

## EDITORIAL

### Publication bias and the Medical Editors Trial Amnesty

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What would you do if your experiment produced a negative or nonsignificant result? Having a negative result is like receiving "no" for an answer. You do not want to talk about it. No one is excited about it. It is not interesting reading. So researchers tend not to report them. Furthermore, reviewers and editors also tend not to accept them for publication.

Why should the scientific mind balk at negative results? Surely, in the search for truth, genuine negative findings are as important as positive ones. That is not to say that we should accept experiments that are poorly designed or do not have the power to answer the research question. However, the tendency to publish only significant findings has resulted in a publication bias that may do the scientific world a disservice. The danger arising from this practice is that the true picture is not presented. In fact, a misleading one develops due to overwhelming noise from one side. This is further compounded by meta-analysis, a research method now much in vogue in systematic reviews. Meta-analysis is based on searching out and quantitatively combining the results of all studies that have addressed a similar research question.<sup>1</sup> The aggregated data adds power to the pooled results which individual smaller studies are unable to achieve. However, if the data is sourced from a biased pool, then it stands to reason that the conclusions will be doubly damning. Publication bias in clinical trials is now well recognised.<sup>2,3,4</sup> This can have important implications for patient care as management policies are usually adopted on the basis of published studies, which may be misleading in the face of publication bias. Because it is recognised that a substantial proportion of clinical trials, especially those with nonsignificant results, are not reported, the editors of nearly 100 international medical journals have recently joined together to call an "amnesty" for unreported trials - called Medical Editors Trial Amnesty (META).<sup>5,6</sup> They would like to register any unreported controlled clinical trial, including trials that have been published only as abstracts. It is intended that the trial information be listed in a dedicated Web site

and be assessed from there by, for example, those conducting systematic reviews. Readers are urged to respond to this call, using the designated unreported-trial registration form available through the META journals.<sup>5,6</sup> META can also be contacted through e-mail: meta@ucl.ac.uk.

There are many facets to publication bias. In a recent meeting among Medical Editors, much discussion was focussed on this.<sup>7</sup> Besides bias against negative findings, it has been contended that reviewers show bias in favour of papers from First World countries, that financial sponsors e.g. pharmaceutical companies influence researchers' publication decisions, that there is a prejudice against unconventional work and that UK and US authors tend to cite papers of their own nationality. Editors, reviewers and authors all share responsibility in introducing bias into the published literature. Although the Malaysian Journal of Pathology is a mere amateur in the publication arena, we seek to learn and improve. Since its inception, the Journal has depended on blinded peer-review to uphold the credibility of its papers. The Journal subscribes to the uniform requirements for manuscripts submitted to medical journals formulated by the International Committee for Medical Journal Editors, which also define authorship and stipulate guidelines on relevant ethical issues.<sup>8,9</sup> These requirements are reproduced as a special report in this issue of the Journal.<sup>10</sup> We have enjoyed the support of our readers in our endeavours. Undoubtedly, there is room for improvement and suggestions are always welcome.

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