An evidence and consensus based guideline for acute diarrhoea management

We would like to respond to the commentary on our paper on the above. The following points require clarification.

Dr Baumer states that “Dr Armon and colleagues have used a formal consensus process to provide guidance...”. The recommendations were evidence based wherever evidence was available, with a formal consensus process used additionally. A systematic review of the literature was undertaken. We complied with the essential elements of a systematic review in accordance with the Scottish Intercollegiate Guidelines network. Thus the literature must be identified according to an explicit search strategy; selected according to defined inclusion and exclusion criteria; and evaluated against consistent methodological standards. As is stated in the text, mesh heading and text word searching was performed.

Formal consensus development was used:

• To develop recommendations where evidence was not available. We would argue that in most guideline development processes this is the prime area of difficulty because in paediatrics, research is sparse and consensus is required for a guideline to be complete. The transparency of the development process is essential and we were explicit about which recommendations were based on consensus rather than on evidence. The Delphi method imparts greater rigour to a process that is often performed by a small selected group of individuals.

• To act as an internal peer review. The guideline is available to a large number of participants during the development process so that any inaccuracies can be identified early on. The participants have an opportunity to check the literature grading and to inform the development group of any papers not yet identified.

• To improve the implementation of the guideline, since the Delphi process facilitates the translation of recommendations into an algorithm which can be readily followed by clinicians. This is an important consideration in all guideline development. We stated that we included scientific reviews of the literature and guidelines written by national bodies in our inclusion criteria. The two systematic reviews references in Dr Baumer’s commentary were appraised and graded as level 1 evidence since they both included sufficient detail of the methods suggesting that they were based on thorough systematic reviews of the literature. Despite sound methodology in performing a systematic review, the evidence from the articles found still has to be translated into recommendations for putting the evidence into practice. Formal consensus was therefore used to determine how a large body of clinicians commonly looking after children with this presenting complaint would apply the evidence found.

It is important to differentiate guideline development from a Cochrane review. Established organisations who have been developing guidelines such as SIGN do not advocate hand searching and contacting of experts for unpublished studies in every circumstance. This decision is left to the guideline developer and depends on the subject area. In view of the scope of the review (to produce a guideline for the child presenting to hospital with acute diarrhoea) it was impractical to perform hand searches and contact experts in the field for all the clinical questions that were addressed. At the time of the development of the guideline the RCPCH standards on guideline production did not stipulate hand searching or contacting of experts.

We accept that with only two nurses on the panel, nursing staff views would not be fully represented. Unfortunately few of the nurses approached were prepared to take part.

We would agree with Dr Baumer that primary care input is valuable and would be a useful extension of the work. At the outset, however, we limited the scope of the guideline to children presenting to hospital, in the light of previous research showing that 16% of medical presentations to hospital were with diarrhoea.

Parents views on admission were not sought during the Delphi process. However, we have incorporated the importance of the parents views in the guideline itself (boxes 28, 38, 43). Again parental views could be formally sought as an extension to the work. Finally, the implementation of any national guideline at local level requires modification by those who will use it and this we fully endorse.

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On behalf of the Paediatric A&E Research Group

References


Parental smoking

While summarising the US Third National Health and Nutrition Examination Survey, Archivist suggests that in Britain many paediatricians would view smoking cessation promotion as being the province of the general practitioner. Given the strong relation between environmental tobacco smoke exposure and morbidity in children, we feel it essential that all those who care for children are involved in the active promotion of smoking cessation.

We have presented data from a pilot smoking cessation study conceived by paediatricians but performed in primary care. Adult female smokers registered with a general practice in Newcastle upon Tyne were identified. Smokers in each of three age matched groups (mothers of asthmatic children, mothers of children without asthma, and women without children) were approached and invited to take part in a smoking cessation study. The smoking cessation interventions, which included nicotine replacement patches and brief motivational interviews, were delivered by practice nurses. Table 1 shows the number of women contacted in each of the three groups, the number agreeing to participate, and the number not smoking (verified by salivary cotinine measurement) after 12 weeks.

While there was no significant difference in cessation rates between the three groups once subjects had been recruited, there was a difference between the likelihood of contacted women wishing to participate in the study. Mothers of asthmatic children were more likely to volunteer than mothers of children without asthma (OR = 1.8; 95% CI: +0.8 to +3.7) or adult women without children (OR = 2.6; 95% CI: +1.2 to +5.6). It can be seen that, in order to achieve one successful cessation at 12 weeks, far fewer mothers of asthmatic children had to be contacted than mothers of non-asthmatic children and women without children.

Although the actual support of adults trying to stop smoking may be undertaken in
Table 1  Number of women contacted and invited to part in the study, number recruited, and number of women not smoking after 12 weeks

<table>
<thead>
<tr>
<th></th>
<th>Mothers of asthmatic children</th>
<th>Mothers of children without asthma</th>
<th>Women without children</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. contacted</td>
<td>56</td>
<td>89</td>
<td>96</td>
</tr>
<tr>
<td>No. recruited (% of those contacted)</td>
<td>19 (34)</td>
<td>20 (22.5)</td>
<td>16 (16.5)</td>
</tr>
<tr>
<td>No. not smoking after 12 weeks</td>
<td>7</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>No. needed to contact in order to achieve one non-smoker after 12 weeks</td>
<td>8</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

a primary care setting (often by practice nurses), paediatricians should not underestimate their potential influence in affecting parents’ decisions regarding trying to stop smoking. Mothers of children with respiratory illness may be already further around the cycle of ‘behaviour change’ than other adults. Encouragement from their child’s paediatrician may prove the spur to them finally trying to stop smoking.

References

Evidence Based Pediatrics and Child Health

If any book is to persuade paediatricians to practice evidence-based healthcare, this is it. Evidence Based Pediatrics and Child Health is a practical tutorial in the process and practice of evidence based paediatrics. It is not a reference book, unlike the others in this series (Evidence Based Cardiology and Evidence Based Gastroenterology & Hepatology). It is divided into three distinct sections, beginning with twelve well written chapters on the process of evidence based paediatrics: formulating questions, searching for answers, and critically appraising the results. Using these chapters to reinforce learning from an EBM workshop or short course is ideal. As a primary introduction to the subject, they may be a touch too concise.

The next two sections cover in detail what other books on evidence based practice ignore: putting the results into clinical practice. Divided into community based and patient specific topics, a very wide range of clinical conditions and questions are covered. Each chapter takes a broad topic—febrile seizures, childhood obesity—by building an almost realistic scenario and proposing a number of important clinical questions. The author guides you through forming precise questions, searching for answers, selecting and appraising the evidence. Both strengths and weaknesses of study design and applicability are explored, without excessive reliance on statistics. The clinical realities are reinforced by reference to the scenario which triggered the questions, and addressing the wider applicability of the study. As with any multi-author book, there is variation in style and quality of content. If you want to involve yourself in methodological and academic discourse, turn to Sandi Pirozzo and Chris Del Mar discussing Otitis Media. For those wanting to see how they, as the SpR in clinic, can put some evidence in their practising (sp intentional), Milton Tenenbein gives a great demonstration on the topic of SIDS.

This isn’t a book for the library—it’s one for the staff room coffee table, to inspire discussion and development over doughnuts. Get someone to buy one for your workplace.

P Eunson

Management of the Child with a Serious Infection or Severe Malnutrition
World Health Organization, 2000; £8.75, pp 162. ISBN 9241545313

It is a pleasure to review a paediatric textbook for developing countries which indicates in a foreword its intended audience without trying to be all things to all men and women. This manual is intended for health workers who will be diagnosing and treating children at the first referral level. This will mean hospitals or large health centres which have access to basic investigations and to the essential drugs. The basic principles of treatment have been taken from the Integrated Management of Childhood Illness programme produced by WHO and others. This has the advantage that these health workers will be using the same principles of diagnosis and treatment as health workers in smaller establishments.

The quality of the text is high, and well interspersed with the diagrams, charts, bold type, and bullet points. In particular the quality of the black and white drawings of children, investigation techniques, and physical signs is superb without being patronising. I was particularly impressed by a page of drawings of typical chest x ray findings which are so much better than the usual poor quality copies seen in paediatric text books.

The first chapter deals with emergency triage assessment and treatment and includes 11 charts on practical tasks such as how to position the unconscious child, how to give IV fluids for shock, and how to give diazepam rectally for convulsions. A set of these charts on laminated cards would be ideal for casualty department walls.

The second chapter makes for harder reading as it looks at assessment and diagnosis. There are 14 long tables in this chapter on differential diagnosis of particular signs and symptoms. The use of these tables would presume a considerable medical knowledge and may take them beyond what a nurse or paramedical worker may be able to use. Many children would initially be seen by somebody in these circumstances who does not have a medical degree.

It is an immensely practical text book written by health workers who must have had experience in developing countries. When the possibility of a rare diagnosis is entertained the authors advise the reader to consult standard paediatric text books. They refrain from discussing possibilities of intensive treatment such as mechanical ventilation or expensive antibiotics. Their first line recommendation for treatment of meningitis is chloramphenicol and ampicillin or benzylpenicillin. However, they acknowledge that third generation cephalosporins may be part of some national guidelines.

The appendices cover practical procedures and information and doses of essential drugs. The section on recipes for refeeding malnourished children would benefit from having a table of nutritional contents of some basic foodstuffs. The growth section needs a chart on malnourishment.

The authors have included a short appendix on play and toys for severely malnourished children, which does tend to get ignored by the sheer volume of pathology in malnutrition units.

It is difficult to find fault with the contents of the book. Regular users will quickly get to the sections they want, although I suspect the charts in the first chapter will be even more thumbed. I trust that the book will be translated into other languages and that the quality of the drawings would not suffer adversely in those countries where depiction of the human body is not culturally acceptable. My only real criticism is that after a few days thumbing through this book, the binding has already come apart and it will not stand up to the hard wear which it deserves.

R S Phillips

www.archdischild.com

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acute diarrhoea management

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Arch Dis Child 2002 86: 138
doi: 10.1136/adc.86.2.138

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