



## ORIGINAL ARTICLE

# Representation of women as editors in the Cochrane collaboration

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**Keywords**

Editorial policy; evidence-based medicine; female; gender bias; publishing.

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Received 28 March 2014; accepted for publication 10 October 2014.

doi: 10.1111/jebm.12123

**Abstract**

**Objectives:** There is considerable gender disparity in editorial boards of medical journals. Being an editor in a Cochrane review group (CRG), like being an editor in a medical journal, is an indirect representation of one's reputation and leadership abilities in a particular specialty. The aim of the study was to analyze the representation of women editors on the editorial teams of CRG's and the Central Editorial Unit (CEU) of the Cochrane Collaboration.

**Methods:** Information about editorial team members of CRGs and the CEU was extracted from respective websites. Gender of the individual was determined by inspection of names, individual profile description or photographs in the CRG or institutional webpage, social networking sites and internet search. Data was validated by two authors independently and differences sorted by consensus.

**Results:** A total of 788 editors across all CRGs and the CEU with an overall 371 females (47.1%) and 417 (52.9%) males were identified. Of the CEU editors, 62.5% were females. There were 68 coordinating editors (35.3% females), and 62 managing editors (56% females), who provided leadership to the CRGs. Eighty-four percent of trial search coordinators were found to be females. Ten CRGs had 75% or more of its editors as females while 7 CRGs had less than or equal to 25% female editors.

**Conclusions:** The representation of women editors in the Cochrane Collaboration was found to be better than in editorial boards of medical journals. There is still scope for improvement to ensure better gender diversity across all roles and in all CRG's.

**Introduction**

Gender disparities among healthcare professionals have been reported in spite of the growing numbers and proportion of women joining the healthcare workforce. Gender differences have been noted between different specialties, hiring decisions, incomes and even academic representation (1–4). The issue of under representation of women as editors of medical journals (2, 4) is of immense significance since diversity of perspectives, be it gender, ethnicity or demography, helps enhance development and creation of knowledge—the gate keepers of which are the editors.

The Cochrane Collaboration is a global network with collaborators spread over more than 120 nations. Cochrane aims

to improve health and healthcare by promoting evidence-informed decision by providing high-quality and relevant synthesized research evidence free from any commercial sponsorship and conflicts of interest. The Cochrane Collaboration also holds a seat in the World Health Assembly and is one of the largest producers of synthesized research which is used for making healthcare decisions and as such has a considerable global influence. Cochrane review groups (CRGs) are the backbone of The Cochrane Collaboration and are entirely responsible for activities related to a particular domain/specialty of healthcare. Being an editor in a CRG, akin to membership in editorial boards of medical journals or professional societies, is an indirect representation of one's reputation and leadership abilities in a particular specialty.

Cochrane itself has envisioned the need to ensure that “at least 50% of the organization’s leaders will be women” by 2020 (5) in order to maintain diversity.

## Methods

### Setting and data collection

Information for all editors and their roles in the various CRGs as well as the CEU of The Cochrane Collaboration was obtained from the websites during the period from 28 February 2014 to 15 March 2014. Gender of the individual was determined by various methods; inspection of names, individual profile description (his/her/him/he/she) or photographs in the review group or institutional webpage, social networking sites (Facebook, Twitter, and LinkedIn) and internet search (Google) (more details under Ethical Considerations). Editorial team/board members marked as consultants/advisors/methodologists/support team or any other role which was not designated as editor were not included in the study. However, trial search coordinators (TSC)/information specialists were included since they are an integral part of all editorial teams of CRGs. Statistical editors, associate editors, feedback editors, criticism editor, methods editor, consumer editor, senior editor, technical editor, co-scientific editor or those designated as editor in any category (including simply as editors) were classified under the “editor” category. All data were validated independently by the two authors and differences sorted by consensus.

### Ethical considerations

Since only data available in public domain websites were used and no clinical information was extracted, ethical clearance was not required. For social networking sites where the distinction between public and private space is not so clear, data were extracted only for individuals whose gender could not be determined by other methods. Individuals who had hidden their profile gender data under privacy settings of social networking sites were excluded from analyses.

### Data analysis

All data was extracted in Microsoft Excel 2007 and was then imported to Statistical Package for Social Scientists (SPSS for Windows, version 15; SPSS) for analyses.

## Results

A total of 788 editors were identified across all CRGs and the CEU of The Cochrane Collaboration. Gender was successfully ascertained for all editors. For those which required checking, within social networking sites for ascertaining gender no exclusions were required based on

**Table 1** Gender distribution across editorial roles of Cochrane review groups

Role	Gender	Frequency	Percentage (%)
Editor in chief	Male	1	100.0
Asst. or deputy managing editor/editorial asst. <sup>a</sup>	Female	25	96.2
	Male	1	3.8
	Total	26	100.0
Coordinating editor	Female	24	35.3
	Male	44	64.7
	Total	68	100.0
Deputy coordinating editor	Female	5	71.4
	Male	2	28.6
	Total	7	100.0
Editor <sup>b</sup>	Female	219	38.2
	Male	355	61.8
	Total	574	100.0
Managing editor <sup>c</sup>	Female	56	90.3
	Male	6	9.7
	Total	62	100.0
TSC/information specialist	Female	42	84.0
	Male	8	16.0
	Total	50	100.0

<sup>a</sup>Three individuals who had dual roles as assistant managing editor and TSC were classified in the assistant managing editor category.

<sup>b</sup>Statistical editors, associate editors, feedback editors, criticism editor, methods editor, consumer editor, senior editor, technical editor, coscientific editor or those designated as editor in any other category are classified under the editor category.

<sup>c</sup>Three individuals who had dual roles as managing editors and TSC were classified in the managing editor category.

privacy settings. There were three differences between the authors on the gender categorization and this was solved by rechecking the data and then reaching a consensus.

Overall there were 371 females (47.1%) and 417 (52.9%) males. The CEU which is organizationally the highest editorial body in the Cochrane Collaboration, and works to support all CRGs, and is led by a male Editor-in-chief but 62.5% of CEU editors were females. There were 68 coordinating editors in the different CRGs, 35.3% of whom were females and 62 managing editors, 56% of whom were females, who provide leadership to the CRGs. Eighty-four percent of TSC were found to be females. The gender distribution across various editorial roles in the CRG and CEU is given in Table 1.

## Discussion

A 2014 study (6) had found that the proportion of female editorial board members across six high impact general medical journals (Ann Intern Med, BMJ, JAMA, JAMA Intern Med, Lancet, NEJM) varied from 22.2% to 41.7%. In comparison the percentage of women editors in CRGs ranged from 15.4% to 100%. Ten CRGs had 75% or more of its editors as

females and 7 CRGs had 25% or less female editors. Other studies which have covered the issue of representation of women as editorial boards members, editors and editors in chief of medical journals (2, 4, 6–8) had reported lower rates of representation of women when compared to this study.

The study did not consider the existence of the third gender and all gender classification was either categorized as male or female. Future studies are needed to ascertain the proportion of women as authors, peer-reviewers and other roles in The Cochrane Collaboration. A larger study encompassing gender representation across various roles in Cochrane fields, centers, satellite and other entities is required. Studies on ethnic and regional diversities within editorial teams of CRG as well as other medical journals are also necessary.

## Conclusion

The representation of women in editorial positions of the CRGs (managing editor or coordinating editor) and the CEU of The Cochrane Collaboration is better than what was found in editorial boards of medical journals. There is however still a huge variation across CRGs particularly in editorial roles. There is scope for further improvement to ensure better gender diversity (for both men and women) across all roles and in all CRGs of the Cochrane Collaboration.

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