UC Davis
Dermatology Online Journal

Title
Editorial boards of dermatology journals and their potential financial conflict of interest

Permalink
https://escholarship.org/uc/item/198587m9

Journal
Dermatology Online Journal, 24(8)

Authors
Updyke, Katelyn M
Niu, Wei
St Claire, Chelsea
et al.

Publication Date
2018

DOI
10.5070/D3248041137

Copyright Information
Copyright 2018 by the author(s).This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at https://creativecommons.org/licenses/by-nc-nd/4.0/

eScholarship.org Powered by the California Digital Library
University of California

Editorial boards of dermatology journals and their potential financial conflict of interest

Katelyn M Updyke*[1] BS, Wei Niu*[1] MS, Chelsea St Claire[2] BS, Emma Schlager[2] BS, Michael Knabel[3] BS, Nicholas F Leader[4], Ryan M Sacotte[5] BS, Cory A Dunnick[6,7] MD, Robert P Dellavalle[6,7,8] MD PhD MSPH

*Shared first authors

Affiliations: [1]University of Central Florida College of Medicine, Orlando, Florida, USA, [2]Michigan State University College of Human Medicine, East Lansing, Michigan, USA, [3]Medical College of Wisconsin, Milwaukee, Wisconsin, USA, [4]Chicago Medical School at Rosalind Franklin University, Chicago, Illinois, USA, [5]Northwestern University Feinberg School of Medicine, Chicago, Illinois, [6]Department of Dermatology, University of Colorado School of Medicine, Aurora, Colorado, USA, [7]Dermatology Service, Eastern Colorado Health Care System, Denver, Colorado, [8]Department of Epidemiology, Colorado School of Public Health, Aurora, Colorado

Corresponding Author: Dr. Robert Dellavalle MD, PhD, MSPH, University of Colorado School of Medicine, Department of Veterans Affairs Medical Center, Dermatology Service, 1700 N Wheeling Street, Room E1-342, Aurora, CO 80045, Tel: (720) 857-5562, Fax: (303) 393-4686, Email: Robert.Dellavalle@ucdenver.edu

Abstract

Background: Financial relationships between editorial board members of peer-reviewed journals and pharmaceutical and medical device manufacturing companies can potentially lead to biases and loss of objectivity of the medical literature. The purpose of this study was to evaluate the potential financial conflicts of interest that exist among editorial board members of dermatology journals.

Methods: Editorial board members for 36 dermatology journals were identified and searched using the Open Payments database on the Center for Medicare and Medicaid Services website. The total amount of general payments made to these physician editors were collected and stratified using a tier system: 1) nothing reported, 2) >$0 and <$10,000, 3) >$10,000 and <$100,000, and 4) >$100,000.

Results: We identified 551 editors from 36 dermatology journals for use in our analysis. Some form of general payment was made to 87% of these physicians (480 of 551). Four journals had >25% of their editorial staff receiving >$100,000.

Conclusions: Financial relationships exist between editorial board members of dermatology journals and pharmaceutical/medical device manufacturing companies, which could lead to financial conflicts of interest. Publications coming from journals with highly paid physician editors have more potential to be biased.

Keywords: dermatology, editorial board, financial conflicts of interest, open payments

Introduction

Health care professionals utilize peer-reviewed journals to guide optimal medical management based on the most up-to-date scientific literature [1]. Editorial objectivity is based on the avoidance of economic and political biases [1-3], a role that can be compared to a judge in the judiciary system. Financial assistance from pharmaceutical companies to U.S. physicians has the potential to affect prescribing practices [4], and editorial peer-review [5-7]. The Patient Protection and Affordable Care Act requires the Center for Medicare & Medicaid Services (CMS) to collect payment data between U.S. physicians and related health care industries. This "Open Payments" program (http://openpaymentsdata.cms.gov) is available to the public and identifies pharmaceutical contributions to three areas, including 1) Non-research-related payments for travel, lodging, food, consulting, royalties, honoraria, etc.; 2) Research-related payments for direct fees and costs of conducting research; 3) Ownership payments including physician or family member ownership or interest in associated business entities. Our study used this "Open Payments" database to examine potential conflicts of interests among physicians

sitting on the editorial boards of dermatology journals.

Methods: Using the Thomson Reuters 2016 InCites Journal Citation Reports™ database, we identified all the dermatology journals reported to be active in 2016. We searched for the editorial staff using each journal's website. For JAMA Dermatology, Journal of Investigative Dermatology, and Journal of the American Academy of Dermatology, only those editors that were actively serving on the editorial staff during the June 2017 issues were included. After locating the editorial staff information for each journal, the names of all members of the editorial staff were included, including editor-in-chiefs and the editorial board. Non-U.S.-based editors, emeritus editors, and scientist editors (i.e. PhDs) were excluded from the study. Journals that did not have any non-scientist U.S.-based editors were excluded from the study. Journals that had U.S.-based editors, but insufficient data available to calculate means and medians were excluded from data analysis (i.e. two U.S.-based editors on the editorial board, but only one with information available on Open Payments Database).

Two authors independently searched the CMS database for the names of the U.S-based physicians who received general payments during the 2014, 2015, and 2016 calendar years. The search function on the CMS database included the physician's name, specialty, and geographic location, which were all used to ensure accurate data collection. General payments include, but are not limited to, payments for serving as faculty or as a speaker, consulting fees, food/beverage and travel/lodging costs, honoraria, and gifts. Payment data was rounded to the nearest dollar amount.

Payment data were categorized into four tiers: 1) Nothing reported, 2) >$0 and <$10,000, 3) >10,000 and <$100,000, 4) >100, 000. For each category, the percentages of editors who fell into these categories were calculated. This study did not require approval by the Institutional Review Board, as it did not contain human subject research and utilized publicly available data.

Results: Of the dermatology journals that were reported in the CMS database (n=36), the total number of U.S.-based physicians sitting on the editorial boards was calculated (n=551).

The number of U.S.-based physician editors sitting on each journal was highly variable, ranging from 0 to 118, with an average of 14. Some form of general payment was made to 87% of these physicians (480 of 551). *JAMA Dermatology* had the highest percentage (100%) of editors who received general payments, while *Burns* had the lowest percentage (56%).

Potential financial conflicts of interest were assessed based on 4 tiers of payment data: 1) Nothing reported, 2) >$0 and <$10,000, 3) >$10,000 and <$100,000, and 4) >$100, 000 (**Table 1**). Only 13% of physician editors fell into tier 1 (nothing reported). The majority (54%) of physician editors fell into tier 2 (>$0 and <$10,000) and 25% of physician editors fell into tier 3 (>$10,000 and <$100,000). A small percentage, 8% of physician editors fell into tier 4 (>$100,000).

The journals with the highest percentage of physician editors in tier 1 (nothing reported) were *Postępy Dermatologii i Alergologii* (100%), *Archives of Dermatological Research* (50%), followed by *Burns* (44%). The journals with the highest percentage of physician editors in tier 4 (>$100,000) were *Dermatology* (50%) and *European Journal of Dermatology* (33%). The top ten dermatologist-editors who received the highest general payments during the year 2016 are listed in **Table 2**.

Payment disputes were extremely rare. There were no payment disputes among the physician editors of 38 dermatology journals during the 2016 calendar year.

Discussion

There is an increasing awareness and concern regarding the adverse impacts of potential conflicts of interest in medicine [8]. Peer-reviewed literature has the potential to influence our medical decision-making and affects the care of our patients. Financial conflicts of interest may interfere with both

Table 1. *Summary general payments received during the year 2016 among United States-based physician editors on dermatology journal editorial boards. Dermatology journals without United States-based physician editors on their editorial board were not included.*

					Total Dollar Values			
Journal	Impact Factor	Total Number of Editors	Number of US-Based Physician Editors that are in the CMS	US Physician Editors Percentage	Nothing Reported	>$0 and <$10,000	>$10,000	>$100,000
JAAD	7.002	76	52	68%	8(15%)	31(60%)	8(15%)	5(10%)
JID	6.284	113	29	26%	8(28%)	16(55%)	2(7%)	3(10%)
JAMA dermatology	5.817	58	22	38%	0	18((82%)	2(9%)	2(9%)
Pigment Cell and Melanoma Research	5.17	58	11	19%	1((9%)	6(55%)	4(36%)	0
British Journal of Dermatology	4.706	113	17	15%	0	13(76%)	1(6%)	3(18%)
Contact Dermatitis	4.335	33	2	6%	0	2(100%)	0	0
Journal of Dermatological Science	3.733	74	7	9%	0	6(86%)	0	1(14%)
Journal of the European Academy of Dermatology and Venerology	3.528	52	4	8%	1(25%)	2(50%)	0	1(25%)
Wound Repair and Regeneration	3.041	47	8	17%	1(13%)	4(50%)	3(37%)	0
Journal der deutschendermatologischen gesellschaft	2.865	48	1	2%	0	1(100%)	0	0
International Wound Journal	2.848	64	6	9%	0	5(83%)	1(17%)	0
Skin Pharmacology and Physiology	2.756	34	2	6%	0	1(50%)	1(50%)	0
American Journal of Cinical Dermatology	2.755	34	16	47%	0	9(56%)	5(31%)	2(13%)
Experimental Dermatology	2.679	123	14	11%	0	9(64%)	4(29%)	1(7%)
Photodermatology, Photoimmunology & Photomedicine	2.662	38	7	18%	0	7(100%)	0	0
Melanoma Research	2.615	56	5	9%	0	3(60%)	2(40%)	0
Dermatological Clinics	2.591	1	1	100%	0	0	1(100%)	0
Dermatitis	2.403	43	24	56%	5(21%)	10(42%)	7(29%)	2(8%)
Dermatological Surgery	2.351	110	79	72%	11(14%)	42(53%)	24(30%)	2(3%)

Table 1 (Continued). *Summary general payments received during the year 2016 among United States-based physician editors on dermatology journal editorial boards. Dermatology journals without United States-based physician editors on their editorial board were not included.*

					Total Dollar Values			
Journal	Impact Factor	Total Number of Editors	Number of US-Based Physician Editors that are in the CMS	US Physician Editors Percentage	Nothing Reported	Journal	Impact Factor	Total Number of Editors
Archives of Dermatological Research	2.327	41	2	5%	1(50%)	1(50%)	0	0
Lasers in Surgery and Medicine	2.312	42	19	45%	6(32%)	7(37%)	4(21%)	2(10%)
Clinics in Dermatology	2.253	44	14	32%	2(14%)	8(57%)	4(29%)	0
Mycoses	2.252	45	2	4%	0	2(100%)	0	0
European Journal of Dermatology	2.243	43	3	7%	0	1(50%)	0	1(50%)
Journal of Dermatology	2.094	68	8	12%	2(25%)	3(38%)	2(25%)	1(12%)
Burns	2.056	51	9	18%	4(44%)	3(34%)	1(11%)	1(11%)
Journal of Dermatological Treatment	1.89	45	12	27%	0	5(42%)	4(33%)	3(25%)
Journal of Cosmetic Dermatology	1.764	58	21	36%	1(5%)	8(37%)	10(48%)	2(10%)
Journal of Drugs in Dermatology	1.708	158	118	75%	14(12%)	50(50%)	36(30%)	9(8%)
Postępy Dermatologii i Alergologii	1.683	93	1	1%	1(100%)	0	0	0
Skin Research and Technology	1.662	27	5	19%	0	3(60%)	2(40%)	0
Dermatology	1.598	31	2	6%	0	0	1(50%)	1(50%)
International Journal of Cosmetic Science	1.581	51	2	4%	0	0	2(100%)	0
International Journal of Dermatology	1.56	64	9	14%	2(22%)	6(67%)	0	1(11%)
Uptodate		23	15	65%	4(27%)	6(40%)	5(33%)	0
Dynamed		6	2	33%	0	2(100%)	0	0

reporting and evaluation of medical research [9, 10]. The peer-review process may be manipulated or distorted by professional conflicts in publication ethics, which undermine the goal of objectivity [11, 12]. Of the various types of competing interests in medicine, the financial, especially pharmaceutical industry-physician relationships, tops the hierarchy of conflicts of interest in medicine [11, 13, 14]. Although the Open Payments Database assists in transparency among conflicts of interest, companies who do not yet market a drug approved by the FDA are not required to report payments to physicians, thus resulting in a loophole for a small segment of the market [15]. The potential financial conflict of interest among U.S.-based authors sitting on the editorial boards of academic journals has not been fully studied [2].

Most academic journals have policies in place to help minimize or prevent conflicts of interests in publishing. *JAMA Dermatology* and *Journal of the American Academy of Dermatology* both require authors and editors to submit disclosure statements of any potential conflicts of interest with the intent that physician-editors involved in the decision to publish certain articles do not have any bias.

Analyzing the dermatology journals using the common threshold of <$10,000, we found rates of potential conflict of interest among journal authors as low as 6% to as high as 100%. We identified four dermatology journals in which 25% to 50% of the editorial board accepted above the $100,000 threshold in general payments. These findings can be related to a study published by Mehlman et al. who evaluated potential financial conflicts of interest among physician editorial board members of 15 orthopedic surgery journals. Using the <$10,000 threshold, they found potential conflict of interest rates between 4% to 73%, with the highest rates noted for *Foot Ankle International* (73%) and *Spine Deformity* (66%), [7]. Comparable rates were found between our study and the work by Mehlman et al., which highlights interesting similarities in potential conflicts of interest across editorial boards of different medical specialties.

Financial conflicts of interests have been recently explored among other physician specialties through the Open Payments Database. Fleischman et al. identified 46,405 non-research, nonroyalty payments from industry, totaling $10,693,310. These payments were received by 12,883 (30%) active emergency medicine physicians in 2014, which was a considerably lower number of physicians when compared to other specialties. Active physicians within specialties receiving payments ranged from 14.6% in preventative medicine to 91% in orthopedic surgery. Approximately 65% of active dermatologists received general payments with total pay per physician ranging from $100 to $5,000 [16]. The concentration of these payments among physicians in specialties suggested a need for further analysis of the nature of these financial relationships, as well as their potential to influence the clinical standards within their respective fields [17]. Moreover, Perlis et al. explored the impact of industry sponsorship on financial conflicts of interest within dermatology research and found that the 43% of analyzed studies containing at least one author with a reported conflict of interest were more likely to report a positive result than those studies without authors with reported conflict of interest [18]. Finally, Checketts et al. found that of the 49 authors of dermatology clinical practice guidelines, 40 received industry payments. Twenty-two of those receiving industry payments inaccurately disclosed industry relationships, thus demonstrating a need for improved enforcement of clinical practice guidelines or revision of the standards [19]. An editorial raises questions regarding the significance of these finding

Table 2. *The top ten physician-editors who received the highest amount of general payments during the year 2016 and their affiliated journals*

Physician	Total General Payments Received in 2016	Affiliated Journal
Molly A Henshaw	$683,103	JAMA Dermatology
Steven R Feldman	$586,771	British Journal of Dermatology
Mary C Spellman	$497,797	Journal of American Academy of Dermatology
Leon H Kircik	$464,434	Journal of Drugs in Dermatology
Joel M Gelfand	$402,694	Journal of Investigative Dermatology
James Q Del Rosso	$342,999	Journal of Drugs in Dermatology
Brian Biesman	$324,114	Lasers in Surgery and Medicine
Jeffrey M Weinberg	$312,638	Journal of Drugs in Dermatology
Francisco A Kerdel	$305,562	Journal of Dermatological Treatment
David J. Goldberg	$276,792	Lasers in Surgery and Medicine

and calls for the AAD to increase transparency and perform its own audits regarding adherence to administrative regulations [20].

Leavitt et al. evaluated the relationship between financial disclosure and study findings/validity in all clinical breast and cosmetic articles in *Plastic and Reconstructive Surgery* and *Annals of Plastic Surgery* published in 2013, and compared the findings to articles from *Dermatology* and *Journal of Bone and Joint Surgery*. Conflicts of interest were statistically greater in *Plastic and Reconstructive Surgery* (7.7%) compared to *Dermatology* (2.2%); however, this demonstrates that the peer-review process of leading journals in each medical specialty presents a true conflict of interest, including dermatology [21].

In the year 2014, Feng et al. found that 8333 dermatologists received 208,613 payments, totaling >$34 million. The top 10% of dermatologists received more than $31.2 million (90% of total payments). These payment entries were mostly comprised of food and beverage fees (13%), speaker fees (31.7%), consulting fees (21.6%), and research payments (16.5%). Furthermore, the top 15 companies were all pharmaceutical manufacturers, paying dermatologists $28.7 million. Although dermatologists received a substantial amount of payments from the pharmaceutical industry in 2014, the impact on patient care and physician practice patterns remains unclear and further studies evaluating payments to individual dermatologists are needed [22]. One must remember that prominent dermatologists on editorial boards are also highly valued as speakers and likely to receive more invitations. This does not necessarily impact their objectivity.

Conclusion

The mean for receiving general open payments for the 2016 calendar year within the field of dermatology is approximately $5,000. One could argue that the average value that editorial board physicians receive in general payments should reflect that of the general dermatology specialty average. As a specialty, we should ask ourselves: at what point does financial conflict of interest become a concerning issue? Studies have shown that once physicians receive payments of $5,000, they begin to alter their behavior [23]. Although conflict of interest bias may not increase proportionately with financial incentives, it is not likely to decrease the bias either. Thus, there is no true way to estimate or adjust for potential biases that stem from some of these multimillion-dollar financial relationships [23, 24]. Further studies on the effects of these financial conflicts of interest on medical decision making are needed.

References

1. Lundberg GD. The role and function of professional journals in the transfer of information. Int *J Technol Assess Health Care*. 1988;4(1):51-8. [PMID: 10287115].
2. Ray JG. Judging the judges: the role of journal editors. *QJM*. 2002;95(12):769-74. [PMID: 12454319].
3. Editorial freedom. *Br Med J*. 1988;(297):1182. [PMCID: PMC2545789].
4. Wazana A. Physicians and the pharmaceutical industry: is a gift ever just a gift? *JAMA*. 2000;283(3):373-80. [PMID: 10647801].
5. van Kolfschooten F. Conflicts of interest: can you believe what you read? *Nature*. 2002;416(6879):360-3. [PMID: 11919595].
6. Janssen SJ, Bredenoord AL, Dhert W, de Kleuver M, Oner FC, Verlaan JJ. Potential conflicts of interest of editorial board members from five leading spine journals. *PloS one*. 2015;10(6):e0127362. [PMID: 26042410].
7. Mehlman CT, Okike K, Bhandari M, Kocher MS. Potential Financial Conflict of Interest Among Physician Editorial Board Members of Orthopaedic Surgery Journals. *J Bone Joint Surg Am*. 2017;99(5):e19. [PMID: 28244918].
8. Luce EA. Financial conflicts of interest in plastic surgery: background, potential for bias, disclosure, and transparency. *Plast Reconstr Surg*. 2015;135(4):1149-55. [PMID: 25285680].
9. Gjersvik P. Conflicts of interest in medical publishing: it's all about trustworthiness. *Br J Dermatol*. 2015;173(5):1255-7. [PMID: 26769646].
10. Barbour V. Competing interests in journal editors. *BMJ*. 2017;359:j4819. [PMID: 29074639].
11. Anstey A. Conflicts and heuristics in dermatology: time to ask ourselves, 'What might I do in this situation?'. *Br J Dermatol*. 2015;173(3):631-2. [PMID: 26404569].
12. Liu JJ, Bell CM, Matelski JJ, Detsky AS, Cram P. Payments by US pharmaceutical and medical device manufacturers to US medical journal editors: retrospective observational study. *BMJ*. 2017;359:j4619. [PMID: 29074628].
13. Fletcher RH, Black B. "Spin" in scientific writing: scientific mischief and legal jeopardy. *Medicine and law*. 2007;26(3):511-25. [PMID: 17970249].

14. Carragee EJ, Ghanayem AJ, Weiner BK, Rothman DJ, Bono CM. A challenge to integrity in spine publications: years of living dangerously with the promotion of bone growth factors. *Spine J.* 2011;11(6):463-8. [PMID: 21729794].
15. Silverman E. Here's how a loophole in a transparency law can distort medical practices. 2017 Available from: https://www.statnews.com/.2017/10/09/loophole-pharma-payments/. Accessed on February 10, 2018.
16. Fleischman W, Ross JS, Melnick ER, Newman DH, Venkatesh AK. Financial Ties Between Emergency Physicians and Industry: Insights From Open Payments Data. *Ann Emerg Med.* 2016;68(2):153-8.e4. [PMID: 26973175].
17. Furno R, Agrawal S. The Open Payments Program and the Emergency Physician. *Ann Emerg Med.* 2016;68(2):159-61. [PMID: 27033140].
18. Perlis CS, Harwood M, Perlis RH. Extent and impact of industry sponsorship conflicts of interest in dermatology research. *JAAD.* 2005;52(6):967-71. [PMID: 15928613].
19. Checketts JX, Sims MT, Vassar M. Evaluating Industry Payments Among Dermatology Clinical Practice Guidelines Authors. *JAMA Dermatol.* 2017;153(12):1229-35. [PMID: 29049553].
20. Katz KA. Industry Influence in Dermatology Clinical Practice Guideline Development. *JAMA Dermatol.* 2017;153(12):1219-20. [PMID: 29049541].
21. Leavitt A, Pace E, Reintgen C, Mast BA. The Effect of Financial Conflicts of Interest in Plastic Surgery Literature. *Ann Plast Surg.* 2016;76 Suppl 4:S357-8. [PMID: 26678100].
22. Feng H, Wu P, Leger M. Exploring the Industry-Dermatologist Financial Relationship: Insight From the Open Payment Data. *JAMA Dermatol.* 2016;152(12):1307-13. [PMID: 27706478].
23. Carragee EJ, Baker RM, Benzel EC, et al. A biologic without guidelines: the YODA project and the future of bone morphogenetic protein-2 research. *Spine J.* 2012;12(10):877-80. [PMID: 23199819].
24. Gelberman RH, Samson D, Mirza SK, Callaghan JJ, Pellegrini VD, Jr. Orthopaedic surgeons and the medical device industry: the threat to scientific integrity and the public trust. *J Bone Joint Surg Am.* 2010;92(3):765-77. [PMID: 20194337].