Dear Sir,

That medication dosing and administration errors occur relatively frequently during paediatric resuscitation even when led by highly trained and/or senior clinicians in tertiary paediatric emergency medicine centres¹ is concerning. Although I was unable to find published evidence for this, I suspect that clinicians in mixed (adult and paediatric) Emergency Departments are likely to fare worse in such a study due to fewer occurrences of, and therefore less familiarity with, paediatric resuscitation.

This is an important issue as not all children who require resuscitation have access to paediatric emergency medicine and critical care services at tertiary level such as that was studied, ¹ at least during the initial stabilisation phase. The level of care in mixed Emergency Departments is likely to improve with increased uptake by health care workers looking after children of paediatric life support courses, although skills and knowledge maintenance may degrade over time.²

Pre-hospital emergency practitioners³ and junior medical staff ⁴ may not be as well trained as medical and nursing staff at tertiary paediatric emergency centres in the initial management of critically unwell children, and therefore be more prone to making errors (including that of clinical judgement rather than just drug dosing or administration) during paediatric resuscitation. This has implications for the resuscitative care of children in isolated communities facing prolonged transport times to hospitals and smaller communities who have access to only junior doctors. The feasibility of regular paediatric mock code practice may be less practicable and effective in these settings than having staff members attend Advanced Paediatric Life Support courses, ⁵ including refresher courses.

References:

- Kozer E, Seto W, Verjee Z, et al. Prospective observational study on the incidence of medication errors during simulated resuscitation in a paediatric emergency department. BMJ 2004; 329:1321-5.
- 2. Durojaiye L, O'Meara M. Improvement in resuscitation knowledge after a one-day paediatric life support course. *J Paediatr Child Health* 2002; 38: 241-5.
- 3. Gaffney P, Johnson G. Paediatric prehospital care: postal survey of paramedic training managers. *Arch Dis Child* 2001; 84: 82-3.
- 4. Tuthill DP, Hewson M, Wilson R. Paediatric resuscitation-by phone. *J Paediatr Child Health* 1998; 34: 524-7.
- 5. Phillips BM, Mackway-Jones K, Jewkes F. The European Resuscitation Council's paediatric life support course 'Advanced Paediatric Life Support'. *Resuscitation* 2000; 47: 329-34