Avoiding Errors in Paediatrics

Joseph E. Raine, Kate Williams & Jonathan Bonser

CLINICAL CASES

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Avoiding Errors in

Paediatrics

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and Anne

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Avoiding Errors in Paediatrics

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Foreword

Sometimes we may learn more from a man's errors, than from his virtues.
—Henry Wadsworth Longfellow

Paediatrics is an exciting, rewarding and diverse speciality. Doctors who opt for a career in paediatrics know that the high intensity, challenging aspects of the work are balanced in equal measure by the satisfaction of supporting children and families through both acute and long-term illness. However, every practising clinician lives with the uncomfortable truth that the practice of medicine is an error-prone business; and if the stakes are high in all specialities, they are even more so in the care of children.

It goes without saying that no doctor or nurse leaves home in the morning with the intention of harming a child. Indeed, we can only function in the workplace by putting to the furthest recesses of our mind the notion that our actions, in the worst-case scenario, could result in a child's death. Nonetheless, the guilt and self-recrimination that follow even the most trivial of errors are emotions that every clinician would wish to avoid. And that is the great appeal of this book. It is not an academic treatise on the extensive literature about error, human factors, system failure and organizational accidents. Because the busiest, most hard-pressed paediatrician – arguably at greatest risk of making an error – is the one least likely to read such a book. Rather this is an accessible and engaging book, written in a way that will draw its readers in through the appeal of case studies.

For those who do want a helicopter overview of the key causes of errors and the legal context, that is provided in a short punchy style in the first section of the book. The systematic reader will start there first, whilst those who take more of a 'bumble-bee' approach to flitting around books will fly straight to the cases studies. These cannot be read passively! They are devised so as to challenge as well as inform, forcing the reader to really think through what they would have done in the circumstances, before presenting the expert opinion and legal comment, and rounding up with key learning points. Each one can be read in a few minutes at a bus stop or in a lull between patients in a clinic – and any one could make the difference between a clinician making or averting the same mistake. The final section wraps up with a practical account of investigation and management of errors and their fallout.

Every serious paediatric error is a tragedy for the child and family involved. Perhaps the greatest tragedy of all, as set out at the beginning of this book, is that errors fall into recurrent themes that are repeated by successive generations of doctors. Families of children who have suffered from a medical error

frequently say that they don't want the same thing to ever happen to another child. This book is the most effective way to widely share learning from the case studies, and in doing so to give something back – albeit anonymously – to the children and families involved. If each case described stops even one similar recurrence it will be a worthwhile outcome.

Hilary Cass
President, Royal College of Paediatrics and Child Health

Abbreviations

ACRM	Anaesthesia Crisis Resource Management
ALL	acute lymphoblastic leukaemia
ALP	alkaline phosphatase
ALSG	Advanced Life Support Group
ALT	alanine transaminase
APLS	Advanced Paediatric Life Support
ARDS	Adult Respiratory Distress Syndrome
AXR	abdominal X-ray
BP	blood pressure
CDOP	The Child Death Overview Panel
CP	child protection
CPAP	continuous positive airways pressure
CPD	continuous professional development
CPS	Crown Prosecution Service
CRP	c reactive protein
CRT	capillary refill time
CSC	Children's Social Care
CSF	cerebrospinal fluid
CT	computerised tomography scan
CXR	chest X-ray
DAT	direct agglutination test
DGH	district general hospital
DKA	diabetic ketoacidosis
ECG	electrocardiogram
ED	emergency department
EEG	electroencephalogram
ESBL	extended spectrum beta-lactamase
ESR	erythrocyte sedimentation rate
FBC	full blood count
FY1 and 2	foundation year 1 and 2 doctors (most junior doctor training grades)
GBS	Group B streptococcal
GCS	Glasgow Coma Score
GMC	General Medical Council
GP	general practitioner
Hb	haemoglobin
HDU	high dependency unit
HIV	human immunodeficiency virus
HQIP	Healthcare Quality Improvement Partnership
HV	heath visitor
IPPV	intermittent positive pressure ventilation
IT	intrathecal
IV	intravenous
LFTs	liver function tests
LP	lumbar puncture
LSCB	Local Safeguarding Children Board
MDDUS	Medical and Dental Defence Union of Scotland
MDO	Medical Defence Organisation
MDU	Medical Defence Union
Mg	magnesium
MHPS	Maintaining High Professional Standards in the Modern NHS
MPS	Medical Protection Society
MRI	magnetic resonance imaging
MRSA	Methicillin Resistant Staphylococcus aureus
NCAS	National Clinical Assessment Service
NHS	National Health Service
NHSLA	National Health Service Litigation Authority
NICE	National Institute for Clinical Excellence
NICU	neonatal intensive care unit
PALS	paediatric advanced life support
PALS	Patient Advice and Liaison Service
PCR	polymerase chain reaction
PET	Paediatric Epilepsy Training
PEW	Paediatric Early Warning
PHHI	persistent hyperinsulinaemic hypoglycaemia of infancy
PICU	paediatric intensive care unit
PM	postmortem
POC	Paediatric Oncology Centre
POSCU	Paediatric Oncology Shared Care Unit
PVL-SA	Panton-Valentine Leukocidin producing *S. aureus*

RCPCH	Royal College of Paediatrics and Child Health
SaO2	oxygen saturation
SPOC	single point of contact
ST 1-8	specialist training grades 1–8; grades 1–3 are equivalent to senior house officer standard and grades 4-8 to registrar standard
SUFE	slipped upper femoral epiphysis
TFT	thyroid function tests
TPHA	Treponema pallidum particle agglutination assay
TPO	thyroid peroxidase antibody
TSH	thyroid stimulating hormone
TSS	toxic shock syndrome
U and E's	urea and electrolytes
US	ultrasound
WBC	white blood cells
WCC	white cell count
ZIG	zoster immune globulin

Introduction

In 2000, a committee established by the Department of Health, chaired by the then Chief Medical Officer, Professor Liam Donaldson, published its report *An Organisation with a Memory*. The report recognized that the vast majority of NHS care was of a very high clinical standard and that serious failures were uncommon given the volume of care provided. However, when failures do occur their consequences can be devastating for the individual patients and their families. The health care workers feel guilt and distress. Like a ripple effect, the mistakes also undermine the public's confidence in the Health Service. Last, but not least, these adverse events have a huge cumulative financial effect. Updating the figures provided in the report, in 2010/11, the NHS Litigation Authority (the NHSLA is the body that handles negligence claims against NHS Trusts in England) paid out £863,400,000 for medical negligence claims (these figures take no account of the costs incurred by the Medical Defence Organisations for General Practice and private health care). The report commented ruefully that often these failures have a familiar ring to them; many could be avoided 'if only the lessons of experience were properly learned'.

The Committee writing the report also noted that there is a vast reservoir of clinical data from negligence claims that remains untapped. They were gently critical of the Health Service as being par excellence a passive learning organization; like a school teacher writing an end of term report, they classified the NHS a poor learner – could do better. On a more positive note, the report stated that 'There is significant potential to extract valuable learning by focusing, specialty by specialty, on the main areas of practice that have resulted in litigation.' It acknowledged that learning from adverse clinical events is a key component of clinical governance and is an important component in delivering the Government's quality agenda for the NHS.

The NHSLA has reported that its present (as of 2011) estimate for all potential liabilities, existing and expected claims, is £16.8 billion. At the time *An Organisation with a Memory* was written, this figure stood at £2.4 billion. (These sums are actuarially calculated figures that are based on both known and as yet unknown claims, some of which may not surface for many years to come. They should not be confused with the figure of £863,000,000 mentioned above, which was the sum actually paid out in one year.) The NHSLA also reported that the number of negligence claims rose from 6652 in 2009/10 to 8655 in 2010/11. While the increases in these figures may be due to the increased readiness of patients to pursue negligence claims and the very significant costs of claims inflation, rather than any marked decline in the standard of care provided by the NHS, the statistics clearly show