

Special Issue

Pediatric and Neonatal Critical Care: Management, Monitoring and Treatment

Message from the Guest Editors

Pediatric and neonatal critical care medicine is dedicated to the complex and detailed management of critically ill neonates, infants, children, and adolescents suffering from high-risk conditions such as organ immaturity and prematurity, single- or multiorgan failure, sepsis, congenital anomalies leading to susceptibility to complex illnesses, post-operative care, and trauma. Synchronous management prioritizes early stabilization and customizes developmentally tailored, size-adjusted interventions that factor in unique physiological and pathological variability across ages. Health care technologies are maximally utilized, which enables intricate insight into real-time patient status, allowing rapid and precise adjustments in care. Treatment modalities are extensive with options such as extracorporeal membrane oxygenation (ECMO), continuous renal replacement therapy (CRRT), and pharmacogenomic-guided management, enabling individualized and nuanced therapies. Multidisciplinary collaboration and evidence-based guidelines are essential for advancing outcomes, optimizing quality of care, and adjusting health care utilization in this highly specialized field.

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Message from the Editor-in-Chief

You are invited to contribute a research article or comprehensive review for consideration and publication in *Children* (ISSN 2227-9067). *Children* is an open access journal—research articles, reviews, and other content are published online immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. The journal focuses on sharing clinical, epidemiological, and translational science relevant to children's health. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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