Sleep is a vital function and virtually occupies one-third of our lives, and even more so during the formative years of our childhood. Such uniquely enhanced and developmentally-regulated need for sleep reflects the critically important role that health sleep represents in child wellness, and in optimal somatic and intellectual development. As such, it is important for anyone involved in the medical management of children to better understand the multifaceted aspects of healthy sleep, such as to promote this important behavior in a quest to foster the best possible outcome for the children under our care. Furthermore, we need to become familiar and competent in identifying sleep issues in general, and more particularly when sleep disorders may be present in children. Unfortunately, most medical schools curricula either have no instructional material communicated and taught to their students during their training or include a skeletal and clearly insufficient sleep content that precludes any practitioner from feeling confident in the detection and management of sleep disorders. Furthermore, such issues persist during postgraduate training in most places. One could assume that if sleep disorders were rare, then such state of affairs would be acceptable. However, sleep disorders affect a very large proportion of children in the community, and every pediatrician will encounter patients with a sleep disorder in the clinic everyday, particularly if they become empowered to ask parents and caretakers about the sleep of their children, and make efforts to recognize the cardinal symptoms and consequences of sleep disorder conditions. In this special issue of the journal, we will begin our quest to bring some important facets of pediatric sleep medicine to the readership of the journal. The topics selected in no way reflect the full spectrum of conditions affecting the sleep of children, but rather attempt to provide comprehensive yet succinct information on some of such sleep diseases. After reading this special issue, the initial evaluation of children and the requirements for the setup of a child centric sleep laboratory will hopefully become more accessible for those who are interested in going the extra mile and develop pediatric sleep programs. In addition, a thorough description and approaches to management of childhood insomnia should be an helpful guide to clinicians, since insomnia affects 15% of all children at any given time of their childhood. Apnea of prematurity is obviously a frequent issue in premature babies that is seldom resolved by the time they are discharged to home and will also be reviewed to illustrate some of the precautions and practical aspects of assuring a safe and homeostatically driven environment for these fragile babies. Kicking during sleep may not be just an item to laugh about, but may in fact underlie an important and quite prevalent disease of sleep, namely, periodic leg movement disorder of sleep that can carry substantial cognitive, behavioral, and cardiovascular consequences. A better understanding of upper airway collapsibility as an introduction to the epidemic of obstructive sleep apnea around the world cap the topics selected for this special issue of the journal, and hopefully have illustrated major advances that have occurred in our understanding of pediatric sleep disorders. We hope that you will enjoy reading these articles, and use them in your clinical practice.