

## Management of the Acutely Unwell Child



Nearly one-quarter of the world's population are children aged 0–14 years, with this proportion rising to almost 50% in some countries. Children account for nearly one-fifth of all emergency department visits in the USA and U.K., with an increasing trend of emergency admissions requiring intensive care. Data from emergency departments in England and the U.S. report that approximately 20% of individuals are aged 14 y and under. This may be due to the improved survival of very premature infants, increasing levels of socio-economic deprivation and increasing numbers of children with chronic and life-limiting illnesses.

Lower respiratory infections, diarrhoea and injury, are some of the most common causes of death in children aged >12 months in the U.K. and the U.S. Paediatric critical care transfer data from the U.K. and Ireland reports that over half of the severely ill transported children were infants, with the majority aged < 5 y. The leading causes for transfer were respiratory, neurological, and cardiovascular. The most common diagnoses were bronchiolitis, seizures, asthma and croup.

Anaesthetists play a critical role in managing paediatric emergencies and can contribute to stabilisation, emergency anaesthesia, transfers and non-technical skills. It is important to understand that paediatric patients have diverse physiology and present with various congenital and acquired pathologies that differ from the adult population. With the increasing centralisation of paediatric services, staff outside these centres have less exposure to caring for children. However, they are often the first responders in managing these situations. It can be challenging to stay abreast of the latest evidence for managing complex low-frequency emergencies.

The delivery of high-quality essential and basic care is essential for paediatric patients. This will require an in-depth understanding of pathologies encountered in the emergency setting. In addition, the recognition of potentially life-threatening conditions and identification of patients who require transfer for subspecialist care is also very important. The ABCDE approach is adopted by many international guidelines for assessing and managing an acutely unwell child. Comprehensive descriptions are covered by advanced life support groups such as the Resuscitation Council U.K. and European Resuscitation Council.

Family-centred care should be at the forefront of paediatric practice. International guidelines support the presence of carers at the resuscitation of their child if they wish. Studies do not report any increase

in adverse events such as multiple attempts, oxygen desaturations or increased team stress levels when families were present. It is thus important to facilitate the presence of carers with a child, even if the child is critically unwell. This is particularly true during inter-hospital transfers, as many children feel it is important parents accompany them.

Managing an acutely unwell child can be complex due to the breadth of knowledge required and the wide-ranging presenting pathology. Some key skills that are required when dealing with an acutely ill child include the recognition of such a patient, initiating immediate treatment, understanding safeguarding issues, and ensuring effective communication with the patient, their families, caregivers and colleagues.

Source: Anaesthesia
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