

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Carers' perspectives on the presentation of community-acquired pneumonia and empyema in children: a case series
AUTHORS	Crocker, Joanna ; Evans, Meirion; Butler, Christopher; Hood, Kerenza; Powell, Colin

VERSION 1 - REVIEW

REVIEWER	Dr Matthew J. Thompson GP & Senior Clinical Scientist, University of Oxford Department of Primary Care Health Sciences, UK
REVIEW RETURNED	02-Jul-2012

GENERAL COMMENTS	<p>This is a well written paper, and having read it carefully I have honestly found little to suggest in the way of even minor edits. The clinical area is well known to me, and the Authors cite much of the work in this area of trying to differentiate serious from less serious illness (particularly resp illnesses) in children in primary care. The methods are appropriate, and the limitations of the study design and potential biases are fully acknowledged in the manuscript, the authors are obviously aware of the issues regarding sampling, case definition, generalisability, recall, etc. and they refer to all of these as potential limitations.</p> <p>The results are very interesting and I feel strongly will be used by clinicians and researchers in this area. For clinicians, this adds weight to the potential red flag of torso pain, gut feeling of parents of something being wrong, duration of illness of these severe LRTI. These findings are all clearly laid out in the take home points, and I feel will inform clinical practice as well as telephone triage and safety netting advice etc. Of course we still need the research that the authors suggest to determine diagnostic accuracy of these features, particularly in primary care and low prevalence settings. Research is underway (eg the TARGET study funded by the UK's NIHR to help address some of these questions).</p> <p>Overall and excellent paper, and my lack of specific minor edits or errors should be seen as a sign of excellent manuscript.</p>
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REVIEWER	Damian Wood Consultant Paediatrician Nottingham University Hospitals NHS Trust
REVIEW RETURNED	06-Jul-2012

THE STUDY	The objective of the study "to describe the symptoms of pneumonia from the carer's perspective, with a focus on pain and unusual
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	<p>symptoms of particular concern" - the study is not representative of this patient group as in your introduction you state that 5% of children with pneumonia have empyema whereas 27% of the sample had an effusion and 15%. There is a high rate of hospital admission which does suggests the population is highly skewed to those with moderate to severe pneumonia. This is addressed in the discussion however the authors state the sample "may not be representative" (p17 line 2) The baseline rates for empyema presented in their introduction appear to provide strong evidence that their sample is not representative of the whole spectrum of severity of childhood pneumonia and the strength of the statement in the discussion should reflect this.</p> <p>This then makes the key messages difficult to interpret as the statement pain in the torso(including the back, abdomen and side) may be a common symptom of pneumonia in children aged 3 or more years is difficult to support given the bias in the cases to more severe forms of pneumonic illness and the high prevalence of pleural effusion/empyema. The second and third key messages are unaffected by this and are appropriate.</p>
RESULTS & CONCLUSIONS	<p>This then makes the key messages difficult to interpret as the statement pain in the torso(including the back, abdomen and side) may be a common symptom of pneumonia in children aged 3 or more years is difficult to support given the bias in the cases to more severe forms of pneumonic illness and the high prevalence of pleural effusion/empyema. The second and third key messages are unaffected by this and are appropriate.</p>
GENERAL COMMENTS	<p>The main sources of bias in the study are (1) the skewed nature of sample with regard to the severity of illness (2) the retrospective nature of some of the data collection leading to recall bias. Whilst both sources are acknowledged in the discussion this is not reflected in the conclusion or key messages. I would suggest that these are revised to reflect the hypothesis generating rather than practice changing nature of this paper.</p> <p>Many thanks for an early insight into your results and the chance to review your hard work.</p>

VERSION 1 – AUTHOR RESPONSE

Dr Damian Wood rightly pointed out in his first paragraph that our sample is not representative of the whole spectrum of severity of childhood pneumonia and that the strength of our statement in the discussion should reflect this. We have now highlighted this in our discussion (page 17) and in the strengths and limitations (page 3, lines 50-55). We have also emphasised that our sample includes empyema (not only uncomplicated pneumonia) by revising the 'article focus' (page 3, line 21) and objective (page 5, lines 23-28).

As a result of this bias, Dr Wood felt that our first key message was difficult to support. We have therefore revised our first key message so that it relates specifically to our sample rather than to the general population (page 3, lines 28-30). Dr Wood felt the second and third key messages were appropriate, so these remain unaltered apart from a slight change to the third key message (page 3, line 37) for clarification.

Finally, Dr Wood suggested that we revise the conclusion to reflect the hypothesis generating rather than practice changing nature of the paper. We feel that the main conclusion is already hypothesis generating rather than practice changing (page 19, lines 43-50); however we have revised the abstract conclusion in order to reflect this (page 2, lines 45-55).