



TURKISH SOCIETY OF
PEDIATRIC EMERGENCY AND
INTENSIVE CARE MEDICINE

Journal of Pediatric Emergency and Intensive Care Medicine

Çocuk Acil ve Yoğun Bakım Dergisi

EDITORIAL / EDITORIAL

The opening issue of volume 13 arrives at a moment of remarkable momentum in our discipline. Within the span of a single week in March 2026, the Surviving Sepsis Campaign (SSC) released its second-ever pediatric-specific guidelines^{1,2} the Society of Critical Care Medicine (SCCM) published the first evidence-based framework for end-of-life care in pediatric and neonatal intensive care units,³ and the updated Pediatric Readiness in the Emergency Department joint policy statement-released in January 2026-began reshaping how emergency departments across the world prepare for critically ill children.⁴ Rarely have so many foundational documents converged in such a brief period, each carrying direct implications for the clinicians and researchers who form the readership of this journal.

The 2026 SSC Pediatric Guidelines, published simultaneously in Pediatric Critical Care Medicine and Intensive Care Medicine on March 23, 2026, represent a substantial expansion from their 2020 predecessor.^{1,2,5} The updated document now contains 61 statements-of which 20 address entirely new questions-covering recognition and management of infection, hemodynamics and resuscitation, ventilation, adjunctive therapies, and, for the first time, long-term follow-up of children who survive sepsis.¹ Among the most practice-changing recommendations are the conditional suggestion to use point-of-care cardiac and lung ultrasound (POCUS) to guide resuscitation when local training and resources allow; the recommendation against routine use of procalcitonin to guide antimicrobial de-escalation when effective stewardship programs are in place; the suggestion to target conservative oxygen saturation (SpO₂ 88-92%) rather than liberal targets (>94%) following initial resuscitation in intubated children with sepsis; and the recommendation for routine infectious diseases consultation in children with sepsis and documented bloodstream infections.^{1,2} These guidelines also formally acknowledge the 2024 Phoenix Sepsis Criteria alongside traditional definitions, reflecting the evolving landscape of pediatric sepsis identification.⁶ Importantly, the panel introduced a new category of "in our practice" statements for areas where evidence remains insufficient but clinical guidance is needed-a pragmatic approach that resonates with the daily realities of our emergency departments and intensive care units, particularly in resource-variable settings.²

One week earlier, the SCCM published its 2026 Guidelines on the Care and Management of Pediatric and Neonatal Intensive Care Patients at the End of Life-the first-ever GRADE-based guideline specifically addressing end-of-life care in pediatric critical care.³ Developed by a 21-member multidisciplinary panel including intensivists, nurses, palliative care specialists, bioethicists, and bereaved parents, this document provides five conditional recommendations and one good practice statement encompassing advance care planning, palliative care consultation, systematic symptom management, bereavement support, and health equity in end-of-life care.³ For those of us who daily witness the intersection of maximal therapeutic effort and the limits of medicine, this guideline offers not only clinical direction but also ethical grounding for conversations that remain among the most difficult in our practice.

The third landmark development-the 2026 Joint Policy Statement on Pediatric Readiness in the emergency department-was released in January 2026 by the American Academy of Pediatrics, the American College of Emergency Physicians, and the Emergency Nurses Association, with endorsement from multiple national organizations.⁴ Building on robust evidence that high levels of pediatric readiness are associated with a 76% reduction in mortality risk for critically ill children and a 60% reduction for injured children, the updated statement now extends its scope to freestanding emergency departments, emphasizes universal suicide screening in adolescents, calls for multidisciplinary review of all pediatric deaths and adverse events, and places greater emphasis on pediatric mental health preparedness.⁴ The 2026 National Pediatric Readiness Project Assessment, which opened on March 3, 2026, provides a structured framework for emergency departments worldwide to evaluate and improve their capacity to care for children-a mission that lies at the very heart of our journal's identity.

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It is against this backdrop of global guideline transformation that we present the current issue.

The six original research articles and four case reports in this issue collectively illustrate the breadth of challenges encountered in pediatric emergency and critical care settings across multiple countries. Gürsoy Durak et al.⁷ present a prospective comparison of high-flow nasal cannula (HFNC) therapy versus salbutamol with standard oxygen in infants with bronchiolitis, demonstrating earlier clinical improvement with HFNC as measured by serial respiratory clinical scoring—a finding that aligns with the growing body of evidence supporting HFNC as a first-line respiratory support modality in selected populations. Their observation of reduced emergency department re-admission rates with HFNC, despite longer initial hospitalization, raises important questions about how we define treatment success and whether short-term metrics adequately capture patient-centered outcomes.

Bilen et al.⁸ offer an elegant contribution to the diagnostic approach of foreign body aspiration by demonstrating that quantitative radiodensity measurement on standard chest radiography nearly doubles the detection rate of aspiration-related hyperinflation—from 42.9% to 80.7%. In an era of advanced imaging, this study reminds us that substantial diagnostic gains can be achieved through more rigorous analysis of readily available tools, an approach particularly relevant for resource-limited settings.

Yavuz et al.⁹ provide a sobering 23-year analysis of cardiovascular surgical outcomes in Down syndrome patients, identifying postoperative systemic inflammatory response syndrome and high RACHS-1 surgical risk category as the strongest predictors of mortality. Their finding that comorbidity was paradoxically associated with lower mortality—likely because the underlying cardiac defect, rather than associated conditions, drove outcomes—underscores the complexity of risk stratification in this vulnerable population.

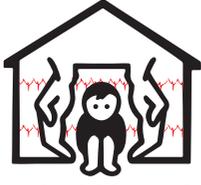
The study by Söngüt et al.¹⁰ demonstrates that even a brief 15-minute structured first-aid training session can significantly improve parental knowledge of pediatric head trauma management, with a strong effect size. This work speaks directly to the community-based preventive strategies that the updated Pediatric Readiness statement emphasizes.⁴ Gupta et al.¹¹ from North India document a shifting epidemiological pattern in childhood poisoning, with corrosive household cleaners now surpassing kerosene as the leading agent—a change that demands updated prevention strategies and public health messaging.

Aycan et al.¹² present a comprehensive single-center analysis of pediatric acute liver failure, demonstrating that toxic and drug-induced etiologies—predominantly mushroom poisoning and medication overdose—constitute the most common cause and follow a milder clinical course than other etiologies. Their 81% overall survival rate, achieved through early intensive care and timely liver transplantation, reflects the advances in multidisciplinary management that have transformed outcomes in this historically devastating condition.

The case reports in this issue carry their own urgent messages. Bayramov et al.¹³ describe severe myocardial injury in an adolescent following consumption of multiple energy drinks—a scenario increasingly encountered in pediatric emergency departments worldwide and one that demands regulatory attention and public awareness. Aydın and Battal¹⁴ present two adolescent cases illustrating the life-threatening consequences of social media “challenges”—one surviving severe hyponatremia, the other succumbing to aspiration during an eating contest—reminding us that the digital environment has become a significant source of pediatric morbidity and mortality.

The bibliometric analysis by Martuti et al.¹⁵ provides a valuable cartography of non-invasive ventilation research in children, revealing the expansion of this field from neonatal oxygenation toward broader clinical outcomes including extubation failure, weaning protocols, and mortality metrics. Their identification of Southeast Asia as an underrepresented region presents a clear opportunity for collaborative research that this journal is well-positioned to facilitate.

As we look forward, the convergence of the new SSC Pediatric Guidelines,¹ the SCCM End-of-Life Guidelines,³ and the Pediatric Readiness statement⁴ creates both a challenge and an opportunity. The challenge lies in translating these evidence-based



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recommendations into practice across diverse healthcare settings-from tertiary academic centers to rural emergency departments, from high-income to low- and middle-income countries. The opportunity lies in the research questions these guidelines generate: how should we implement POCUS-guided resuscitation in settings with limited training infrastructure? What are the optimal conservative oxygenation targets across different pediatric age groups and disease states? How do we integrate mental health screening into already burdened emergency department workflows? And how do we ensure that end-of-life care guidelines are culturally adaptable across the diverse communities we serve?

This journal remains committed to publishing rigorous, clinically relevant research that addresses these questions and advances the care of critically ill and injured children worldwide. I invite our readers-clinicians, researchers, and trainees alike-to engage with the work presented in this issue, to challenge its findings, and to build upon them in their own practice and scholarship.

Prof. Hayri Levent Yılmaz, MD.

Editor-in-Chief

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