

GLOBAL
EDITION



Kozier & Erb's

Fundamentals of Nursing

Concepts, Process, and Practice

ELEVENTH EDITION

Audrey Berman • Shirlee Snyder • Geralyn Frandsen



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*Eleventh Edition
Global Edition*

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Audrey Berman, PhD, RN

Professor, School of Nursing

Samuel Merritt University
Oakland, California

Shirlee J. Snyder, EdD, RN

Retired Dean and Professor, Nursing

Nevada State College
Henderson, Nevada

Geralyn Frandsen, EdD, RN

Professor of Nursing

Maryville University
St. Louis, Missouri





Figure 24.7 ■ Utilize safety equipment such as life jackets when near the water.
famveldman/123RF.

Injuries

Injuries are the leading cause of mortality of toddlers. Toddlers are curious and like to feel and taste everything. The most common causes of fatal injuries are automobile crashes, drowning, burns, poisoning, and falls. Parents or other caregivers need to take the appropriate preventive measures to guard against these health threats (Figure 24.7 ■).

Vision Problems

Early in the toddler years, the child should be screened for amblyopia. **Amblyopia** (a failure to establish normal

neuropathways of vision that leads to reduced visual acuity in one eye) is usually the result of **strabismus** (cross-eye) but can be caused by refractive errors (e.g., myopia) or opacities in the lens. Initially, the child with amblyopia has straight eyes, but the condition can lead to deviation of the “lazy” eye and subsequent loss of vision.

Dental Caries

Dental caries occur frequently during the toddler period, resulting from the interaction between the tooth surface, the *Streptococcus mutans* bacterium, and carbohydrates, especially sugar, in the diet. Prolonged exposure of teeth to carbohydrates (e.g., use of the bottle during naps and at bedtime) can cause caries.

Respiratory Tract and Ear Infections

Respiratory and middle ear infections are common during the toddler years and contribute significantly to visits to the pediatric primary care provider; their incidence increases with exposure to other children (as in daycare centers or preschools), with use of a bottle during naps or at bedtime, or if bottles are propped for feedings.

Health Assessment and Promotion

Growth and development in the toddler and preschool years provide the basis for a child’s future health and well-being. It is essential for nurses to perform accurate and timely assessments to promote health and detect problems early, thus allowing for early interventions. Providing health education, information about growth and development, and anticipatory guidance to parents is also an important nursing role. Assessment activities for the toddler are similar to those for the infant in terms of measuring weight, length (height), and vital signs (see the Developmental Assessment Guidelines).

Promoting health and wellness includes such areas as injury prevention, toilet training, and good dental hygiene. For a summary of health promotion for toddlers, see Box 24.5.



Developmental Assessment Guidelines

The Toddler

In these four developmental areas, does the toddler do the following?

PHYSICAL DEVELOPMENT

- Demonstrate physical growth (weight, height, and head circumference) within normal range.
- Manifest vital signs within normal range for age.
- Exhibit vision and hearing abilities within normal range.

MOTOR DEVELOPMENT

- Perform gross and fine motor milestones within the normal range for age. For example, by 3 years of age, is the toddler able to do the following?
 - Walk up steps without assistance.
 - Balance on one foot, jump, and walk on toes.
 - Copy a circle.
 - Build a bridge from blocks.
 - Ride a tricycle.

PSYCHOSOCIAL DEVELOPMENT

- Perform psychosocial developmental milestones for the child’s age. For example, by 3 years of age, is the toddler able to do the following?
 - Express likes and dislikes.
 - Display curiosity and ask questions.
 - Accept separation from mother or primary caregiver for short periods of time.
 - Begin to play and communicate with children and others outside the immediate family.
 - Understand words such as *up*, *down*, *cold*, and *hungry*.
 - Speak in sentences of three to four words.
 - Imitate religious rituals of the family, if any.

DEVELOPMENT IN ACTIVITIES OF DAILY LIVING

- Feed self.
- Eat and drink a variety of foods.
- Begin to develop bowel and bladder control.
- Exhibit a sleep pattern appropriate for age.
- Dress self.

BOX 24.5 Health Promotion Guidelines for Toddlers**HEALTH EXAMINATIONS**

- At 15 and 18 months and then as recommended by the primary care provider
- Dental visits starting at age 3 or earlier

PROTECTIVE MEASURES

- Immunizations: continuing acellular pertussis (DTaP), inactivated poliovirus vaccine (IPV), pneumococcal, measles-mumps-rubella (MMR), varicella, *Haemophilus influenzae* type B, hepatitis B, hepatitis A, influenza, and meningococcal vaccines as recommended
- Screenings for tuberculosis and lead poisoning
- Fluoride supplements if there is inadequate water fluoridation (less than 0.6 part per million)

TODDLER SAFETY

- Importance of constant supervision and teaching child to obey commands
- Home environment safety measures (e.g., lock medicine cabinet)
- Outdoor safety measures (e.g., close supervision near water and on sidewalks)

- Appropriate toys
- Elimination of toxins in environment (e.g., tobacco, pesticides, herbicides, mercury, lead, arsenic in playground materials)
- Use of smoke and carbon monoxide (CO) detectors in the home

NUTRITION

- Importance of nutritious meals and snacks
- Teaching simple mealtime manners
- Dental care
- Elimination
- Toilet-training techniques

REST AND SLEEP

- Dealing with sleep disturbances

PLAY

- Providing adequate space and a variety of activities
- Encouraging regular, vigorous physical activity
- Toys that allow “acting on” behaviors and provide motor and sensory stimulation

Preschoolers (4 and 5 Years)

During the preschool period, physical growth slows, but control of the body and coordination increase greatly. Preschoolers’ worlds get larger as they meet relatives, friends, and neighbors.

Physical Development

Preschool-age children tend to grow more in height than in weight, so by the time children are 4 or 5 years old, they appear taller and thinner than toddlers. The posture of preschoolers gradually becomes more erect as the pelvis is straightened and the abdominal muscles become stronger. The extremities of the body grow more quickly than the body trunk, making the child’s body appear somewhat out of proportion. The preschooler’s brain almost reaches its adult size by 5 years.

Weight

Weight gain in preschool children is generally slow. By 5 years, they should have added only another 3 to 5 kg (7 to 12 lb) to their 3-year-old weight, increasing it to somewhere between 18 and 20 kg (40 and 45 lb).

Height

Preschool children grow about 5 to 6.25 cm (2.0 to 2.5 in.) each year. By 4 years of age, they have doubled their birth length and measure about 102 cm (41 in.).

Vision

Preschool children are generally **hyperopic** (farsighted), that is, unable to focus on near objects. As the eye grows in length, it becomes **emmetropic** (it refracts light normally). If the eyes become too long, the child becomes **myopic** (nearsighted), that is, unable to focus on objects that are far

away. In severe cases of hyperopia or myopia, glasses may be prescribed. By the end of the preschool years, visual ability has improved; normal vision for the 5-year-old is approximately 20/30. The Snellen E chart can be used to assess the preschooler’s vision.

Hearing and Taste

The hearing of the preschool child has reached optimal levels, and the ability to listen (attend to and comprehend what is said) has matured since the toddler age. As for the sense of taste, preschoolers show their preferences by asking for something “yummy” and may refuse something they consider “yucky.” At about age 3, children may display food “jags,” refusing to eat some foods or only eating a few particular foods. It is important that parents not engage the child in a “battle of wills” over food. If parents provide a variety of healthful foods in an environment that is pleasant and comfortable for eating, the child will eat what is needed.

Motor Abilities

By 5 years of age, children are able to wash their hands and face and brush their teeth (Figure 24.8 ■). They are self-conscious about exposing their bodies and go to the bathroom without telling others. Typically, preschool children run with increasing skill each year. By 5 years of age, they run skillfully and can jump three steps. Preschoolers can balance on their toes and dress themselves without assistance.

Psychosocial Development

For Erikson (1963), the major developmental crisis of the preschooler is initiative versus guilt. Preschoolers must solve problems in accordance with their consciences.



Figure 24.8 ■ Preschoolers brushing their teeth.
blendevo/123RF.

Their personalities continue to develop. Erikson viewed the success of this milestone as determining the individual's self-concept. According to Erikson, preschoolers must learn what they can do. As a result, preschoolers imitate behavior, and their imaginations and creativity become lively.

Parents can enhance the self-concept of the preschooler by providing opportunities for new achievements where the child can learn, repeat, and master. For example, a child obtains a two-wheel bike with safety wheels and quickly learns coordination, balance, use of the brakes, and bicycle safety. Mastery of these tasks provides the child with a sense of accomplishment. The child will soon be ready for the new challenge of mastering the two-wheeler without the safety wheels.

The self-concept of the preschooler is also based on gender identification. Preschoolers are aware of the two sexes and identify with their gender. They often imitate sexual stereotypes and usually begin by identifying with the parent of the same sex. They may mimic the parent's behavior, attitudes, and appearance (Figure 24.9 ■). Parents need to be aware that preschoolers are curious about their own bodies and sexual functions, as well as those of others, and will often ask questions. Parents should answer questions calmly and frankly, using words and concepts the child understands. Children do not have the social, emotional, or moral context that adults do, so a simple answer may be more than adequate. When parents overreact to a child's question, refuse to answer, or punish or shame the child, the child can become confused.

Freud theorized that the preschooler is in the phallic stage of development. The biological focus of the child during this stage is the genital area, and masturbation is common. The phase of close emotional relationships with both parents changes to the phase Freud referred to as the Electra or Oedipus complex. At this time, the child focuses feelings of love chiefly on the parent of the opposite sex, and the parent of the same sex may receive some hostile feelings. The child may express sexual curiosity, but it is without sexual connotations.



Figure 24.9 ■ Preschoolers often identify with the parent of the same sex and like to mimic behavior.
Stewart Cohen/Stockbyte/Getty Images.

During the preschool years, Freud asserted that four adaptive mechanisms are learned: identification, introjection, imagination, and repression. **Identification** occurs when the child perceives the self as similar to another individual and behaves like that individual. For example, a boy may internalize the attitudes and gender behavior of his father. **Introjection** is similar to identification. It is the assimilation of the attributes of others into oneself. When preschoolers observe their parents, they assimilate many of their values and attitudes, thus creating an ego and superego (conscience). **Imagination** is forming a mental image of something not present to the senses or never before experienced and is an important part of preschoolers' lives. Imagination helps children make sense of the world and gives them a sense of control and mastery. The preschooler has an active imagination and fantasizes in play; for example, a chair becomes a beautiful throne to a girl, and she is the ruler of all she sees. **Repression** is the removal of experiences, thoughts, and impulses from awareness. According to Freud, the preschooler generally represses thoughts related to the Oedipus or Electra complex.

Preschool children gradually emerge as social beings. At the age of 3 or 4, they learn to play with a small number of their peers. They gradually learn to play with more peers as they grow older. Preschoolers participate more in the family than they did previously. In associations with neighbors, family guests, and babysitters, too, they learn about social relationships.

In their speech, children of 4 years are often dogmatic; they tend to believe that what they know is right. Four-year-olds love nonsense words such as "jump-jump" and

can string them together, much to an adult's exasperation. At age 4, children are aggressive in their speech and capable of long conversations, often mixing fact and fiction. By 5 years of age, speaking skills are well developed. Children use words purposefully and ask questions to acquire information. They do not merely practice speaking as 3- and 4-year-olds do but speak as a means of social interaction. Exaggeration is common among 4- and 5-year-olds.

Preschoolers become increasingly aware of themselves. They play with their bodies largely out of curiosity. They know where the body begins and ends as well as the correct names for the different parts. By 5 years of age, they are able to draw a person and include all the features. Preschoolers also learn about their feelings; they know the words *cry*, *sad*, and *laugh* and the feelings related to them. They begin to learn how to control their feelings and behavior. The preschooler uses the same types of coping mechanisms in response to stress as the toddler does, although protest behavior (kicking, screaming) is less likely to occur in the older preschooler. Preschoolers usually have greater ability to verbalize stress.

Preschoolers need to feel that they are loved and are an important part of the family. The child who has to compete with siblings for parental attention will often display jealousy. Parents and caregivers should be aware that preschoolers need time to adjust to a new baby and may need additional attention or special activities to help them through this adjustment period. Preschoolers with older siblings may also experience sibling rivalry. Siblings may fight and argue and become aggressive because of their daily proximity or competition for parental attention. Parents who can plan some special time or activity for each child will help that child to feel loved and may decrease the sibling rivalry.

Guidance and discipline are important parts of the parental role during the preschool years. As children seek independence from adults, they often test limits by refusing to cooperate and by repeatedly ignoring parental requests. Parents can help their children develop a sense of self-control and cooperative engagement in the family by setting reasonable expectations and consistent limits, reinforcing children's positive behaviors, and encouraging children to be responsible for their own behavior as much as possible. When conflict does occur, parents can employ mutual discussion and compromise.

Cognitive Development

The preschooler's cognitive development, according to Piaget, is the phase of intuitive thought. Children are still egocentric, but egocentrism gradually subsides as they experience their expanding world. Preschoolers learn through trial and error, observation, imitation, and practice in play and make-believe. They think of only one idea at a time. They do not fully understand relationships, such as those between mother and father or sister and brother. Preschoolers become concerned about death as something inevitable, but they do not explain it. They also associate death with others rather than themselves.

Reading and mathematical skills (e.g., recognizing and naming letters and numbers, counting, and "reading" age-appropriate books) begin to develop at this age. Young children like fairy tales and books about animals and other children, and they should be read to often.

Moral Development

Preschoolers are capable of prosocial behavior, that is, any action that an individual takes to benefit someone else. The term *prosocial* is synonymous with *kind* and connotes sharing, helping, protecting, giving aid, befriending, showing affection, and giving encouragement.

At this stage of development, preschoolers do not have a fully formed conscience; however, they do develop some internal controls. Moral behavior is largely learned by modeling, initially of parents and later significant others. The preschooler usually behaves well in social settings.

Children who perceive their parents as strict may become resentful or overly obedient. Preschoolers usually control their behavior because they want love and approval from their parents. Moral behavior to a preschooler may mean taking turns at play or sharing. Nurses can assist parents by discussing moral development and encouraging parents to give preschoolers recognition for actions such as sharing. It is also important for parents to answer preschoolers' "why" questions and discuss values with them.

Spiritual Development

Many preschoolers enroll in Sunday school or faith-oriented classes. The preschooler usually enjoys the social interaction of these classes. According to Fowler, children from the ages of 4 to 6 years are at the intuitive-projective stage of spiritual development. Faith at this stage is primarily a result of the teaching of significant others, such as parents and teachers. Children learn to imitate religious behavior, for example, bowing the head in prayer, although they don't understand the meaning of the behavior. Preschoolers require simple explanations, such as those in picture books, of spiritual matters. Children at this age use their imaginations to envision such ideas as angels or the devil.

Health Risks

Preschoolers often have health problems similar to those they had in the toddler years. Respiratory tract problems and communicable diseases frequently occur as the preschooler interacts with other children at nursery schools and daycare. Injuries and dental caries continue to be problems. Congenital abnormalities such as cardiac disorders and hernias are often corrected at this age.

Health Assessment and Promotion

During assessment, the preschooler can often participate in answering questions with assistance from parents or caregivers. For instance, children who attend preschool



Developmental Assessment Guidelines

In these four developmental areas, does the preschooler do the following?

PHYSICAL DEVELOPMENT

- Demonstrate physical growth (weight, height) within normal range.
- Manifest vital signs within normal range for age.
- Exhibit vision and hearing abilities within normal range.

MOTOR DEVELOPMENT

- Perform gross and fine motor milestones within the normal range for age. For example, by 5 years of age, is the preschooler able to do the following?
 - Jump rope and skip.
 - Climb playground equipment.
 - Ride a bicycle with training wheels.
 - Print letters and numbers.

PSYCHOSOCIAL DEVELOPMENT

- Perform psychosocial developmental milestones for age. For example, by 5 years of age, is the preschooler able to do the following?

The Preschooler

- Separate easily from parents.
- Display imagination and creativity.
- Enjoy playing with peers in cooperative activities.
- Understand right from wrong and respond to others' expectations of behavior.
- Identify four colors.
- Exhibit increasing vocabulary using complete sentences and all parts of speech.
- Cooperate in doing simple chores (e.g., putting away toys).
- Demonstrate awareness of sexual differences.

DEVELOPMENT IN ACTIVITIES OF DAILY LIVING

- Demonstrate development of toilet training.
- Perform simple hygiene measures.
- Dress and undress self.
- Engage in bedtime rituals and demonstrate ability to put self to sleep.

can describe the typical lunch and how much of it they usually eat. Preschoolers can also describe the types of activities they enjoy. Guidelines for the preschooler are shown in the Developmental Assessment Guidelines.

Promoting health and wellness includes such areas as injury prevention, dental health, good nutrition, cognitive stimulation, and sufficient sleep. For a summary of health promotion, see Box 24.6.

School-Age Children (6 to 12 Years)

The school-age period starts when children are about 6 years of age and ends at about 12 years, with the onset of puberty. Because the average age of onset of puberty is 10 for girls and 12 for boys, some individuals define the school-age years as 6 to 10 for girls and 6 to 12 for boys. Skills learned during this stage are particularly important in relation to work later in life and willingness to try new tasks. In general, the period from 6 to 12 years is one of significant growth.

Physical Development

The school-age child gains weight rapidly and thus appears less thin than previously. Individual differences due to both genetic and environmental factors are obvious at this time.

Weight

At 6 years, boys tend to weigh about 21 kg (46 lb), about 1 kg (2 lb) more than girls. The weight gain of schoolchildren from 6 to 12 years of age averages about 3.2 kg (7 lb)

BOX 24.6

Health Promotion Guidelines for Preschoolers

HEALTH EXAMINATIONS

- Every 1 to 2 years

PROTECTIVE MEASURES

- Immunizations: continuing acellular pertussis (DTaP), inactivated poliovirus vaccine (IPV), measles-mumps-rubella (MMR), hepatitis A and B, pneumococcal, influenza, varicella, and other immunizations as recommended
- Screenings for tuberculosis
- Vision and hearing screening
- Regular dental screenings and fluoride treatment if necessary

PRESCHOOLER SAFETY

- Educating child about simple safety rules (e.g., crossing the street)
- Teaching child to play safely (e.g., bicycle and playground safety)
- Educating to prevent poisoning; exposure to toxic materials

NUTRITION

- Importance of nutritious meals and snacks

ELIMINATION

- Teaching proper hygiene (e.g., washing hands after using bathroom)

REST AND SLEEP

- Dealing with sleep disturbances (e.g., night terrors, sleepwalking)

PLAY

- Encouraging regular, vigorous physical activity
- Providing times for group play activities
- Teaching child simple games that require cooperation and interaction
- Providing toys and dress-up clothing for role playing

per year, but the major weight gains occur from age 10 to 12 for boys and from 9 to 12 for girls. By 12 years of age, boys and girls weigh an average of 40 to 42 kg (88 to 95 lb); girls are usually heavier. Overweight and obesity are unlikely at this age if the child has demonstrated a pattern of good nutrition and regular, vigorous exercise in the infant, toddler, and preschool years.

Height

At 6 years, both boys and girls are about the same height, 115 cm (46 in.). They are about 150 cm (60 in.) by 12 years. Before puberty, children of both sexes have a growth spurt, girls between 10 and 12 years and boys between 12 and 14 years. Thus, girls may be taller than boys at 12 years.

The extremities tend to grow more quickly than the trunk; thus, school-age children's bodies appear somewhat ill-proportioned. By 6 years of age, the thoracic curvature starts to develop, and the lordosis disappears. Full adult posture is not assumed, however, until after the complete development of the skeletal musculature during adolescence.

Vision

The depth and distance perception of children 6 to 8 years of age is accurate. By age 6, children have full binocular vision. The eye muscles are well developed and coordinated, and both eyes can focus on one object at the same time. Because the shape of the eye changes during growth, the farsightedness of the preschool years gradually changes to 20/20 vision during the school-age years; 20/20 vision is usually well established between 9 and 11 years of age.

Hearing and Touch

Auditory perception is fully developed in school-age children, who are able to identify fine differences in voices, both in sound and in pitch. At this stage, children also have a well-developed sense of touch and are able to locate points of heat and cold on all body surfaces. They are able to identify an unseen object, such as a pencil or a book, simply by touch. This ability is called **stereognosis**.

Prepubertal Changes

Little change takes place in the reproductive and endocrine systems until the prepuberty period. During prepuberty, at about ages 9 to 13, endocrine functions slowly increase. This change in endocrine function can result in increased perspiration and more active sebaceous glands. Girls may have a sticky vaginal discharge (leukorrhea) prior to puberty.

Motor Abilities

During the middle years (ages 6 to 10), children perfect their muscular skills and coordination. By 9 years, many children are becoming skilled in games of interest, such as football, soccer, or baseball. These skills are often associated with school, and many of them are learned there. By 9 years, most children have sufficient fine motor control for such activities as drawing, building models, or playing musical instruments.

Psychosocial Development

According to Erikson, the central task of school-age children is industry versus inferiority. At this time, children begin to create and develop a sense of competence and perseverance. School-age children are motivated by activities that provide a sense of worth. They concentrate on mastering skills that will help them function in the adult world. Although children of this age work hard to succeed, they are always faced with the possibility of failure, which can lead to a sense of inferiority. If children have been successful in previous stages, they are motivated to be industrious and to cooperate with others toward a common goal.

Freud described the period from 6 through 12 years of age as the latency stage. During this time, the focus is on physical and intellectual activities, whereas sexual tendencies seem to be repressed. Curiosity about sexual matters is present, however, and children are aware of the messages related to sex in popular media, films, and on the Internet; parents need to set limits, answer questions, and provide guidance to help their children understand and cope with information and feelings.

In school, children have the restraints of the school system imposed on their behavior, and they learn to develop internal controls. Children tend to compare their skills with those of their peers in a number of areas, including motor development, social development, and language. This comparison assists in the development of self-concept.

As school-age children grow older, they learn to play in groups. The typical 6- and 7-year-old is a member of a peer group that is usually informal and transitory, with the leadership changing from time to time. During this period of socialization with others, children gradually become less self-centered and more cooperative within a group. Peers can have a greater influence than the family. During middle to late childhood, children may join a more formalized group of peers, which is often structured around common interests. These groups may consist of children of the same gender later in the school-age period.

Self-concept continues to mature during this period. Children recognize similarities and differences between themselves and others. School-age children compare themselves with others. Children who are successful and receive recognition for their efforts feel competent and in control of themselves and of their environment. Conversely, children who feel unaccepted by peers or constantly receive negative feedback and little recognition may experience feelings of inferiority and worthlessness. A major negative impact on psychosocial development is that of bullying. Bullying has become very common in all age groups, but it most commonly begins in the school years. Bullying is a complex social trend that needs to be addressed with strong school policies, parental awareness, and monitoring to combat the problem (Ali, Virani, & Alaman, 2017).