss and tooth eruption. In addition the jaw line elongates and teeth move into new positions. Periodic dental visits focus on both the placement of teeth and oral hygiene.

During the health promotion visit, examine the teeth. Look to see how many deciduous and permanent teeth are present. Describe the child’s oral hygiene. Ask how often the child brushes, flosses, and visits the dentist. The child should have learned how to brush and floss during preschool years but is now performing the skills independently. If there are cavities or poor oral hygiene is apparent, ask the child to demonstrate brushing and flossing. Reinforce the need for brushing twice daily and flossing once daily. Provide toothpaste and toothbrushes as gifts during health supervision visits. Local dentists will often provide these supplies to encourage oral hygiene.

Dental visits are recommended every 6 months. If the child is not visiting on that schedule, ask if finances or transportation is an issue, if the family needs a referral to a dentist, or if there is some other reason. If cavities or malocclusion is present, stress the need for a dental appointment soon. Inquire about use of fluoride if the water supply is not fluoridated. Ask if the child has had sealants applied to the permanent teeth; these will help to prevent future caries.

Many children have a high intake of sugared foods and snacks. If this is apparent from the nutritional assessment, discuss the importance of limiting these foods and brushing after their consumption. Frequent brushing is needed when the child has braces. Ask how they are caring for them and what the orthodontist has recommended.

The nurse’s health promotion activities include positive reinforcement of good hygiene habits, and health maintenance involves teaching about the need for improved care and limiting food that furthers the formation of caries. Desired outcomes include good oral hygiene, attendance at recommended dental visits, and absence of dental caries.

MENTAL AND SPIRITUAL HEALTH

The school-age years are marked by the emergence of new cognitive skills, ability to interact cooperatively with others, and a feeling of accomplishment in achievements. The child’s self-concept and mental health are linked to these important developmental tasks. Self-concept is the mental idea that one has of the self. School age is an important period in the development of one’s self-concept. Self-esteem reflects a positive self-concept; it includes the feelings and beliefs of children about their competence and worth as individuals, ability to meet challenges, and ability to learn lessons from success and failure.
2002). The aim is to establish a positive sense of self-esteem, even in the face of adversity and challenge. The child who believes in his or her ability to face good times and bad has a lowered chance of mental illness such as depression, eating disorder, and anxiety. Parents are encouraged to evaluate and help to build the child’s sense of self-esteem (see “Teaching Highlights: Evaluating and Fostering Self-Esteem”).

Many of the areas discussed already in this chapter provide clues to the child’s self-concept. Are there sports or other physical activities? They may reflect a positive self-concept and body image. However, if the child is forced to do these sports by parents and feels inadequate in their performance, they may promote a negative self-concept and body image. Ask about children’s activities and how they feel about them. Do they enjoy them? How do they rate their performance?

Inquire about school performance and best friends. Is there an increasing independence and responsibility for self? Success in achieving developmental milestones leads to a positive sense of self-esteem in the child. Parents are encouraged to evaluate and help to build the child’s sense of self-esteem. A low sense of self-esteem is noted when the child states a disinterest in exercise, school clubs, and family activities. This can lead to loneliness, depression, and mental health problems such as eating disorders (Jellinek et al., 2002). When these feelings are noted during a health supervision visit, the nurse should recommend that the child see a counselor at school or another setting, and should recommend that parents be included in the sessions so they can best help the child.

It is obvious that the family plays a critical part in the child’s developing self-esteem and mental health. In order to understand the child, it is necessary to ask questions about and explore dynamics in the family. Several protective factors have been identified for families:

- Communication is open and clear, and parents use problem-solving skills.
- Members are encouraged and appreciated.
- Family is committed to each other, including spending time together.
- Religious or spiritual orientation is present.
- Social connectedness or support is available.
- Resilience or the ability to adapt to new situations is present (Wertlieb, 2003).

Ask about and observe the family’s relationships. Evaluate the effect of family interactions on the child. Model respectful interactions by listening carefully to the child, as well as the parent. Gently recognize the child if parents answer for the child or seem to put him or her down. Provide brochures and examples of ways to show children their importance. Encourage both parents to come to child healthcare visits and support the involvement of both parents in childrearing (Task Force on the Family, 2003). Ask about family stressors such as job changes, financial concerns, illness, substance abuse, and domestic violence. About one half of marriages end in divorce, so be prepared to offer suggestions to deal with this situation (see Chapter 36 for further discussion of effects of divorce on children). Ask about and identify risk factors and protective factors. The child’s strengths are used to assist the family functioning and will, in turn, give the child a sense of accomplishment. Some examples include the following:

- A child who is able to act independently can be given responsibility for parts of the home or family function,
such as planning the menu for dinner two evenings weekly.

- A creative child can be given the task of planning books and other activities for a younger sibling.
- A child with a talent for design can be asked to set the table for dinner guests.

Self-concept and self-esteem include all parts of the person such as cognitive, spiritual, sexual, and physical. Body image refers to a specific part of the self-concept—to the idea that one forms about one’s body. Sexuality is another part of the self-concept and refers to the person’s view of self as a sexual being, and what that means for one’s life. The school-age child is developing a sense of body image and sexuality. Look at the child’s appearance and dress. Some children may have poor posture, display a sense of insecurity, and seem uncomfortable with themselves. Others may dress as if they were much older, seem sophisticated, and are clearly assuming the role identification with their gender group. Ask the parents in a private setting what observations they have about the child’s body image and sexuality. Inquire about friends of the opposite sex and whether the parent has concerns. Questions related to sexuality will emerge during school years. They should be answered truthfully and fully. Even children who do not ask questions usually need information related to sexuality education. They may get information in school beginning in about fourth grade, but often still have misconceptions about the bodies of men and women, sexual intercourse, how babies are born, and other topics. Suggest that parents read books with their children that deal with these issues at a level children understand. If books are available at home, children will be likely to look at them and ask questions. They should be in the home from third grade on since many young girls have body changes as early as 9 or 10 years of age (see Chapter 33). This can often put both parent and child at ease and open the door to discussion. Parents should be advised to talk with teachers to learn what is presented in school and be able to supplement and clarify this information. Having discussions at a young age will help lead to further discussion as the child gets older.

Suggest to parents that computer and other media provide information that can confuse children. Encourage them to watch movies with children, encourage frank discussions related to sexuality observed, and answer questions truthfully. Children generally learn about topics such as sexual intercourse, homosexuality, and childbirth from school discussions and the media. It is better to learn from parents than from friends or the media. A few moments alone with parents and child at healthcare visits may help to identify the concerns of each related to sexuality.

By about fourth to sixth grades, most girls have started to have prepubertal body changes and may have begun to menstruate. This is another opening to discussions about mature bodies of men and women and the transformation from childhood to greater maturity. Boys mature about 2 years later than girls. Without an event such as menstruation, parents may be less likely to start discussions with male children. Suggest that parents consciously begin conversations with boys periodically to explain changes they see in themselves and their peers. See Chapter 33 for further discussion of the body changes seen in the prepubertal period and during puberty.

School-age children continue to develop an ability to self-regulate activities and responses to situations. At this age the abilities to solve problems and assume more responsibility for self are important. Encourage parents to discuss issues with the child and to seek solutions together when appropriate. The child assumes more responsibility for assisting with meal preparation and home chores, coming home alone after school, and caring for younger siblings. Encourage the parents to praise the child for assuming more family responsibilities and recognize that the child will need some guidance when taking on new tasks.

Sleep is still important for children in order to have the energy to perform well in school and other activities. They generally take charge of bedtime routines with reminders about the time to go to sleep, and they sleep through the night. Sleep time varies from 8 to 12 hours, depending on child and activity level. Busy schedules may interrupt this pattern, leading to irritability, lack of concentration, or even hyperactive behavior (Colyar, 2003). Help children and families plan what the bedtime should be.

Sleepwalking and sleep talking sometimes occur at this age, but usually decrease as the child nears adolescence. Children who have stress at home, such as parental fighting, ill family members, or inadequate food or shelter, may not get enough sleep and fall asleep at school. Ask the child if falling asleep in class is occurring, and seek additional information about family stressors. This can lead to interventions such as recommending family counseling or referring to resources to obtain better housing or more stable food sources.

School is a major microsystem influence in the lives of children, and it plays a role in self-concept and mental health formation. Ask the child to describe a best friend; if unable to do so, isolation may be occurring. Inquire about what the three best and three worst things are about school. Children with low self-concepts often have trouble talking about and evaluating school. Find out where the child attends school, if the area is generally safe, and how the child gets to school. Encourage the parents to meet the child’s teachers, to become active in school activities, and to be available to solve problems with school personnel when needed. Partner with the parents and child when interventions are needed. An office nurse may contact a school
nurse when the child needs support in the school environment. This may occur if the child has become ill and missed school, has family stressors, does not get along well with a teacher, or has a condition such as attention deficit disorder. Identify the risk and protective factors in the school environment and plan interventions to support the child when risks are present. Certain mental health disorders are commonly seen during the school years. One example includes anxiety problems that result in worries, fears, physical symptoms, stress, and sleep disorder, without significantly impairing daily functioning. However, some anxiety disorders affect functioning and have more striking characteristics such as clinging, abdominal pain and headache, and refusal to attend school (American Psychiatric Association, 2000). Post-traumatic stress syndrome and depression may also be seen. See Chapter 54 for further description of these disorders.

Anxiety disorder, post-traumatic stress, and depression should be referred to a mental health specialist for treatment. However, all children worry at times and this type of anxiety can be helped by learning coping skills and relaxation techniques.

Spiritual health is the ability to develop a spiritual nature, including awareness of a life purpose and fulfillment (Pender et al., 2002). School age is a time when children learn more about the people and the world around them, and begin to find their place in that world. Connection with faith-based groups assists some children and families in defining the purpose of life, while others may do so through social activity or a strong moral sense of responsibility. Ask children what brings happiness, how they help other people, or if they are members of a church, synagogue, or mosque. If families seem to have little purpose, parents are withdrawn or depressed, or the child has difficulty answering questions about meaningful activities, suggest methods of engagement in the community. These might include providing contacts at local religious events, posting flyers about community events designed to bring unity to various cultural groups, or suggesting services needing volunteers in the community. Families who spend time together and find meaning in supporting each other nurture the spiritual health of their members. Suggest that every family plan a “family night” weekly when they play games, talk, eat, or engage in other activities together.

The nurse has an important role in fostering the mental and spiritual health of school-age children. Health promotion fosters strengths of families and children, leading to healthy self-concept and positive self-esteem. Health maintenance seeks to prevent mental health disruptions. Be alert for risk factors in families since they represent the need for intervention. Expected outcomes for health promotion and health maintenance activities with school-age children include formation of a positive sense of self-esteem and healthy body image, use of coping skills to deal with stress, sleep patterns that meet needs for rest, and a growing purpose and meaning in life.

RELATIONSHIPS

While the school-age child is gradually moving away from the family as the center of life, the family remains an important anchor. The preceding section discusses several issues where the parents foster development. Ask also about siblings, grandparents, and other extended family members. Sometimes these persons assist in the child’s formation of a self-concept. Peers are increasingly important to the school-age child’s self-identity. School age is a time of cooperative engagement with others. All children need to learn how to make and maintain friendships and work with others on projects and in recreation.

Inquire about the child’s best friends at school. In private, ask parents if they are comfortable with the child’s selection of friends. Find out if the parents facilitate friendships by allowing other children to come to the home and providing transportation as needed. When the child experiences a risk factor such as a move to a new town or school, role-play how to meet new children and how to make friends. If the child feels like an outcast or outsider among peers at school, explore how the family can create a safe and secure place for the child in extracurricular activities with children who have similar interests. When children are home schooled, the family may need to plan social events and contacts after usual school hours.

Since peers are important to the school-age child, pressure begins to appear like others, to fit in, and to do what others encourage. Although such pressures are often associated with teen years, they usually begin earlier, at least by 8 or 9 years of age. Ask children what things friends try to get them to do that they know they should not do, or if friends have tried to get them to smoke. Middle school years are the most common age for beginning to smoke, so always ask if the child has tried smoking, being careful to do this when the parent is not present and the child is more likely to be honest. They may tell you about activities when parents are not in the room, such as playing with guns, trying alcohol or other substances, or other risky behavior. It is best to ask children what they do in these situations, what they want to do, and who they can talk to about these events. Offer information about the risks connected with behaviors that are described, and suggest people such as parents, teachers, counselors, or clergy who are possible resources. If the child’s health is at risk, be sure to report the activity to the physician or other healthcare provider so that it can be pursued and the child’s safety can be assured. Activities such as playing with firearms or visiting a friend whose parents are making methamphetamine, for example, place children in extreme danger.
School age is often a time when children first experience violence in relationships with others. Some children are bullied, while others are the bullies. Anger and aggression can occur, and children get in fights with each other. Ask children to describe when they last had a disagreement with someone and how the problem was solved. Suggest people like school nurses, teachers, and counselors who can help, and be sure that children feel safe in schools, neighborhoods, and homes. Ask parents how they resolve arguments between children at home and what help they need to help children learn problem-solving skills. Find out what policies the local schools have to assist in decreasing harassment of and by children. Become active on school committees that help children learn how to solve problems peacefully and how to respond to episodes of violence. See Chapter 36 for further discussion of violence in children and a detailed discussion of bullying.

The child’s temperament still plays a part in response to situations and the ability to self-regulate. The “difficult” child may have trouble getting to sleep or being quiet in the classroom. Have parents plan more physical activity for this child. Teach the child that bedtime routines are helpful and that sitting near the front of the class can help with concentration. The “slow to warm up” child may need ideas about what to say when meeting new people. Parents can help the child prepare for a new school by visiting with the child, talking about it, and meeting with the teacher so that a warm welcome can occur. The “easy” child is usually adaptable in most situations and is regular in activities. However, this child may object when other children interrupt, fail to take turns, or otherwise “break the rules” of behavior. They might need help to understand differences in temperament in order to be more tolerant of classmates and their behaviors. Often nurses in schools address the issue of individual differences by speaking with classes or small groups of children.

The nurse takes an active role in promoting the child’s health by anticipating developmental issues and preparing parents and child to deal with them. Health maintenance outcomes include preventing problems in interactions.

**DISEASE PREVENTION STRATEGIES**

School-age children are generally healthy. The immune system is mature (see Chapter 44), personal hygiene practices are more mature than at earlier ages, and immunizations are usually complete. Engage school-age children in active pursuit of their own health. Teach strategies that can enhance the prevention of diseases. Nurses in offices and schools can teach children how to wash hands effectively, how respiratory infections are transmitted, what can cause gastrointestinal illness, and how to best manage their own health problems (Figure 38–4). Ask children in your settings what topics are of most interest to them and be prepared to suggest common areas of concern such as safety, skin care, athletics, and illnesses. Children are interested in their bodies and can understand the connection between eating well and avoiding illness, maintaining normal weight and preventing type 2 diabetes, avoiding smoking to prevent cancer and other respiratory diseases, and exercising to prevent hypertension.

School-age children are in the concrete stage of intellectual development (see Chapter 33). This means that teaching is most effective when opportunities are provided to touch, feel, and otherwise become actively engaged in learning. When teaching about smoking, provide models of lungs and have the students breathe through a straw to demonstrate the effects of airway narrowing. These concrete activities will teach them concepts better than simple lecture or reading (Figure 38–5). Concepts of health promotion tend to be abstract since they deal with supporting one’s highest potential for wellness. Thus, it becomes even more important to provide concrete methods of learning.

Immunizations are generally up-to-date for school-age children. However, some children may have missed earlier doses due to illness or missed healthcare visits. Evaluate the immunization record to be sure it meets all recommendations. The most common immunization needs at this time include the following:

- Hepatitis B (whole series or a missed third shot)
- Hepatitis A (if in state with recommendation for immunization)
- Tetanus-diphtheria, polio, or measles-mumps-rubella (if booster dose was not given prior to school entry)
This boy is learning about the effects of smoking on the body through the concrete experience of examining a model of the lungs. Why does this type of hands-on technique help school-age children to learn concepts?

- Varicella if not given earlier and the child has not had the disease
- Meningococcal vaccine
- Certain vaccines for children at high risk, such as pneumococcal and influenza (see Chapter 45 for further information on immunizations)

Screening for health risks should occur during the visit. These include hearing and vision screening, blood pressure monitoring, tuberculin skin test, and in some cases screening for hyperlipidemia and lead exposure. Unusual complaints may indicate a need for further testing; examples include the following:

- Pain other than brief discomfort after an injury
- Headaches
- Bruising
- Lack of coordination
- Repeated infections
- Decreasing vision or hearing
- Problems or changes in school performance or behavior

Children who have an identified health problem or developmental disability may have additional needs for screening and for interventions to assist with health maintenance. For example, the child with cystic fibrosis will need information to lessen risk of respiratory infection, and the child with diabetes may need additional blood studies. The child who has difficulty reading will need alternative approaches to teaching correct handwashing; demonstration with explanation may be the best approach. A family history of some diseases increases the child’s risk and necessitates testing. For example, if a parent has had early cardiovascular disease (before age 55 years), a lipid profile should be performed on the child.

Parents should receive explanations about the screening tests performed and the results obtained. Inform them about vision and hearing results. Send home or call about results of blood tests when available. Be sure they understand the findings and have resources to assist in preventing or treating the specific disease in their children. Have them call with questions about health problems the child develops, and provide information about lowering risks of diseases. Be sure that families know when to keep children home from school (elevated temperature, active vomiting or diarrhea, coughing up brown or green mucus). Assist schools in setting guidelines for management of infectious diseases in that setting. Contact the local county and state health department for infectious disease guidelines for schools. Desired outcomes for the school-age child include prevention of infectious diseases, prompt treatment for acute infections, and careful management of existing health conditions in order to maximize health potential.

INJURY PREVENTION STRATEGIES

Injuries are a common cause of morbidity and mortality among school-age children, and each health maintenance encounter should include injury prevention strategies. Children have more independence and may be harmed by activities they engage in without adults, such as playing with fire or firearms. They participate in many sports and other physical activities and may suffer related injuries. Some children unfortunately suffer harm due to physical abuse or other forms of violence (see Chapter 36).

Many common injuries are preventable with simple use of protective gear and following safety guidelines. Eighteen percent of youth rarely or never wear seat belts in automobiles (MMWR, 2004). Many children ride bicycles, but only about 14% are protected by helmet use, contributing to 23,000 bicycle-related head injuries annually. Bike helmets could prevent up to 88% of serious brain injuries from bicycle crashes (Committee on Injury and Poison Prevention, American Academy of Pediatrics, 2001). Strategies to make helmet use more attractive and to ensure correct wearing of helmets are needed (see “Evidence-Based Nursing”).

Identify youth engaging in risky activities and teach them safe practices. Join with schools and community groups to establish education programs. Provide information about adequate conditioning for sports in order to decrease chance of overuse injury (Committee on Sports Medicine and Fitness, American Academy of Pediatrics,
EVIDENCE-BASED NURSING

BICYCLE HELMET EFFECTIVENESS AND USE

Problem
About 900 children die of bicycle-related injuries annually in the United States. Although helmets can reduce injury, many times they are not worn correctly.

Evidence
Nearly 500 children visiting a pediatric office were asked to bring their helmet to their health supervision visit, or were supplied with one when they came. Although about 73% of the children claimed to wear a helmet when bicycling, only 4% were able to demonstrate correct fitting and wearing of the helmet. Commonly the helmets were worn too high on the head, were not properly strapped on, or were secured so that they moved around the head excessively. The researchers suggest that helmet assessment be integrated into health supervision visits.

Implications
Nurses should not assume that reports of safety precautions such as wearing helmets or seat belts mean that children use these measures correctly. Ask for demonstrations and provide suggestions to improve technique as needed. Common injury causes such as car and bicycle crashes necessitate including at least these evaluations as part of health maintenance activities (Parkinson & Hike, 2003).

Critical Thinking
What are the reasons that children might not wear protective gear during sports? Are there laws in your community about wearing helmets for biking? How can nurses work with parents and schools to increase helmet use? To what incentives would school-age children be most likely to respond?

References

NURSING MANAGEMENT

NURSING ASSESSMENT AND DIAGNOSIS

Assessment of health promotion and health maintenance topics occurs in many settings with school-age children. They may be seen in offices, clinics, or other settings designed to provide such care. They may come for episodic care for a fracture or infection when health promotion and health maintenance can be easily integrated. They may be seen in the home or neighborhood center, and are frequently encountered by nurses in schools. Opportunities for assessment and intervention should be used whenever they occur. The individual child is examined, and the family, friends, school, and community are addressed. In addition these visits provide an opportunity to identify early and intervene for health-related problems that emerge or become apparent in school age.

Assessment can be considered on two levels with school-age children. Individual children may be assessed for height and weight, for immunization status, and for use of protective gear during sports. Populations of children may also be assessed since school age is the first time that large numbers of children are together in certain settings. The findings from such assessments will become the basis of an individualized approach or a population-based approach to health promotion and health maintenance. For example, nurses commonly measure height and weight, and calculate body mass index for individual children seen in a clinic. The results are shared with the family, and appropriate teaching about weight control and nutritious intake can be addressed. In other settings, nurses may measure a classroom of children and use the collective data to plan appropriate interventions. If 40% of children in a school are classified as overweight by BMI percentile, much emphasis should be placed on teaching about dietary intake, physical activity, and the relationship of recommended weight levels to chronic disease risk. However, if only a small number of children are overweight, interventions may not be as extensive about this topic.

Nurses perform assessment of growth in school-age children, look for achievement of developmental tasks, assess physical and mental health, and assess social characteristics. Based on the assessment of the individual child or populations of children, nursing diagnoses for children and families are established. Possible nursing diagnoses include the following:

- Delayed Growth and Development related to abuse
- Impaired Parenting related to lack of knowledge about child health maintenance
- Sleep Deprivation related to sleep terrors
### TABLE 38–2 ✡ Injury Hazards in the School-Age Years

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Developmental Characteristics</th>
<th>Preventive Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor vehicle/ pedestrian/ biking crashes</td>
<td>Child plays outside; may follow ball into road; rides two-wheeler.</td>
<td>Teach child safe outside play, especially near streets. Reinforce use of bike helmet. Teach biking safety rules and provide safe places for riding.</td>
</tr>
<tr>
<td>Firearms</td>
<td>Child may have been shown location of guns; is interested in showing them to friends.</td>
<td>Teach child never to touch guns without parent present. Guns should be kept unloaded and locked away. Guns and ammunition should be stored in different locations. Be sure guns have trigger locks.</td>
</tr>
<tr>
<td>Burns</td>
<td>Child may perform experiments with flames or toxic substances.</td>
<td>Teach child what to do in case of fire or if toxic substances touch skin or eyes. Reinforce teaching about 911.</td>
</tr>
<tr>
<td>Assault</td>
<td>Child may be left alone after school and may walk, bike, or take public transportation alone.</td>
<td>Provide telephone numbers of people to contact in case of an emergency or if child feels lonely. Leave child alone for brief periods initially, and evaluate child’s success in managing time. Teach child not to accept rides from or talk to or open doors to strangers. Teach child how to answer the phone.</td>
</tr>
</tbody>
</table>

- **Risk for Violence Directed at Others** related to history of witnessing family violence
- **Risk for Loneliness** related to long periods alone after school
- **Health-Seeking Behaviors** related to locating swimming classes

### PLANNING AND IMPLEMENTATION

The nurse is instrumental in planning interventions to promote and maintain health in school-age children. These interventions may take place in offices, homes, or clinics with an individual child, or in schools and other community settings with groups of children.

When working with individuals, summarize the strengths and needs that you have identified during the visit, and ask the child and family if they concur. Plan together with them to provide the needed information for topics you all have developed. Be sure to emphasize those areas where the family excels. For example, positively reinforce use of car seat belts (see "Teaching Highlights: Car Safety for the School-Age Child"), use of protective sports...
CHAPTER 38

Age Injury Prevention Teaching

5–8 years
- Use a booster seat, properly positioned in the back seat of the car; use lap and shoulder belts.
- Never place the child in a front car seat with a passenger air bag.
- Be sure the child knows how to swim and works on these skills regularly.
- Protect the child with sunscreen when outside.
- Check smoke alarms and keep them in proper function.
- Have an escape plan in case of fire in the home.
- Keep poisons, electrical appliances, and fire starters locked.
- Keep firearms unloaded and locked; store ammunition in a separate locked location; have trigger locks installed on guns; keep dangerous knives locked.
- Provide protective gear for bicycling and other activities and insist that it be worn.
- Teach safety precautions for bicycling and other activities.

Never place the child in a front car seat with a passenger air bag.

Be sure the child knows emergency numbers, names, and plans.

Review carefully any hazardous event that has occurred with the child and summarize what was done correctly and how response could be improved.

Limit screen time to 2 hours daily; do not allow violent games or viewing.

Review behavior with strangers regularly such as not getting in cars, and not engaging in phone or Internet conversations.

8–10 years
- Use car booster seat until child sits upright against back seat with bent knees over edge of seat; insist on use of lap and shoulder belts.
- Do not place child in front seat of car with a passenger air bag.
- Continue to reinforce teaching described above.

10–12 years
- Continue to reinforce teaching described above.
- Parents and child should attend class on cardiopulmonary resuscitation and airway obstruction removal.

When you are working with groups of children, health promotion focuses on known needs, interests, and risk areas. Nurses in school settings have used a variety of creative approaches to promote the health of youth. Nurses in

gear, and being current with immunizations. Summarize the next expected developmental tasks, such as increasing independence and growing self-responsibility for choosing snacks and television shows. Then provide anticipatory guidance to assist with the child’s growing independence. As peers are becoming more important, always focus some discussion on maintaining healthy social relationships through school peers, religious or community events, and sibling contacts. A combination of discussion and reading material or pertinent Web sites for later exploration is welcomed by most families. Provide telephone numbers of resources for questions and community contacts. Tell the parents when the next health promotion/maintenance visit is recommended. If you come in contact with school children for episodic care, ask when the last health maintenance visit occurred. If a child is seen for healthcare after a bicycling accident, the family may be receptive to teaching about safety precautions. When exposed to injuries to the skin, a review of the last tetanus booster may review health maintenance needs. Use every opportunity to work with individual children and insert appropriate health promotion/health maintenance topics.

When you are working with groups of children, health promotion focuses on known needs, interests, and risk areas. Nurses in school settings have used a variety of creative approaches to promote the health of youth. Nurses in


### TEACHING HIGHLIGHTS

**CAR SAFETY FOR THE SCHOOL-AGE CHILD**

Recommendations include the following:
- For children over 40 lb (generally 4 to 8 years of age), use a belt positioning, forward-facing booster seat located in the back seat. Always use both lap and shoulder belt. Make sure the lap belt fits low and tight across the lap/upper thigh area, and the shoulder belt is snug across the chest and shoulder to avoid abdominal injuries.
- Children 4’9” and taller can sit in a regular car seat restrained with lap and shoulder belt that are snug and correctly located across the lap and chest. The back seat is preferred for all children and necessary for children 12 years and younger.

Note: ALL children 12 years and younger should ride in the back seat.
Adolescents are often seen only sporadically for healthcare, even though visits are recommended annually. They are usually healthy, may not need immunizations, and consequently do not often come for healthcare. If they have a minor illness, come in for birth control, or need a sports examination, the visit should be viewed as a health supervision opportunity. While all components of the usual visit may not be performed, at least those parts most important are inserted into care. If time is limited, the nurse has to decide which topics to address during a healthcare visit. It is advisable to start with the topic of most interest to the teen and then to insert some injury prevention teaching, since injury is the greatest risk to teens. Health promotion topics such as dietary and exercise habits could be discussed if there is time. Mental health assessment and teaching are other areas of prime importance. Of course, if the teen is at immediate risk, such as considering suicide in response to depression, this must be dealt with immediately by collaborating with a mental health specialist.

What general principles can guide programs to promote health in adolescents? Some researchers have analyzed theory application and approaches of programs, and others have suggested key elements of programs (see “Thinking Critically”). Programs that assist adolescents in taking on health promotion behaviors foster a sense of competence, confidence in the youth’s own abilities, building of a sense of character and responsibility, connection to other youth and beneficial programs, and the qualities of caring and compassion (Lerner & Thompson, 2002). When establishing youth programs, whether with individual adolescents or with groups, the nurse includes evaluation of effectiveness, and plans methods to enlarge and sustain successful approaches.
CHAPTER 38

THINKING CRITICALLY

APPLYING THEORY TO PLAN FOR ADOLESCENT HEALTH

A review that analyzed articles describing adolescent health promotion identified the most common theories used by healthcare providers (Montgomery, 2002). A major theory is social cognitive theory. This theory was developed by Walter Bandura, who is described in Chapter 33 (Bandura, 1977). The key components of his theory involve self-efficacy (the person’s belief in the ability to perform a behavior) and outcome expectancy (what the person expects to get from performing a certain behavior). Learning a new behavior occurs through modeling, or imitation of the behavior of someone else. Bandura believes that individuals make decisions about health behaviors based on thought about the consequences and outcomes of those behaviors. The person’s characteristics, such as self-efficacy and outcome expectancy, interact with the external environment and the behavioral choices available. All of these components together determine health behaviors, and all can be influenced to promote health.

When seeking to promote physical activity behaviors in youth, some essential components are:

- Encouraging the youth to believe they could perform the activity (self-efficacy).
- Pointing out the positive aspects of the behavior (outcome expectancy).
- Showing the youth how to do the activity (modeling).
- Providing a physical setting and opportunity for performing the behavior (environment).
- Allowing trial and error, choice in time and extent of activity (behavioral choices).

Composing a teaching plan to encourage increased physical activity for a teen, using all components of the social cognitive theory, list the outcome measures or goals for the teaching, the interventions, and methods of evaluation.

will be time to talk with them about any of their concerns and questions. Provide them with an opportunity to ask questions and get information also.

Some teens are comfortable in healthcare settings and actively engage in conversation, while others are nervous and will need more explanations and reassurance during the first steps of measurement and blood pressure. By adolescence, boys and girls should be assuming more of a partnership role in their own healthcare. As the visit begins, greet adolescents warmly, ask what concerns and questions they have, and ask for their opinions and reactions throughout the visit. This will show that their thoughts are important and that they play an important role in guiding the healthcare visits. When adolescents are visiting the same office or clinic that they came to during childhood, they usually know and feel comfortable with the care providers. If the setting is new to them, explain procedures and introduce personnel so they feel more at ease.

GROWTH AND DEVELOPMENTAL SURVEILLANCE

Adolescence spans several years, and growth and developmental issues vary throughout the period. For young adolescents, or those from about 12 to 13 years of age, growth measurement remains important. Many youth are still growing, and use of percentile grids continues to be an important part of care. Growth should remain in the same percentile channel as during childhood, with girls reaching nearly adult height at this age, and boys still continuing to grow. Be alert as always for youth who have either increased or decreased channels, or are above the 85th percentile or below the 5th percentile for body mass index. They will need additional assessment of nutritional intake and physical activity.

By middle and late adolescence, adult growth is nearly achieved, earlier for girls than boys. While mea-
surement continues to be performed, nurses assess the BMI more carefully to be sure the height and weight indicate appropriate intake and exercise. Overweight at this age is likely to continue into adulthood, particularly if parents are overweight, so early intervention will be needed to decrease this potential. Other youth may have eating disorders and should be referred to a specialist for care. Children from homes without sufficient financial resources may be hungry and lack food. Parents who were eligible for Women, Infants, and Children (WIC) Nutrition Program services when children were younger may not receive them once the child is an adolescent, so the increasing dietary intake needs of their teens cannot be met. If an adolescent is thin and has little energy, consider this possibility; administer the food security questionnaire found in Chapter 34.

There are few options for measuring the developmental competence of adolescents, but observations and questions during care provide information about the meeting of developmental milestones. Key tasks for adolescents involve separating from the parents and establishing positive relationships with peers. The young teen may come to an appointment with a parent and still rely on that parent to answer some questions during the examination. However, the middle and late teen should be increasingly able to come alone, answer questions, and assume responsibility for healthcare decisions. Offer older teens the option of coming into the room alone, stating, “Your mom can wait here and we can come and get her later. Does that sound all right?” During time with the adolescent, ask questions to learn about peer interactions and activities.

The adolescent receives a physical examination, often by the nurse practitioner or physician. See Chapter 35 for components of the examination. Some particular parts of the examination to include for teens are scoliosis screening, sexual maturity rating (Tanner stages), breast exam, testing for sexually transmitted diseases (among those sexually active), pelvic exam and pap smear (for sexually active females), hematocrit for anemia annually in menstruating adolescents, hearing screening (at 12, 15, and 18 years), blood pressure annually, lipid screening for those with family history of early heart disease or other risk factors, and tuberculosis screening for those in high-risk areas. Most adolescents do not want their parents present during the examination, but occasionally will want a parent for something like a first pelvic examination or a blood draw. Ask them their wishes in a confidential setting so they can freely make the choice. They also may choose to have a healthcare provider of the same gender as them complete the genitourinary examination. Expected outcomes of care include screening and early identification for common health problems, normal patterns of growth, and meeting of developmental milestones.

**NUTRITION**

The young adolescent needs a well-balanced diet to support the growth of this period, and the late adolescent requires intake that supports physical activity and provides nutrients for metabolism and to promote the immune system. While nutritional intake is important, teens often do not eat well. They may be busy and do not want to plan meals, they like to eat foods that are popular with other teens so high fat and sugar intake can be common, they may be dieting to achieve weight loss, and some do not have enough financial resources to access proper foods.

Combine the information from measurement of the adolescent with the answers to questions about diet to identify possible areas for intervention. Find out what questions the teen has about foods, diet, maintaining desired weight, and topics like vegetarianism or supplements to enhance athletic performance. See Chapter 34 for further detail about these special nutritional topics. Health promotion plans focus on practices that lead to healthy growth and development. They may include teaching about:

- Getting five fruits and vegetables daily.
- Including whole grain products to replace refined products whenever possible.
- The importance of eating three meals each day, including breakfast and lunch.
- Eating together as a family several times weekly, which enhances quality food intake.
- How to plan menus and prepare foods for balanced intake.

Health maintenance plans center on those practices that prevent disease, including:

- Limiting refined sugar and high-fat intake (such as soft drinks and fried foods) to maintain weight at recommended level.
- Including two to three servings of dairy products daily to enhance bone formation and decrease chance of osteoporosis as an adult.
- Using resources for treatment of eating disorders if they are identified.

While much of nutrition teaching should be aimed directly at the adolescent, parents are also included. They can be effective contributors to healthy intake by providing plenty of fruits and vegetables for snacks, having foods attractively prepared and ready for consumption when the teen is hungry, planning several meals together as a family each week, encouraging milk or other forms of calcium intake, and setting a good example for food intake. Help them to identify the youth with an eating disorder and provide resources for intervention in these cases. Consider as
well the teen with a baby. The adolescent who is pregnant or breastfeeding has even more need for nutritional teaching and may need financial resources to access sufficient food. How can the nurse combine the growth and developmental needs of an adolescent with those of her new baby when planning teaching?

PHYSICAL ACTIVITY

Many adolescents suffer from the effects of inadequate physical activity. As children get older and enter the teenage years, physical activity decreases, particularly in girls. Only about 30% to 60% of adolescents report daily vigorous activity, and the percentage is lower among some groups (Epstein, Paluch, Kalanus et al., 2001). The recommendation of Healthy People 2010 (U.S. Department of Health & Human Services, 2000) is quite moderate, stating that adolescents should get at least 20 minutes of vigorous activity 3 days weekly. At a time when teens are not very active as a group, physical education requirements in school are also decreasing, with only 19% of 12th-grade students regularly attending a PE class (Lowry, Wechsler, Kann et al., 2001). Physical activity levels must therefore be assessed at each health supervision visit or in other contacts with adolescents. Apply resilience theory and assess youth, family, and community for risk and protective factors regarding physical activity (Table 38–4).

Some youth have established regular physical activity programs, and their behaviors should be encouraged (Figure 38–7). Be alert for those who exercise but have other health problems. Some athletes try to eat very little to remain a certain weight for wrestling, running, or other sports. Integrate nutritional teaching that includes the importance of adequate intake for sports performance. Other athletes use nutritional supplements to enhance performance. While most are not harmful, few have proven benefits and their cost is not warranted; some may actually be harmful to adolescents.

Other youth have very little physical activity and feel incompetent in performing many sports. Work with them to find at least one thing they can do on a daily basis—walking their dog in the neighborhood, riding a bike to the store, using stairs instead of elevators when possible, parking on the far side of the school lot and walking further, swimming at a club whose parents belong to or at a local YMCA or YWCA, or saving money to take lessons for something they have always dreamed of doing such as horseback riding or golf. Form interest groups at schools and community centers that provide an outlet for adolescents who cannot “make the team” for school sports. Encourage parents and adolescents to set goals together to integrate some physical activity daily.

The nurse’s activities for health promotion concentrate on teaching the health and mental benefits of physical activity such as increased energy, weight control, and a feeling of control and success. Health maintenance focuses on viewing physical activity as a method to prevent disease such as cardiovascular disease and diabetes. Youth who have family members with these diseases or meet adults who have them are more likely to understand the importance of their own activity. Desired outcomes include maintenance of weight within recommended level, daily exercise of 20 to 60 minutes, and establishment of lifetime routines for exercise.

### TABLE 38–4  Risk and Protective Factors Regarding Physical Activity in Adolescence

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lives in isolated setting with little opportunity for contact with others</td>
<td>Has opportunities for participation in physical activity at home, at school, and in the community</td>
</tr>
<tr>
<td>Has a developmental disability that impairs physical movement</td>
<td>Has exercised during all of childhood, often with parents</td>
</tr>
<tr>
<td>Does not like physical activity</td>
<td>Knowledgeable about benefits of activity, committed to maintaining exercise patterns</td>
</tr>
<tr>
<td>Has a pattern and history of low activity levels</td>
<td>Has many friends living close who participate in physical activity</td>
</tr>
<tr>
<td>Is overweight</td>
<td>Youth and parents agree to a limit of 2 hours daily of screen time</td>
</tr>
<tr>
<td>Does not feel competent in most sports</td>
<td>Availability of financial and other resources for sports gear and protective equipment</td>
</tr>
<tr>
<td>Limited financial resources to pay registration fees or buy protective gear for sports</td>
<td>Parents participate in regular physical activity and encourage the adolescent to do so also</td>
</tr>
<tr>
<td>Family members who have little physical activity</td>
<td>Neighborhood and community provide physical activity options</td>
</tr>
<tr>
<td>Parents who are not active in school sports and committees</td>
<td>Public policies maintain parks, green spaces, biking trails, playgrounds</td>
</tr>
<tr>
<td>Parents who do not like physical activity and have had low levels while their teen was growing up</td>
<td>Programs are available for adolescents with developmental disabilities or other healthcare needs</td>
</tr>
<tr>
<td>Parents who have little time or facilities for exercise, or always exercise at a club out of view of their family</td>
<td>Lack of neighborhood programs for physical activity promotion</td>
</tr>
<tr>
<td>Lack of youth and parent knowledge about physical activity needs and benefits</td>
<td>Presence of neighborhood hazards and unsafe areas</td>
</tr>
<tr>
<td>Lack of neighborhood programs for physical activity promotion</td>
<td>Data from Green &amp; Palfrey, 2002.</td>
</tr>
<tr>
<td>Presence of neighborhood hazards and unsafe areas</td>
<td>What risk and protective factors for physical activity are present in your community?</td>
</tr>
</tbody>
</table>

Go to http://www.activelivingbydesign.org to examine the positive effect community planning can have on its members’ exercise levels.
Health Promotion and Health Maintenance for the Older Child and Adolescent

This teen girl is an avid “boarder.” How can you encourage and praise her for this activity? What clues do you have that she is using adequate safety measures?

**FIGURE 38–7**

**ORAL HEALTH**

Continued dental care during the adolescent years can ensure oral health. The recommendations remain the same as those for young children. The adolescent should floss daily, brush twice daily with a small amount of fluoridated toothpaste, and visit a dental provider every 6 months. By about 14 years of age, those adolescents who do not have fluoridated water and have been taking fluoride can stop this supplement. Even the molars have been formed by that age so fluoride tablets are no longer needed. Continue to examine the condition of the teeth and the number of erupted permanent teeth present. Be alert for any unusual growths and ulcers in the mouth and refer for care as needed.

One potential concern that should be addressed includes the availability of dental insurance for the adolescent. The teen whose family does not have dental insurance needs referrals for care to affordable resources. Dental specialists clean off plaque that has formed, apply sealants to erupting molars, examine the teeth for caries, and perform restorative care. There are particular groups more at risk for inadequate dental care (see “Developing Cultural Competence”). When working with these populations, nurses can question access to care, and make recommendations that foster regular checkups. Some teens may wish to whiten the teeth or get orthodontia to improve appearance. The nurse helps the youth and parents to find resources for needed care. Expected outcomes are dental visits twice annually with recommended follow-up care for problems, and good oral health.

### DEVELOPING CULTURAL COMPETENCE

**DENTAL CARE**

Several ethnic groups are more likely to have inadequate dental care than other groups. When you work with these populations, be certain to include dental assessment in health supervision visits, and have resources for care readily available.

An analysis of several national surveys such as the National Health and Nutrition Examination Survey (NHANES) reported that rural children were more likely (41%) to be uninsured for dental care than urban children (35%). They were also less likely to have visited a dentist in the last year (70%) than urban children (74%). More rural children (8%) had unmet dental needs than did urban children (6%) (Vargas, Ronzio, & Hayes, 2003). When children live in rural areas, be sure to ask about their access to dental care.

Another analysis of NHANES data examined African-American respondents. Sixty-two percent reported that they only visit a dentist when needed rather than regularly. Those who were poor, unemployed, uninsured, or living in the South had poorer dental health. If you work with African-American youth, be conscious of the need to integrate oral assessment into care, and to encourage utilization of services (Green, Person, Crowther et al., 2003).

National Health Interview Surveys (NHISs) data were analyzed for dental care utilization by Asians and Native Hawaiians and other Pacific Islanders. Native Hawaiian and other Pacific Islander children were most likely (82%) to have had a dental visit in the last year, while Asian Indians were least likely to have a visit (60%). Once again, children with no insurance and who were poor were more likely to have less care. Children living with a single parent or someone other than a parent, and those whose parents had under 12 years of education, were more likely to have unmet dental needs (Qui & Ni, 2003).

All children need oral assessment and questions about dental care, but rural and poor groups, particularly African Americans and Asian groups, may need teaching about the importance of dental care and referral to appropriate resources.

### MENTAL AND SPIRITUAL HEALTH

Adolescents have many challenges to their mental health and need support to emerge from adolescence with mental and spiritual strengths. Mental health topics must be addressed at each health supervision opportunity to promote mental health among teens. Mental health is closely linked
to developmental tasks such as growing independence, formation of close relationships with peers, becoming confident in accomplishments, and setting goals for the future. Some chronic mental health disorders such as schizophrenia can emerge during adolescence, so mental health screening is important to perform with this age group.

As during other ages, the self-concept continues to develop and tailors reactions to the environment. Self-regulation in the form of making decisions to govern oneself is important. Self-esteem, or a positive feeling about the self, is key to meeting life's challenges. Ask what the teen is proud of and has accomplished and what disappointments have occurred as well. Provide resources to deal with disappointments and give praise for the teen's accomplishments. Another part of the self-concept that continues to develop is that of body image. Factors such as early or late maturation, overweight or underweight, or the role of the media can influence the teen's body image. A healthy image includes the realization that the body has positive and less positive attributes and that the individual can influence the body by healthy eating and physical activity. Be alert for the teen whose wish for a different body leads to eating disorders and excessive exercise or intake of nutritional supplements.

Sexuality involves both body changes that signal maturation sexual development, and the mental concept of oneself as a sexual being. Body changes and mental concepts do not necessarily mature at the same time, and adolescents may not be ready for sexual maturity and the decisions about sexual behavior simply due to achieving sexual maturation. Most young adolescent girls have begun menstruating, and by early to middle adolescence, boys are having nocturnal emissions and ejaculations. Ask teens if they have received information about puberty, body changes, and sexuality. Tell young adolescents that most teens have questions and that they may ask about any areas of interest, including contraception, and sexually transmitted diseases. Ask older adolescents directly if they have had sexual intercourse and if so, what they are doing to protect against pregnancy and sexually transmitted diseases. Provide support for adolescents who have decided not to have sexual intercourse, encouraging them to continue this plan, telling them that sexual feelings are normal, but that decisions about sexual intercourse are their right and privilege. Ask if teens have confusion about their sexuality. If teens have identified as homosexual, let them know they are welcome and ask about decisions regarding sexual practices, reinforcing the need for protection against sexually transmitted diseases. Provide community resources to support gay or lesbian teens so that they can develop a social group in which they feel comfortable. Some adolescents are seen for healthcare at the time they become sexually active. Use this opportunity to reinforce and correct prior knowledge about the body and protection against pregnancy and sexually transmitted diseases (see “Nursing Practice”).

Most adolescents still need discipline or guidance from parents at certain times. Rather than a constant battle over daily events, it is best if there are just a few important rules that parents have to enforce only rarely. When working with parents, nurses can assist them to set useful boundaries for teens and offer resources such as parenting groups and Web sites for assistance.

Sleep is necessary for anyone to function safely and at a level of one's potential. Unfortunately, many youth do not get the sleep needed for healthy functioning. Teens have an increased need for sleep due to their growth rates and activity levels. At the same time, their internal clocks change, making it more difficult to get to sleep at the usual time. It is thought that a decrease in secretion of melatonin occurs, so the teen does not feel tired in the late evening. However, they often do not have the number of hours of sleep needed by the time they wake up for school or work. The problem may be worsened if the student participates in sports or other activities. They may need to get to school before normal starting hours for music, sports, or other activities, or perhaps stay late into the evening for practices. Some adolescents then work weekends or evenings as well. And of course social activities usually fill much of their time. While about 9 hours of sleep is needed, most adolescents get about 6 hours (Mayo Clinic, 2005). The effects of sleep deprivation can be serious. Teens cannot perform to their potential in school or at work. Many parents state that adolescents are moody and difficult to communicate with when they are tired. There may be a connection between lack of sleep and substance abuse, and teens commonly use...
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Some people tend to eat more when they are tired, and get less physical activity. Perhaps one of the most serious consequences deals with the danger of driving while sleepy; this is a common cause of accidents. Ask adolescents about what time they go to bed, when they awaken, and whether they are frequently tired. Provide suggestions for regular sleep schedules, avoiding caffeinated beverages in the evening, and planning a day of relaxation into every week.

Temperament or personality type characteristics continue into adolescence, but they generally do not change from earlier years. For example, the active infant and young child is usually an active teenager. The slow-to-warm-up baby may be the adolescent who needs more time to adjust to a new school or teachers. If the adolescent or parent has trouble with personality characteristics, it may be helpful to talk about these traits, help them to establish a positive sense about the attributes, and discuss ways to adapt the environment as needed. For example, parents should not expect a slow-to-warm-up teen to be interested in running for a class office. Someone with irregular sleep and eating habits will find it difficult to have a job at a set time and will need to set alarms and other reminders.

Spirituality offers comfort and support for the adolescent. Being a member of a teen group in a faith-based home can offer a peer group with similar values and bring meaning to life. Some adolescents reject the faith of their parents and seek a different group; others seek to leave religious practices totally while others become more committed to them. Ask them if they have the resources they need to bring meaning to their lives; provide them if needed. Realize that participation in community food kitchens, raising money for causes, and other activities also provide meaning for many adolescents (Figure 38–8).

The nurse actively promotes the mental health of youth by understanding their developmental needs and providing information and resources. Gentle guidance and active partnership with youth help to provide the resources to ensure healthy self-concept, sexuality, and personality development. While most teenagers have many protective factors that can be identified and fostered, a few have risks that can harm mental health. It is important to identify the risks also, and to use health maintenance techniques to lessen the risk factors. Depression and substance use are two common risks to mental health. Depression is discussed in Chapter 54 and substance abuse is discussed in Chapter 36. See the quick checklists in Table 38–5 to help in identification of these problems during health supervision visits.

Although health promotion and health maintenance activities commonly occur in office or clinic settings, there are many other settings where nurses work with adolescents, and mental health activities are often integrated into these settings. Consider offering health promotion/maintenance wherever students might be found. Some nontraditional settings include correctional facilities, school-based health centers, and programs for pregnant teens. Adolescents in these facilities can benefit from services to improve diet, physical activity, and lifestyle behaviors that influence mental health.

The desired outcomes for mental and spiritual health promotion and maintenance include meaningful activities in the adolescent’s life, emerging independence, good choices about lifestyle behaviors, and development of successful coping skills.

### FIGURE 38–8

Teens often become associated with causes. This helps them to feel part of a social group and also provides the opportunities to examine belief systems and to make decisions about meaningful activities.

### TABLE 38–5 Signs of Depression and Substance Abuse

<table>
<thead>
<tr>
<th>Depression</th>
<th>Substance Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in behavior, school performance, and appetite</td>
<td>Changes in behavior, school performance, and appetite</td>
</tr>
<tr>
<td>Physical complaints</td>
<td>Accidents and other unexplained events</td>
</tr>
<tr>
<td>Loss of interest in usual activities</td>
<td>Lack of responsibility</td>
</tr>
<tr>
<td>Difficulty in motivating self and setting goals</td>
<td>Labile mood and attitude</td>
</tr>
<tr>
<td>Change in friends</td>
<td>Hopelessness</td>
</tr>
<tr>
<td>Feelings of worthlessness</td>
<td>Depression</td>
</tr>
<tr>
<td>Consideration of death or suicide</td>
<td>Feelings of ambivalence</td>
</tr>
<tr>
<td>A variety of physical changes depending on the substance</td>
<td></td>
</tr>
</tbody>
</table>

Data from Jellinek, Patel, & Froehle, 2002.
CHAPTER 38

RELATIONSHIPS

Adolescents form stronger bonds with friends than at any time earlier in development; at the same time they need their parents for guidance and reassurance as they become more independent. As teenagers strive for independence, they frequently strike out at parents, test limits, and have conflicts with parents. Interactions in the family provide consistent and important ties at the same time that social interactions become a central part of life. Health promotion helps teens to form strong friendships with peers and to continue to value and participate in the family. It helps parents to understand the developmental needs and their role in establishing a new type of relationship with the emerging young adult in the family. Partnerships with care providers are important to help families work together to achieve these outcomes.

When adolescents are seen for healthcare visits, assess relationships with others. Provide time alone with both the adolescent and the parents (if they are present) so that everyone has time to talk freely and to ask questions. Some areas already discussed, such as school performance and activities, provide information about the adolescent’s friends and how time is spent. Ask teens to describe their best friends and what they do together. Ask parents their opinions of the youth’s friends. Inquire about the youth’s roles in the family. Does the teen have jobs and responsibilities? What freedom is allowed? What are relationships like with siblings and extended family members such as grandparents and cousins? What activities are done together as a family? Are there differences in the teen’s and the parents’ answers to these questions? What are the teen’s and parents’ desires for how the family unit functions together?

Provide an opportunity alone with the teen to talk about issues such as domestic violence. Is the youth abused or is there violence between adults in the family? Are there stressors such as lack of sufficient finances, an ill parent, or a lost job? How have these occurrences affected the adolescent? Minor adjustments can be helped by discussion, whereas some major problems will need referral to mental health specialists.

In their relationships with peers, adolescents often have many of the same issues that emerge with parents. They may have disagreements with friends or feel hurt by things that are said or done. Ask teens about how things are going with friends and what problems they have. Talk about negotiating, joining groups to form new friendships, and the importance of respecting and not making fun of others. Give them strategies for living up to their own standards even when friends are enticing them to do other things. Suggest that having friends one can trust and who have the same ideals can be very supportive and fun in adolescent years. Expected outcomes are the formation of strong relationships both within and outside of the family, along with independence in decision making.

DISEASE PREVENTION STRATEGIES

Teenagers typically do not have many diseases and most are minor illnesses like respiratory and gastrointestinal illness. However, there are some diseases that occur and nurses must always be aware of signs of potential disease. Some common health issues that are described throughout this book include the following:

- Acne and skin infections
- Body piercing and tattooing
- Sports overuse injuries
- Constipation and diarrhea
- Dental problems

Other observations may signal more serious health concerns and need to be referred for further evaluation. Some examples include the following:

- Scoliosis
- Anemia
- Excessive tiredness
- Bruising
- Sexually transmitted diseases
- Eating disorder
- Abuse or severe bullying

Several screening tests should be performed during health supervision visits with adolescents, including vision, hearing, smoking, depression, stress, alcohol or other substance use, blood pressure, urinalysis, sexually transmitted infection risk, and in some cases pap smears and breast examinations. Screening tests with abnormal results require follow-up and intervention. For example, if the adolescent is anemic, iron tablets may be needed and teaching about high-iron foods should be done. Vision impairment requires referral to an eye specialist. Presence of sexually transmitted diseases requires teaching and medication treatment. History of sexual activity will guide the nurse to tests that should be included in the examination (see “Nursing Practice”).

The adolescent should receive extensive information about ways to protect health and prevent disease. The hazardous outcomes of smoking are discussed, and smoking cessation programs are encouraged for smokers. Unprotected sexual activity is presented as a serious health threat. Use of sunscreens to prevent burns and future skin cancer
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**NURSING PRACTICE**

Sexually active teens should be screened annually for the following:
- Chlamydia
- Gonorrhea
- Trichomiasis
- Human papillomavirus
- Herpes simplex virus
- Bacterial vaginosis

Teens should be screened for syphilis and HIV/AIDS if requesting testing or meeting any of these criteria:
- History of sexually transmitted infection
- More than one sexual partner in past 6 months
- Intravenous drug use
- Sexual intercourse with a partner at risk
- Sex in exchange for drugs or money
- Homelessness
- Males—sex with other males
- Syphilis—residence in areas where disease is prevalent
- HIV/AIDS—blood or blood product transfusion before 1985

See Chapter 52 for further information on screening procedures.


is encouraged. Females are taught breast self-exam, and males are taught testicular exam. For youth who are over-weight and sedentary, the possible outcomes such as type 2 diabetes and cardiovascular disease are mentioned. While it would not be advisable to threaten or frighten an adolescent with descriptions of diseases, an understanding of the potential serious outcomes can be motivators for behavior change.

In addition to teaching to prevent disease, the nurse also administers any needed immunizations. Many adolescents have not had immunizations since about school entry time, so their record should be carefully reviewed. Some common immunizations needed by adolescents include the following:

- When was the last tetanus-diphtheria booster? It is recommended every 10 years if no wounds have required an update in the interim. If the child received it at age 5 years, a booster is needed at 15 years.
- Was a second measles-mumps-rubella administered? A second dose may not have been routine when teens were younger so they may need it now.
- Is hepatitis A common in your state? If so, the teen needs to get that vaccine.
- Has the youth had hepatitis B vaccine? This is important for all youth, and some may not have received it as infants.
- Did the youth have a clear history of varicella disease? If not, the vaccine is needed.
- Meningococcal vaccine is now recommended for all youth.

The results of health screening are shared with the teen and with the parent as appropriate. Teaching and other interventions for disease prevention are examples of health maintenance activities. Expected outcomes are increasing knowledge of common diseases and methods of prevention among teen and parent, use of screening tests by the healthcare provider, and use of the healthcare home by the adolescent for treatment of diseases.

**INJURY PREVENTION STRATEGIES**

Injury is the greatest health hazard for adolescents, so injury prevention must be integrated into every health contact with youth. The major hazard is automobile crashes (see Chapter 1). Many teens learn to drive and have a license by 16 years of age. They often transport friends, get distracted by social interactions in the car, have little experience about what to do if a car slides or has mechanical problems, may drink and drive, talk on cell phones while driving, and are often tired when driving (Figure 38–9). Several states have instituted graduated driving licensing to help decrease some risks. Commonly, the youth cannot drive other youth for the first few months, cannot drive from about 1 a.m. to 6 a.m., and has serious consequences for speeding or other infractions.

**FIGURE 38–9**

Adolescents often drive motorized vehicles and may be at risk for injury if not properly prepared or protected. What teaching and experience do these youth need for safe enjoyment of the experience of driving and riding with friends? Do schools in your area offer driver education classes? What are the state requirements for youth driver licensure?
Parents in states without these laws may wish to establish them for their own adolescents. Driving should always be presented as a privilege and a responsibility. Serious consequences such as losing the ability to drive for a time after any infraction can be suggested to parents. Because of the great risk of injury and death from car crashes, ask at each health visit if the teen drives, rides with other teens, what rules parents have established about driving, and whether the teen ever drinks and drives or rides with someone who does. Reinforce the need to wear a lap and shoulder belt at all times and to never drink and drive.

Youth are at risk for injury with other motorized vehicles. Motorcycles, four-wheelers, boats, jet skis, farm machinery, and tools are other sources of injury. Ask about the youth’s exposure to various machines and teach about avoiding alcohol and drug use, and safety gear and precautions to be used. Every health visit should include other questions that help to identify a wide variety of injury hazards. Be sure to discuss and provide written material to perform injury prevention teaching. Such measures are important health maintenance activities (Table 38–6 and Table 38–7). Desired outcomes for nursing care include absence of serious injury, the ability to state sources of risk for injury, and emergency plans for assistance when engaging in any risky activities.

**NURSING MANAGEMENT**

**NURSING ASSESSMENT AND DIAGNOSIS**

Nurses assess adolescents in a variety of settings, including offices, clinics, schools, home, correctional facilities, extended care facilities, sports-related endeavors, and family planning clinics. A wide array of health concerns should be included in these assessments. They include measurement of growth; presence of any unusual findings on physical examination; lifestyle choices related to dietary intake, physical activity, and oral hygiene; assessment of mental status, family interactions, and social connections with peers; and

**TABLE 38–6 Injury Prevention in Adolescence**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Developmental Characteristics</th>
<th>Preventive Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor vehicle crashes</td>
<td>Adolescents learn to drive, enjoy new independence, and often feel invulnerable.</td>
<td>Insist on driver’s education classes. Enforce rules about safe driving. Seat belts should be used for every trip. Discourage drug and alcohol use. Get treatment for teenagers who are known substance abusers.</td>
</tr>
<tr>
<td>Sporting injuries</td>
<td>Adolescents may participate in physically challenging sports such as soccer, gymnastics, or football. They may be allowed to drive motorboats.</td>
<td>Encourage use of protective sporting gear. Teach safe boating practices. Perform teaching related to hazards of drug and alcohol use, especially when using motorized equipment.</td>
</tr>
<tr>
<td>Drowning</td>
<td>Adolescents overestimate endurance when swimming. They take risks diving.</td>
<td>Encourage swimming only with friends. Reinforce rules and teach them about risks.</td>
</tr>
</tbody>
</table>
protective factors. The protective factors can be used during implementation to enhance the youth's resilience.

Based on a thorough assessment, you will establish nursing diagnoses that are appropriate for the adolescent and family. Some possible nursing diagnoses might include the following:

- **Rape-Trauma Syndrome** related to date rape
- **Impaired Dentition** related to ineffective oral hygiene
- **Imbalanced Nutrition: More than Body Requirements** related to lack of basic nutritional knowledge and obesity in both parents
- **Disturbed Sleep Pattern** related to frequently changing sleep/wake schedule
- **Low Self-Esteem** related to situational crisis of friends making fun of adolescent

### PLANNING AND IMPLEMENTATION

Whatever the setting, the nurse partners with the adolescent, the parents, and other persons such as teachers or school counselors to plan appropriate goals and related interventions. Nurses work with individual adolescents in offices, schools, and other settings, and often work with groups of adolescents to perform teaching. Apply communication skills that are effective with teens, such as listening to concerns, allowing for discussion, and bringing peers who have had experiences related to the topic being discussed.

Many of your interventions will involve teaching, so it is wise to develop a number of resources for working with teens. Consult the Web resources on the CD with this book, and visit agencies in your community to gather appropriate materials. Teaching topics will be directed both at health promotion (providing information to enhance the adolescent’s state of health) and at health maintenance (sharing tips about how to avoid disease and injury). A good starting point is to have the adolescent identify a personal health goal and begin teaching there. In addition to teaching, you will provide direct care when you administer immunizations, perform vision screening, and examine the spine and posture for scoliosis.

One of the challenges during health supervision for adolescents is including the right mix of teen and parent decision making and involvement. You will again apply communication skills by tactfully allowing time for both parent and adolescent to be seen alone. Realize that you are supporting and providing information for parents, like useful discipline techniques, recognition of common parental feelings about teens, and the need for growing independence by their youth. When you provide teaching to groups of teens in schools, there may be policies about what needs to be sent home to parents. Some schools require an outline of topics such as sexually transmitted diseases or substance...
use be sent home for parents to read. Parents may call you with questions about content and approach, or some may choose to attend and sit in on your presentation. This obviously requires that you partner with the school administration, teachers, parents, and others to be effective in your presentation. Collaboration with many individuals and agencies are important skills.

Whether you see adolescents in offices or other private settings, or in schools, correction facilities, or other places with groups present, leave information about how you or another nurse or care provider can be contacted. Provide brochures, referral numbers, names, and emails related to the topics discussed. Encourage annual visits for health supervision visits and suggest a variety of places to obtain this care. For example, if a youth will soon graduate from high school, find out if he or she will be working or attending college and provide links to health insurance or care providers in the new location.

**EVALUATION**

Expected outcomes for care of adolescents and their families during health promotion and health maintenance include the following:

- Evidence that a rape victim is no longer abused
- Absence of debris and plaque on dental surfaces
- Approaching ideal weight
- Demonstration of amount and pattern of sleep for mental and physical rejuvenation
- Positive personal judgment of self-worth

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**Critical Concept Review**

**LEARNING OBJECTIVES**

- Apply knowledge of school-age growth and development to identify needed assessment of nutrition and physical activity.
- State components of self-concept for school-age children.
- Describe the growing importance of peers in planning teaching strategies with school-age children.
- Use knowledge of the major injury risks of school-age children to plan nursing interventions that contribute to their prevention.

**CONCEPTS**

**Nutrition:**
1. Height, weight, and BMI.
2. Assessment of nutritional status.
3. Educate child and family about healthy nutritious practices:
   - Healthy snacks at home.
   - Need for increased calcium intake.

**Physical activity:**
1. Educate child and family in risk and protective factors related to physical activity.
2. Assess physical activity of the family:
   - Suggest activities that child and parent can do together.
3. Encourage child to become active in physical education activities at school.

**Self-esteem:**
1. Does child believe he/she is able to handle challenges?
2. Body image:
   - Does child’s appearance and dress reflect a positive self-esteem?
3. Sexuality:
   - Does child ask appropriate questions about his or her own sexuality and opposite sex?

**Injury prevention efforts should focus on the common causes of mortality and morbidity in school-age children, including:**
1. Firearms.
2. Abuse.
3. Motor vehicle crashes.
LEARNING OBJECTIVES

Identify the major health concerns of the adolescent years.

Apply communication skills to interactions with adolescents and their families.

Apply assessment skills to plan data-gathering methods for nutrition, physical activity, and mental health status of youth.

Intervene with adolescents by integrating activities to promote health and to prevent disease and injury.

CONCEPTS

2. Sexual issues.
4. The need for independence.

1. Assist parents to understand that the adolescent is striving to be independent.
2. Reassure adolescent that the parent is trying to provide guidance during a confusing time of life.
3. Encourage parents to reward positive behaviors.
4. Encourage adolescent to discuss specific issues rather than global subjects.

Nutrition:

1. Discuss weight changes since last healthcare visit.
2. Discuss usual meal routines and favorite foods.

Physical activity:

1. Question adolescent regarding participation in sports, including amount of practice.
2. Discuss other forms of physical activity engaged in daily or weekly.

Mental health status:

1. Assess adolescent's perception of accomplishments and disappointments in life.
2. Ask adolescent about sexual activity.

Screening tests:

- Scoliosis.
- Mental health status.
- Anemia.
- Sexually transmitted diseases.

Review immunization status.

Review information concerning need for sun protection.

Discussion of birth control and prevention of sexually transmitted diseases.

Discussion of safe driving practices:

- Seat belts.
- Do not drink and drive.

Discussion of prevention of common sports injuries.

CRITICAL THINKING IN ACTION

View the Critical Thinking in Action video in Chapter 38 of the CD-ROM. Then, answer the questions that follow.

Tammy is a 13-year-old coming into the office for her yearly check-up and she has never been in the hospital or had surgery. She is a good student and is excited to start 7th grade next year. She has not had any immunizations since going into kindergarten. Tammy arrives with her mother, with whom she lives; she has no contact with her biological father. Her mother decides to stay in the waiting room, but did note on the written history form that there is a family history of high cholesterol and heart disease in family members under 50 years old. Tammy’s mother is a single parent working full time with 2 other children at home. Tammy’s body mass index is in the 85th percentile and she passed her hearing and vision tests. Her blood pressure is 115/70 and her urinalysis shows blood, but Tammy has her menses. Tammy has a period every month and menarche started at 10 years old. Her menses lasts 5-7 days and she denies experiencing cramping or excessively heavy menses. Tammy enjoys being a member of the volleyball team and is involved in a church youth group. She does not get to spend much time with her friends because she watches her 2 younger siblings in the afternoons while her mother is at work. When her mother is away, she admits to sitting and playing video games or watching TV most of the day. Tammy says she has had a boyfriend, but denies sexual activity. She also denies any experimentation with substance use.

1. What vaccines is Tammy due for at this age if she has not already had them?
2. Based on the information you collected about Tammy, what are some of the areas of recommended health teaching?
3. A dietary assessment demonstrates that Tammy frequently skips meals and eats fast food almost daily. What are some of the suggestions you can give Tammy to improve her nutritional status?
4. What are some of the injury prevention topics you can discuss with Tammy?
**REFERENCES**


National Center for Education in Maternal and Child Health.