

pulmonary hygiene, chest physical therapy, administration of antibiotics, and use of oxygen to improve arterial saturations are important interventions.

## **Nursing Care Management**

The general appearance of infants and children with significant cyanosis poses unique concerns. Blue lips and fingernails are obvious signs of their hidden cardiac defect. Clubbing and small, thin stature in older children further indicate severe heart disease. Adolescents are especially concerned about their body image; children with cyanosis are often teased about their appearance and singled out as different. Many children, when asked what surgery will do, reply, "Make me pink." Their joy and excitement after surgery are evident when they see their pink fingers. Parents are often fearful of their child's bluish color because cyanosis is usually associated with lack of oxygen and severe illness. They also must deal with comments from relatives, friends, and strangers about their child's abnormal color. They need a simple explanation of hypoxemia and cyanosis and reassurance that cyanosis does not imply a lack of oxygen to the brain. Their questions and fears need to be addressed in a calm, supportive manner, and positive aspects of their child's growth and development are emphasized. They are taught the treatment for hypercyanotic spells (see [Nursing Care Guidelines](#) box).

Dehydration must be prevented in children with hypoxemia because it potentiates the risk of CVAs. Fluid status is carefully monitored, with accurate intake and output and daily weight measurements. Maintenance fluid therapy is the minimum requirement, supplemental fluids should be readily available, and gavage feeding or IV hydration is given to children unable to take adequate oral fluids. Fever, vomiting, and diarrhea can cause dehydration and require prompt treatment. Parents are instructed in the importance of adequate fluid intake and measures to prevent dehydration. An oral electrolyte solution should be available at home in the event that the infant is unable to tolerate the usual formula. The practitioner should be notified of fever, vomiting, diarrhea, or other problems.

Preventive measures and accurate assessment of respiratory infection are important nursing considerations. Any compromise in