

Letter from the Editor

BMJ Clinical Evidence makes the GRADE

2007 has been an outstanding year for *BMJ Clinical Evidence*. In addition to producing new systematic reviews and updating those already published, we have introduced a method based on the work of the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) working party for assessing the quality of the research we review, and have also published an amazing variety of Letters from the Editor. Some of these editorials have been written internally, and others by world renowned opinion leaders to whom we are enormously grateful for their time and effort. Although all our editorials have been fascinating and important, two which have encouraged us to reconsider our editorial approach are Getting behind the headlines written by Cherrill Hicks, and Chemotherapy-Induced Toxicity in the Community Oncology Setting: Hear No Evil, See No Evil, written by Justin Stebbing, George Dranitsaris, and Mark Vincent.

Cherrill Hicks makes the essential point that although most people, including doctors, get information about new medical research from the mainstream media, the media may not be the best vehicle for delivering this information. As newspapers, television, and sponsored websites are not designed specifically as educational vehicles, the way they convey research facts may confuse rather inform their readers. Compounding this problem, it is well established that many doctors do not have as much experience with statistics as do medical researchers. Consequently, the statistics researchers use to convey their findings may be misinterpreted or misunderstood by some doctors, adversely influencing clinical decision making. Combining these two issues leaves us with an ever increasing body of research information of immense value to world health, but which is often conveyed to those who need it most in an unintentionally misleading way.

Justin Stebbing and colleagues also draw our attention to a generic problem with medical research. Clinical trials operate in often very artificial environments, where trial patients may not represent 'average' patients with the same disease, and monitoring and treatment circumstances may not match usual medical practice. Consequently, when trial results are published and disseminated, they may present an overly positive, or negative, impression of the effects of a new therapeutic intervention. Once again, this means that healthcare workers may make important treatment decisions based on erroneous assumptions about research. However, as Stebbings and colleagues say, "Our patients put their trust in us. Therefore, it is our responsibility to protect them." Protection, in this sense, not just from disease, but from misguided assumptions about treatments.

At *BMJ Clinical Evidence* we have spent a large part of 2007 introducing a system to make the limitations of the research we review more transparent to global healthcare professionals, and our reviews more clear with respect to which outcomes matter, and to whom the data relates. The system we have introduced is based on the systematic and explicit approach developed by the GRADE working group to assess quality of evidence and strength of recommendations. The GRADE approach seeks to address many of the perceived shortcomings of existing models of evidence grading. Crucially, evidence is evaluated, not study by study, but across studies for specific clinical outcomes. The methods developed by the GRADE working group take into account: methodological flaws within the component studies, the consistency of results across different studies, how generalisable the research results are to the wider patient base, and how beneficial or harmful the treatments have been shown to be. All treatment comparisons are given one of four GRADE scores reflecting the quality of the evidence — high, moderate, low, or very low quality evidence.

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We have developed a pragmatic approach that has enabled us to apply the principles of GRADE in a reproducible, simple, and efficient way. Full details of how we have decided to implement GRADE can be found on our website. As of this month, over half our systematic reviews have a GRADE evaluation, and we will be adding and updating GRADE scores to all other reviews as they undergo their regular update cycle.

For each *BMJ Clinical Evidence* systematic review, we present a table that identifies the basis on which judgements of evidence quality are made. Each treatment option in the GRADE-evaluated reviews now have a link to the appropriate GRADE table, and the summary statements for each treatment option have been rewritten to include GRADE analyses. The evidence for each treatment option is now summarised for key clinical outcomes and for comparisons with placebo and other treatments. The *BMJ Clinical Evidence* categorisation continues to sum up whether we believe the treatment is likely to be beneficial, ineffective, or harmful, or indeed whether we don't know enough to assess its effects; but clinicians now have an additional transparent layer that shows the quality of the evidence upon which the categorisation has been based, and where further research really is needed.

The introduction of GRADE and the rewriting of summary statements for *BMJ Clinical Evidence* systematic reviews is a major initiative on our part to try to maximise the transparency and accessibility of the evidence we present. We know this evidence is used by clinicians around the world to support treatment decisions, and our aim is to provide those clinicians with the best quality appraised, summarised evidence to facilitate their decision making. Although as editors we cannot directly protect patients against the effects of disease, we can and do use our experience to protect patients and doctors from the effects of confusion about medical evidence.

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