females may need counseling concerning the use of oral contraceptives and other contraceptive options (Hazle, 2010).

Adolescents with CF are encouraged to take personal ownership and management of the illness to maximize their life's potential. Many adolescents and young persons with the illness enroll in college or vocational and technical training school and complete degrees either by distance learning or by attending a local school. Young people should set life goals and live normal lives to the extent their illness allows.

Anticipatory grieving and other aspects related to care of a child with a terminal illness are also part of nursing care. For example, it is important to prepare the child and family members for end-of-life decisions and care when appropriate. Families may need information about specific interventions such as hospice (see Chapter 17).

## **Obstructive Sleep-Disordered Breathing**

Pediatric obstructive sleep-disordered breathing reportedly affects approximately 600,000 children 5 to 19 years old in the United States (Weiss and Owens, 2014). Obstructive sleep-disordered breathing is an abnormal respiratory pattern or abnormal deoxygenation associated with hypoventilation that results in repetitive partial or complete airway obstruction of the upper airway during sleep. The most severe form of this condition is **obstructive sleep apnea syndrome (OSAS)**. Common symptoms include nightly snoring, labored breathing during sleep, interrupted or disturbed sleep patterns, sleep enuresis, and daytime neurobehavioral problems (Marcus, Brooks, Draper, et al, 2012). OSAS is to be distinguished from primary snoring, which is snoring without obstructive apnea, frequent sleep arousals, or abnormalities in gas exchange. Children with OSAS usually do not exhibit daytime sleepiness as do adults, with the possible exception of obese children. If left untreated, obstructive sleep-disordered breathing may result in complications such as growth failure, cor pulmonale, hypertension, poor learning, behavioral problems, attention-deficit/hyperactivity disorder, and death.

The diagnosis of obstructive sleep-disordered breathing is made by a sleep study (polysomnography), which provides evidence of