NSF for children and young people in Wales

The National Service Framework (NSF) for children, young people, and maternity services in England has recently been published by the Department of Health. On 15 October the equivalent Welsh consultation document was launched by the Minister for Health and Social Services at the Welsh Assembly Government, Mrs Jane Hutt; the consultation document of the Welsh NSF differs from the English NSF in a number of ways.

First, the Welsh document has standard sets not just for health and social care but also for the other agencies which have a strong influence on the health and wellbeing of children, such as education, housing, leisure, and transport. The document has been endorsed in a foreword signed by the First Minister, Rhodri Morgan, and all members of the Cabinet of the Welsh Assembly Government.

A second difference from the English NSF is that the Welsh document is written with 21 standards and 203 “key actions”, each of which is specific, written in the present tense, and can be measured. The third difference is that a web based self-assessment audit tool is being developed for use by all the agencies who will be involved in implementing the NSF in order to assess progress locally (in the 22 local government authorities throughout Wales). This measurement should prove invaluable in helping to determine local priorities for future service development.

As part of the process, the Welsh Assembly Government commissioned an extensive series of consultation events with children and young people, parents, and carers at a variety of venues around Wales, as well as through questionnaires sent out to schools. The final reports of these consultation exercises are available to view or download from the NSF website www.nhs.wales.uk/NSF and let us have your comments.

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Competing interests: none declared

Risk of life threatening apnoea after immunisation

It is common practice in the UK to immunise babies with DTP (diphtheria, pertussis, tetanus), Hib (haemophilus influenza type b), meningitis C, and polio at 8 weeks following delivery, regardless of corrected gestational age. However, such recommendations may be inappropriate for premature babies who may be at increased risk of apnoea and bradycardia.1,2

Twenty seven week gestation twins underwent their first immunisations at 62 days of age (corrected age 16-2 weeks) the following morning (15–16 hours later) both twins went a pale, dusky colour and had a respiratory arrest requiring bag and mask ventilation with severe bradycardia. On examination both twins were tachypnoeic and pyrexial. Intravenous antibiotics were started but stopped 48 hours later when full septic screens, viral cultures, and a nasopharyngeal aspirate returned negative. Cardiac and oxygen saturation monitoring showed several further episodes of desaturations, requiring facial oxygen and gentle stimulation. A full recovery to normal self-ventilation in air followed over four hours. Both babies remained pale, active, and with no respiratory distress despite elevated C reactive protein (twin 1: 27 mg/l; twin 2: 38 mg/l; normal <10 mg/l) and raised platelets in twin 1 (420×109/l; normal 150–400). The reactions were reported to the UK Adverse Drug Reactions reporting scheme.

Four weeks later the second immunisation sets using acellular pertussis was administered while cardiorespiratory and oxygen monitoring was performed. Neither twin had any reaction to the second course of immunisations. Current evidence points to an increase in episodes of apnoea and bradycardia in preterm infants receiving their eight week immunisation,3 and the unit has decided to review its policy on the monitoring of such infants.

The episodes of apnoea and bradycardia in the twins following their immunisations were highly suggestive of a delayed type hypersensitivity reaction to a component of one of the vaccines. Studies have implicated the whole cell pertussis component of DTP with significantly more reactions and raised C reactive protein after immunisation with DTP than after separate diphtheria, Hib, and tetanus toxoid vaccines alone.4,5

Current opinion for immunisation of preterm infants suggests cardiorespiratory monitoring for up to 48 hours post-immunisation rather than postponement of immunisation;2 however, recommendations for future immunisations in infants who had an episode of apnoea or bradycardia are unclear. Many suggest immunisation with acellular pertussis, as inpatients with 48 hour monitoring. However, the evidence from one Australian study implies that the risk of future reaction is very low.6

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doi: 10.1136/adc.2004.054544

Competing interests: none declared

References
3 Alson CP, Fireberg HV. Adverse events following pertussis and rubella vaccines. JAMA 1992;267:392–6.

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Provision of child protection services:

Addressing child welfare concerns: a new approach

In a small proportion of childhood hospital attendances there are obvious child protection issues. In a much greater number there is concern about the child's welfare. Only if concerns are recognized, documented, and addressed at an earlier stage, can we hope to improve “safeguarding” children.

In Peterborough District Hospital a “Concern Sheet” has been in use since 1998 to address child protection concerns throughout the Trust. Use of the Concern Sheet has been audited twice. Despite this, many failures of documentation, reporting, and follow up were identified. To address these problems, a joint hospital/community “Children’s Liaison and Discharge Coordinator” was appointed in October 2002. She is a registered children’s nurse, with child protection experience.

Our aim was to see if these two measures improved identification, documentation, and follow up of child protection concerns. We retrospectively analysed the Concern Sheet data collected for 2003 and noted a striking increase in child protection awareness in every hospital department where children are seen (table 1). The Coordinator has been very active in raising the profile of child welfare concerns, not just overt abuse, with all staff.

Table 1

<table>
<thead>
<tr>
<th>Area</th>
<th>2002 (n = 153)</th>
<th>2003 (n = 490)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paediatric assessment unit</td>
<td>68 (44.4%)</td>
<td>105 (21.4%)</td>
</tr>
<tr>
<td>Paediatric ward</td>
<td>43 (28.1%)</td>
<td>73 (14.8%)</td>
</tr>
<tr>
<td>A&amp;E</td>
<td>32 (20.9%)</td>
<td>244 (49.7%)</td>
</tr>
<tr>
<td>Special care baby unit</td>
<td>3 (1.9%)</td>
<td>19 (3.8%)</td>
</tr>
<tr>
<td>Children’s outpatients</td>
<td>3 (1.9%)</td>
<td>11 (2.2%)</td>
</tr>
<tr>
<td>Community child health</td>
<td>0</td>
<td>5 (1.0%)</td>
</tr>
<tr>
<td>Maternity unit</td>
<td>0</td>
<td>15 (3.1%)</td>
</tr>
<tr>
<td>Others*</td>
<td>4 (2.6%)</td>
<td>18 (3.6%)</td>
</tr>
</tbody>
</table>

*As awareness increased, concerns were also received from surgical wards, therapists, and paramedics in 2003.

Table 2

<table>
<thead>
<tr>
<th>Category</th>
<th>0–4 years (n = 260)</th>
<th>5–10 years (n = 90)</th>
<th>11–16 years (n = 140)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neglect</td>
<td>102 (39.2%)</td>
<td>17 (18.9%)</td>
<td>15 (10.7%)</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>94 (36.1%)</td>
<td>30 (33.3%)</td>
<td>30 (21.4%)</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>3 (1.2%)</td>
<td>7 (7.8%)</td>
<td>4 (2.9%)</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>0</td>
<td>2 (2.2%)</td>
<td>37 (26.4%)</td>
</tr>
<tr>
<td>Mental health issues /self harm/overdose</td>
<td>0</td>
<td>2 (2.2%)</td>
<td>23 (16.4%)</td>
</tr>
<tr>
<td>Misuse of drugs/alcohol</td>
<td>0</td>
<td>0</td>
<td>37 (26.4%)</td>
</tr>
<tr>
<td>Parental mental health issues</td>
<td>20 (7.7%)</td>
<td>8 (8.9%)</td>
<td>10 (7.1%)</td>
</tr>
<tr>
<td>Parental misuse of drugs/alcohol</td>
<td>21 (8.1%)</td>
<td>10 (11.1%)</td>
<td>4 (2.9%)</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>17 (6.5%)</td>
<td>12 (13.3%)</td>
<td>8 (5.7%)</td>
</tr>
<tr>
<td>Others</td>
<td>3 (1.2%)</td>
<td>3 (3.3%)</td>
<td>9 (6.4%)</td>
</tr>
</tbody>
</table>

Each column adds up to 100%

References


Maternal vitamin D deficiency, refractory neonatal hypocalcaemia, and nutritional rickets

We read with interest the articles by Allgrove and Ladhani and colleagues which highlighted the re-emergence of vitamin D deficiency, hypocalcaemia, and nutritional rickets as a major public health problem in the UK, especially in the “at risk” ethnic minority groups.

We would like to present our experience from a single centre of maternal vitamin D deficiency, neonatal hypocalcaemia, and nutritional rickets. Leicester City has an estimated proportion of 28% South Asians (Census 2001) and an increasing number of other ethnic groups, including an estimated recently arrived 10 000 people of Somali origin. Studies in our centre have confirmed that significant numbers of south Asian mothers have vitamin D deficiency at the end of pregnancy, and substantial numbers of children have infantile and adolescent rickets, some of whom have extremely severe bony deformities. In addition there have been increasing numbers of late (5–10 days of age) and late-late (2–12 weeks of age) neonatal hypocalcaemia, presenting predominantly with seizures, which, despite intensive calcium and vitamin D treatment have been difficult to correct biochemically. All the mothers had vitamin D deficiency and were supplemented with oral vitamin D and calcium supplements. None of the mothers, despite being within high risk ethnic groups, had vitamin D supplementation in pregnancy despite the recommendation by COMA (Committee on Medical Aspects of Food Policy in UK) that all at-risk pregnant and lactating mothers should receive 10 µg (400 IU) of vitamin D daily. Furthermore, a local audit involving clinicians in antenatal care including general practitioners, midwives, and obstetricians showed that while health professionals were aware of this issue, there was no clear policy followed.

At birth, the newborn’s vitamin D status is directly related to maternal vitamin D status and maternal-fetal transfer of vitamin D and its metabolites in pregnancy. Babies whose mothers have a marked vitamin D deficiency will have a compromised vitamin D status, and this has important long term implications for the health of the offspring.

As noted by Allgrove there were national and local “stop rickets campaigns” in the 1970s, and in Leicester this appeared to reduce but not remove the spectre of nutritional rickets. In view of our recent experiences confirming an increasing frequency and severity of neonatal vitamin D...
deficiency we would strongly agree with Allgrove and Ladhan and colleagues in emphasising the importance of vitamin D supplementation. It is certainly a serious indictment of our community preventative services not to have protected “high risk” mothers and their offspring. We would propose an urgent review and implementation of the national recommendations on vitamin D supplementation in “high risk” pregnant women and infants to prevent associated infantile co-morbidity.

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References

Apnoeas in bronchiolitis: is there a role for caffeine?

Bronchiolitis is a common respiratory illness in infants in winter months. Recurrent apnoeas in high risk infants with severe bronchiolitis increases the need for respiratory support (nasal continuous positive airway pressure and ventilation) and transfer to the paediatric intensive care unit (PICU).

During the winter of 2003–04 we had three babies presenting with apnoeas secondary to bronchiolitis. All three babies were preterm infants under 3 months of age. All had deterioration in their respiratory status potentially needing further care in PICU. On advice of two PICU consultants these babies were treated with a loading dose of caffeine. All the children showed immediate improvement in their respiratory status and avoided being transferred out. Caffeine is a respiratory stimulant widely used in the treatment of apnoea of prematurity.

Following our experience we performed a questionnaire survey of the use of caffeine for apnoeas in bronchiolitis across 20 intensive care units in the UK. We made a thorough literature search to look at the evidence.

Of the 20 questionnaires sent, only 10 replies were received. Opinion was divided between PICU consultants, with four stating that they would advise a trial of caffeine. This made a total of six, including the two who advised us previously. The evidence from literature is anecdotal.

We conclude that there is little evidence in literature to support the use of caffeine in bronchiolitis, and there is divided opinion in PICUs across the UK. We feel that caffeine is a relatively simple treatment option in a district general hospital for apnoeas in bronchiolitis and recommend a randomised controlled trial. We would welcome comments on similar experiences from readers.

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Child public health


Since the heyday of public health in the late nineteenth century it has failed to raise the pulse of many clinicians, as they believe its work, at least in the developed world, is done. This book comes on the tide of renewed interest in the discipline. It outlines the current state of child public health, refreshes the contemporary image, and reinforces the premise that child public health is as relevant and important today as it has ever been. Aimed at paediatricians and public health practitioners, it will also appeal to all those with little knowledge of child public health.

The book moves nicely from the background, through key concepts, to practical applications. The first three chapters describe the health of children nationally and globally, and outlines how child public health practices sit historically. There is a lot of information covered, some glossed over as a necessity, but generally good use is made of tables and statistics.

The next three chapters give an excellent summary of the theories, key concepts, and techniques used in child public health. Again the pace is swift, readable, and well balanced. The further reading lists adequately guide readers to more detail where required. While it would be easy to be critical about the breadth or depth of topics in this book, it was never intended to be a comprehensive public health reference textbook. However it would be useful to have more on sustainable development, quality assurance/service improvement, and the public health contribution to the commissioning process.

The unique aspect of this book is the inclusion of practical examples of theory applied to prevalent public health problems. After assimilating the basic facts and concepts, the reader is given suggestions on how to put the approaches into practice. The ideas should give renewed hope and encouragement to those at the front line dealing with these all too familiar problems. For future editions it would be valuable to expand the content in this section with a reduced focus on the global context and lessons from the past.

This first edition of child public health succeeds in being readable and making child public health an accessible subject, not with theoretical ideals, but with practical suggestions. We hope this book will inspire a future text, with a wider and more in-depth brief that will become the much needed reference standard text for child public health. However there will always be a place for this book of this length for the reader wanting a summary that can be read cover to cover and digested within a week.

Child public health is a superb book and should be on the shelves of all paediatric, child health, and public health departmental libraries. It is essential reading for all paediatric trainees, but has relevance for all who work in child health, whatever their professional background.

R Tomlinson, S Lenton

Reference

Epilepsy in children, 2nd edition


Management of epilepsy in children can be complex and challenging and a good clinician knows when to draw on multidisciplinary professional expertise, while staying alert and retrained after a clinical and non-clinical areas outside the expert at the critical point. No one understood this more than the late Sheila Wallace under whom I had the privilege to
train in the 1980s. She was a hands on clinician who did not shy away from basic science. The first edition of her book, *Epilepsy in children*, published in 1996, not surprisingly encouraged the various disciplines involved in the understanding and management of epilepsy, and became a popular reference text. When I picked up the second edition, now edited by Sheila Wallace and Kevin Farrell, I knew the book would be good reading but would it be better and worth shelling out another £120.00? The short answer is yes.

As in the first edition this book covers all aspects of epilepsy in children with additional contributing authors reflecting the internationa
collaboration. There is also a distinct change in style to include the modern trend of boxes with key points at the end of each chapter, and tables allowing brevity of text. At times there is a price to pay for the brevity. For example I was disappointed that the initial chapter did not include the old classification of seizures and epilepsy syndromes, when the new classification is only a proposal and authors in the text continue to use the old terms. Similarly the chapter on chromosomal syndromes only touched on disorders, even when epilepsy is the major presentation, such as in ring chromosome 20. There are however many chapters of substance covering pathology, pathophysiology, neuropsychology, and neuroimaging, in addition to the various age dependent epilepsy syndromes and lesonal epilepsies including following brain injury. The chapter on psychi
care and cognitive aspects of epilepsy, areas often neglected or left to other professionals, are a must reading for paediatricians developing an interest in epilepsy and the more experienced clinician. Treatment of epilepsy including surgery and management of status epilepticus is well covered, though for the UK reader it is unfortunate that while the ketogenic diet is included, there is no mention of the modified ketogenic diet offered in our centres.

In the first edition Sheila Wallace tackled the chapter on neurophysiology herself, but rightly invited neurophysiologists to contribu
tion for this edition. These authors provide an excellent overview of the normal and abnormal EEG patterns for the clinician with super clarity of EEG samples included with the text. The chapter would have been enhanced by clearer guidelines on the use of the EEG, especially the value, if any, of repeat interictal EEG recordings in the management of children with epilepsy, covering issues related to drug withdrawal, cognitive deteri
oration, etc. Though the EEG is a valuable and relatively inexpensive tool, its limitation is not always appreciated.

With the proposed establishment of epilepsy networks in the UK and the expectation for a named paediatrician in each district general hospital with an interest in epilepsy, this book is well placed to be a valuable addition to the various disciplines involved and also an informative reference source for the paediatric neurologist.

**Z Zaiwalla**

### Recent advances in paediatrics 21


The latest in the *Recent advances in paediatrics* series intends, as the preface states, to provide a review of import
tant topics and help keep doctors abreast of developments in the subject. It is aimed at practising clinicians, trainee paediatricians, and those preparing for specialty examinations.

It contains 14 chapters covering a variety of general paediatric, neurological, and community paediatric topics, as well as a literature review listing key articles and selected reviews published in 2002. The chapters themselves are generally broken down into specific areas for debate, and round off with a listing of key points for clinical practice and a literature review.

The subject matter chosen is varied and diverse, including summaries of recent develop
dments and current practise in areas such as Kawasaki disease, asthma, diabetes mellitus, idiopathic thrombocytopenic purpura, inhaled nitric oxide in the newborn, the use of cannabis in teenagers, and childhood depression. The chapters are well written by respected authors in the appropriate fields. They break down well into bite sized chunks of easily digestible information, and contain a good sprinkling of diagrams and tables, with the occasional radiograph and clinical photog
draph. There are excellent treatises on very common and relevant areas in which the literature is traditionally rather neglectful. The chapters on head lice, cannabis use, weaning from assisted ventilation, and safe sedation provide invaluable advice and experience in dealing with everyday clinical situations on which little is generally written. The “Key points for clinical practice” boxes provide wonderful, concise summaries of the preceding chapters, although one feels that it may have been more effective to keep each box restricted to one page of the book instead of frequently spilling over into two. The diagrams and tables are relevant, but occa
sionally a little fuzzy and sadly lacking in colour. The radiographs and photographs are clear, but seem on the whole to add little to the subjects. The literature review is very well set out and worthy of further reading.

The book is aimed at clinicians and trainees and does indeed cover topics in general and community paediatrics and neonatology. It will probably be more relevant to non

**S A Wall**

The clinical management of craniosynostosis

Edited by Richard Hayward, Barry Jones, David Dunaway, Robert Evans. Cambridge: Cambridge University Press, 2004, £80.00 (hardback), pp 304. ISBN 1 84356 336 0

In the introduction of this text the editors have indicated their desire to produce a volume that does not constitute a specialised text for experts, but rather a source of information for associated professionals who perform an essen
tial role in the management of these complex conditions. It is a significant distance from the “home institution”. In this regard the book has been successful in its aim, and it is certainly refreshing to see a book of craniofacial surgery not concentrating on surgery for craniosynostosis.

In fact the contents of the book highlights the fact that surgical intervention, although a key factor in the treatment of these complex cases, is only a relatively small/short phase of a coordinated multidisciplinary care pathway in these frequently complex cases.

The authors have acknowledged the fact that this text constitutes a single unit philosophy, and as such is a distillation of “local” approaches and beliefs albeit in a major busy unit with a substantial case load. These are presented in clear sections supported by good literature reviews.

As with any texts from multiple authors overlapping in terms of clinical expertise, the book does reflect a degree of repetition, particularly in the earlier chapters.

The overall quality of sections is good, with some excellent chapters, particularly in ophthalmology, airway management, and issues addressing raised intracranial pressure.

Certain sections which are highly complex may lose the non-specialist readers. These are mainly related to the genetic and particular anterior aetopathogenesis of the conditions. This is a complex subject which realistically is of such a nature that it cannot effectively be simpli
dicated without becoming meaningless.

As indicated by the authors, the surgical options presented are not meant as a surgical atlas but are aimed at giving an overview of the options possible. They have acknowledged the fact that the surgical techniques presented are some of a number of options available to individual preferences. This specific chapter is one which could possibly have benefited from photographic illustrations in pre-

**S A Wall**