



## METADATA

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### Abstract

The textbook presents the clinical assessment, diagnosis and treatment of the severely ill or seriously injured child and adolescent in the light of current guidelines (best practice). The most prevalent problems of Emergency Pediatrics and Intensive Care of children hospitalized in an Intensive Care Unit (ICU) are analyzed in a simple and comprehensive manner. The textbook constitutes a bridge between the extensive scientific literature and the modern needs of doctors and nurses in problems that require immediate and logarithmic structural approach. The present textbook aspires to inform and equip the undergraduate and the postgraduate student, the doctor and the nurse, with the knowledge of initial assessment, resuscitation, reassessment and emergency treatment of children with critical illness or severe trauma. The cases presented are taken from the emergency department, the Intensive Care Unit (ICU), health centers, wards and operative rooms. The individual

chapters include the assessment of the pediatric patient and the algorithmic diagnostic and therapeutic approach, which follow the paths of appropriate information systems of the "expert system" type equipped with knowledge of decision reaching techniques (decision trees, machine learning) in Electronic Health Record (EHR) type applications. Indicatively, issues related to the recognition, resuscitation, emergency treatment of life-threatening conditions, the evaluation and treatment of organic deficiencies due to disease or trauma, acid-base balance disorders, mechanical support of breathing, dialysis, systematic monitoring of vital functions and more are analyzed. More specific issues related to human factors, communication in the ICU, and bioethics, are also presented. The textbook is a distillation of long experience of the authors in basic and specialized life support in combination with the implementation of best practices based on current guidelines.

