Preferential publication of editorial board members in medical specialty journals

J Luty,1 S M R Arokiadass,2 J M Easow,3 J R Anapreddy2

ABSTRACT

Background: Publication bias and discrimination are increasingly recognised in medicine. A survey was conducted to determine if medical journals were more likely to publish research reports from members of their own than a rival journal’s editorial board.

Methods: A retrospective review was conducted of all research reports published in 2006 in the four competing medical journals within five medical specialties. Only three journals were willing to divulge the authorship of reports that had been rejected.

Results: Overall, 4460 research reports were published in 2006 by the 20 journals from five subspecialties (mean 223 (SD = 164) reports per journal; median 176; interquartile range 108–238). On average, 17.2 (7.7%) reports were from a journal’s own editorial board (SD = 10.7; median 15; interquartile range 10–23; n = 20), and 6.3 (2.8%) reports were from a member of the editorial board of one of the three rival journals within the specialty (SD = 7.3; median 3.5; interquartile range 1–8; n = 60). There was a statistically significant excess of publications from the journal’s own editorial board in 14 of the 20 journals (p < 0.05). Journals were almost three times more likely to publish reports from their own editorial board than from one of the three rivals within their subspecialty (p < 0.0001; median difference 11; Mann–Whitney U test; power for 5% significance >99.99%).

Conclusions: There was a significant excess of publications from medical journals’ own editorial boards, although it is not possible to determine whether this is due to bias in the peer review process or selective submission by editors.

One former editor of the BMJ has claimed that “the whole business of medical journals is corrupt” and “prone to bias”.1 This bias can take several forms. Traditionally, “publication bias” is a widely recognised phenomenon whereby positive results have an increased likelihood of being published and are published in more influential journals.2–4 Publication bias distorts conclusions of meta-analysis and leads to a misleading impression of the effectiveness of some treatments.5–6 A widely reported example of bias is the tendency for research that is funded by pharmaceutical companies to show the company’s product in a more favourable light than independently funded trials.7–10 There is also widespread condemnation of the distortion of published medical research by the tobacco and alcohol industries.11–12 Governments have even been implicated in attempts to suppress the results of politically embarrassing medical research or editorials.13–14 There are also increasing reports of “ghost” authorship that may conceal conflicting interests.15

There are few allegations of favouritism by medical journal editors and editorial boards. Nevertheless, editorial bias against mental health researchers from less developed countries has been reported.16–17 At least one report has suggested that general psychiatry journals are selectively under-reporting articles on eating disorders.18 There are also occasional references to “hostile reviewers”.12 These criticisms are widely acknowledged in a recent survey of over 5040 academics worldwide, in which 71% supported the use of double-blind peer review.19

Anecdotal evidence suggested to us that researchers who were on an editorial board had an increased likelihood of having their research published in their own journal. Such a practice would be grossly unethical, particularly as funding for medical research often depends on the capacity of researchers to publish in “high-impact” journals. Consequently, we conducted a survey to determine whether specialised medical journals were more likely to publish research reports from members of their own editorial board than from the members of a rival journal’s editorial board.

METHODS

A retrospective review was conducted of all database-based original research reports published in 2006 in the four competing medical journals within five medical specialties: surgery, paediatrics, general practice, psychiatry, and obstetrics and gynaecology. Journals were identified using the 2005 ISI impact factors.20 For convenience, the broadest five medical specialties were used that had at least four based original research reports published in 2006 in the four competing medical journals within five medical specialties: surgery, paediatrics, general practice, psychiatry, and obstetrics and gynaecology. Journals were identified using the 2005 ISI impact factors.20 For convenience, the broadest five medical specialties were used that had at least four

Odds ratios were calculated with Fisher’s exact correction (two-sided) where appropriate. Statistical tests were performed using the StatsDirect Statistical Software program (version 2.4.3). A small minority of editors (18%) were represented on two or more editorial boards. When this occurred, the report was counted twice—under each board where an author was an editor. This small number does not alter the statistical analysis.
Table 1 Proportion of original research reports from the leading medical journals who cited members of the editorial board as authors in 2006.

<table>
<thead>
<tr>
<th>Subject and editorial board</th>
<th>Number (%) of published reports, classified by editorial board membership of authors</th>
<th>OR (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Br J Surg</td>
<td>25 (12)</td>
<td>4 (2)</td>
</tr>
<tr>
<td>Ann Surg</td>
<td>11 (5)</td>
<td>16 (7.5)</td>
</tr>
<tr>
<td>J Am Coll Surg</td>
<td>2 (1)</td>
<td>3 (1.4)</td>
</tr>
<tr>
<td>Arch Surg</td>
<td>13 (6)</td>
<td>3 (1.4)</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>J Paediatr Child Health (n = 94)</td>
<td>Pediatr Res (n = 392)</td>
</tr>
<tr>
<td>J Paediatr Child Health</td>
<td>4 (4)*</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Pediatr Res</td>
<td>0 (0)</td>
<td>30 (7.6)</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>0 (0)</td>
<td>5 (1.3)</td>
</tr>
<tr>
<td>Pediatr Infect Dis</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>General practice</td>
<td>Br J Gen Pract (n = 99)</td>
<td>Fam Pract (n = 92)</td>
</tr>
<tr>
<td>Br J Gen Pract</td>
<td>8 (8)</td>
<td>8 (9)</td>
</tr>
<tr>
<td>Fam Pract</td>
<td>5 (6)</td>
<td>11 (12)</td>
</tr>
<tr>
<td>Am Fam Physician</td>
<td>0 (0)</td>
<td>7 (6%)</td>
</tr>
<tr>
<td>J Fam Pract</td>
<td>1 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>Am J Psychiatry (n = 217)</td>
<td>Arch Gen Psychiatry (n = 114)</td>
</tr>
<tr>
<td>Am J Psychiatry</td>
<td>15 (7)</td>
<td>4 (3.5)</td>
</tr>
<tr>
<td>Arch Gen Psychiatry</td>
<td>18 (8.2)</td>
<td>15 (13)</td>
</tr>
<tr>
<td>Br J Psychiatry</td>
<td>12 (5)</td>
<td>7 (6)</td>
</tr>
<tr>
<td>Psychol Med</td>
<td>28 (13)</td>
<td>13 (11)</td>
</tr>
<tr>
<td>Obstetrics and gynaecology</td>
<td>Am J Obstet Gynecol (n = 459)</td>
<td>Br J Obstet Gynaecol (n = 188)</td>
</tr>
<tr>
<td>Am J Obstet Gynecol</td>
<td>1 (0.2)</td>
<td>1 (0.5)</td>
</tr>
<tr>
<td>Br J Obstet Gynaecol</td>
<td>21 (4.5)</td>
<td>15 (8)</td>
</tr>
<tr>
<td>Fertil Steril</td>
<td>3 (0.6)</td>
<td>1 (0.5)</td>
</tr>
<tr>
<td>Obstet Gynecol</td>
<td>23 (5)</td>
<td>1 (0.5)</td>
</tr>
</tbody>
</table>

Journal titles are abbreviated as in Index Medicus.

*Bold type indicates the values for research reports by members of the journal’s own editorial board.

The results are shown in table 1. Overall there were 4460 research reports published in 2006 by the 20 journals from the five medical subspecialties (mean 223 (SD = 164) reports per journal; median 176; interquartile range 108–238). On average, 17.2 (7.7%) reports were from each journal’s own editorial board (SD = 10.7; median 15; interquartile range 10–23; n = 20). On average, 6.5 (2.8%) reports were from one of the three rival journals’ editorial boards within the specialty (SD = 7.3; median 3.5; interquartile range 1–8; n = 60). There was a statistically significant excess of publications from the journal’s own editorial board in 14 of the 20 journals (p < 0.05). Journals were almost three times more likely to publish reports from their own editorial board than from one of the three rivals within their subspecialty (p < 0.0001; median difference 11; Mann–Whitney U test; power for 5% significance >99.99%).

Between the specialties, primary-care journals had the least significant tendency to publish articles from their own editorial board, with only one journal having a statistically significant rate. By contrast, psychiatry journals tended to publish the highest rate of articles from the journal’s own editorial board (two of the four journals had rates exceeding 15% of reports from members of each journal’s own editorial board).

DISCUSSION AND CONCLUSIONS

This study shows a statistically significant preference among leading medical journals to publish reports that cite authors from their own (rather than a rival journal’s) editorial board. It is possible that the results were due to a selective tendency for the editors to preferentially submit their research reports to their own journal; this may be due to authors’ sense of loyalty or gratitude to the editors in chief, or to the expectation of a more sympathetic review from their colleagues on the editorial board. Whether this “selective submission” fully explains the fact that the journals were almost three times more likely to receive an article from a member of their own editorial board than from a member of the editorial board of a rival journal begins to stretch belief. Overall, the editorial board for each of the four journals within each specialty are likely to contain equally competent and productive researchers. Each of the journals had similar impact factors within their field. This raises the possibility that editorial procedures are selectively biased in favour of members of their own editorial board.

This report raises a significant ethical question. It is perfectly valid to suggest that the results are due to selective favouritism and bias towards members of a journal’s editorial board. To exclude this possibility, we need access to the authorship of the
open or double-blind peer review other than preservation of the status quo.

Funding: The research was funded entirely by the authors. One author (JL) received a free donation of Escitalopram from the manufacturers for a randomised controlled trial of antidepressants in depressed alcoholics. The company provided no other support. The authors have no financial or other association with any commercial company including any pharmaceutical company, the alcoholic drinks industry or any association with the Portman Group, nor have they ever had any such association. The authors are not, nor have ever been, members of the editorial board of any journal.

Competing interests: None.

REFERENCES

11. Babor TF, Diageo, University College Dublin and the integrity of alcohol science: it’s time to draw the line between public health and public relations. Addiction 2008;103:1375–7.
Preferential publication of editorial board members in medical specialty journals

J Luty, S M R Arokiadass, J M Easow and J R Anapreddy

*J Med Ethics* 2009 35: 200-202
doi: 10.1136/jme.2008.026740

Updated information and services can be found at:
http://jme.bmj.com/content/35/3/200

These include:

References
This article cites 21 articles, 13 of which you can access for free at:
http://jme.bmj.com/content/35/3/200#BIBL

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Collections
Articles on similar topics can be found in the following collections

Editor's choice (119)

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/