undifferentiated functions progress to an immensely complex organism composed of highly specialized and diversified cells, tissues, and organs. Generalized development precedes specific or specialized development; gross, random muscle movements take place before fine muscle control.

## **Sequential Trends**

In all dimensions of growth and development, there is a definite, predictable sequence, with each child passing through every stage. For example, children crawl before they creep, creep before they stand, and stand before they walk. Later facets of the personality are built on the early foundation of trust. The child babbles, then forms words, and finally sentences; writing emerges from scribbling.

## **Developmental Pace**

Although development has a fixed, precise order, it does not progress at the same rate or pace. There are periods of accelerated growth and periods of decelerated growth in both total body growth and the growth of subsystems. Not all areas of development progress at the same pace. When a spurt occurs in one area (such as, gross motor), minimal advances may take place in language, fine motor, or social skills. After the gross motor skill has been achieved, the focus will shift to another area of development. The rapid growth before and after birth gradually levels off throughout early childhood. Growth is relatively slow during middle childhood, markedly increases at the beginning of adolescence, and levels off in early adulthood. Each child grows at his or her own pace. Distinct differences are observed among children as they reach developmental milestones.

## Nursing Tip

Research suggests that normal growth, particularly height in infants, may occur in brief (possibly even 24-hour) bursts that punctuate long periods in which no measurable growth takes place. The researchers noted sex differences, with girls growing in length during the week they gained weight and boys growing in the week after a significant weight gain. Sex-specific growth