Female dermatology journal editors accepting pharmaceutical payments: An analysis of the Open Payments database, 2013 to 2018

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A B S T R A C T

Background: Pharmaceutical payments may affect the interpretation of clinical research and prescribing patterns of physicians. Additionally, they may reflect gender disparities in academic dermatology with regard to social recognition and opportunities for career advancement.

Objective: We examined relationships with industry among male and female journal editors who accepted pharmaceutical payments in leading dermatology journals.

Methods: We assessed the seven US journals among the leading 20 dermatology journals as determined by impact factor and gathered data via the CMS Open Payments dataset.

Results: In a cross-sectional study of 329 editors eligible to appear in the Open Payments website, we found that 218 (66.3%) received industry payments totaling $2,195,240. The mean and median dollar value of payments per editor was $100,699 and $3,638 (interquartile range, $364–$57,108). Food and beverage payments accounted for 63.0% of the $28,992 total payments, and the associated dollar value was $887,617 (4.0%). Gender disparities in corporate payments were observed in other contexts, but we did not find a similar relationship among leading dermatology journals.

Conclusion: Our work highlights that pharmaceutical payments exist among dermatology editors, providing a rationale for future research to address whether editor bias related to pharmaceutical payments exists and more granular studies on the role of gender with regard to navigating such payments.

Introduction

Pharmaceutical payments may affect the interpretation of clinical research and prescribing patterns of physicians. One study found that >8,300 dermatologists in the United States received >$34 million in industry payments in 2014 (Feng et al., 2016). A growing area of research has similarly uncovered industry relationships among dermatologists in various contexts, including patient advocacy organizations and clinical guidelines (Li et al., 2019; Wise, 2017). Such financial relationships may have an impact in publishing academic research, where journal editors have significant influence in disseminating knowledge and highlighting practice changing evidence.

At the same time, industry funding may reflect one’s advancement in the academic community, serving as an acknowledgment that one is a key opinion leader in industry, and provide career benefits including enhanced access to research funding and recognition by peers (Sismondo, 2013; Weng et al., 2019). This makes pharmaceutical payments a possible marker of gender disparities in academic dermatology, particularly given the lack of women serving as dermatology journal editors and a large number of journals that have yet to have a female editor-in-chief (Gollins, 2017). Furthermore, according to Weng et al. (2019), “female physicians may be more likely to avoid ethically ambiguous partnership that may compromise appropriate clinical decision-making or add unnecessary cost to the health care system.” Accordingly, we sought to examine the hypotheses of career advancement and ethical decision-making by inspecting the degree of gender disparities in relationships with industry among journal editors in leading dermatology journals who accepted pharmaceutical payments.

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Methods

We assessed the seven US journals among the leading 20 dermatology journals as determined by impact factor. This was done in accordance with previous studies observing that industry payments are concentrated among editors of high-impact factor journals in the field (Janssen, 2015). Editor names and position (chief, associate, or assistant) were extracted from journal websites and were matched with the CMS Open Payments general payment dataset for all available years from 2013 to 2018 (Centers for Medicare and Medicaid Services, 2020). Gender was independently determined by two raters based on the physician’s name and a manual Internet search using information listed on the Open Payments physician profile. General payments refer to transfers of value to physicians not related to a research protocol or agreement. We examined the degree of gender disparity by comparing the total dollar value, volume, and form of industry payments. The two-sample t-test was used to compare mean values between male and female editors.

Results

This was a cross-sectional analysis of seven dermatology journals and a total of 571 editors, 329 of whom were US-licensed physicians and thereby eligible to appear in the Open Payments website. Among these editors, 218 (66.3%) received industry payments totaling $21,952,402 from 2013 to 2018, and the mean and median dollar values of payments per editor were $100,699 and $3638, respectively (interquartile range, $364-$57,108).

The mean and median number of payments per editor was 133 and 28, respectively (interquartile range, 5-151). As displayed in Table 1, the largest dollar value of payments was attributed to consulting fees (36.53%), followed by compensation for speaking (34.71%) and travel and lodging (10.27%). Table 2 displays payment information by category for female editors, also showing that these were the most significant payment categories for them. Food and beverage payments accounted for 63.0% of the 28,992 total payments, and the associated dollar value was $887,617 (4.04%).

With regard to gender, 61.9% of included editors (n = 135 of 218 editors) were male, accounting for $14,742,684 (67.2%) of the total dollar value of payments; the 38.1% of editors (n = 83 of 218) who were female represented 32.8% ($7,209,718) of the total dollar value. The gender proportion of the editorial position was also similar, with 29.7% of male editors and 28.9% of female editors being at least an associate editor. Between female and male editors, the mean number of payments per editor (1279 vs. 140.7 payments; p = .718) and mean total dollar value of payments per editor ($83,864 vs. $160,300; p = .568) were not significantly different.

Our analysis also characterized financial relationships with industry by other journal characteristics. The 62 associate editors in the sample had a mean dollar value of $89,343 (median: $1,856) in payments per editor. In contrast, 154 assistant editors received a mean value of $104,016 (median: $4,646) in dollar value per editor. For the two chief editors based in the United States who received industry payments, one received 30 payments for a sum of $2437 and the other received three payments for a sum of $122.

Fig. 1 plots the relationship between impact factor and median dollar value of payments per editor. There are too few data points to be conclusive, but the journals with the two highest impact factors were associated with the second and third lowest payment amounts.

Discussion

This study establishes the presence of substantial financial relationships with industry among editors of leading dermatology journals. Although many editors do not have significant ties to pharmaceutical companies, 19.7% (n = 43 of 218) received >$100,000 and account for nearly 91% of total payments in dollars, explaining the consistent discrepancy between mean and median values reported. None of the journals investigated reported industry payments to editors on their respective websites, and only two journals acknowledged editor relations with industry.
Although gender disparities in corporate payments have been observed in other contexts, including urology (Velez et al., 2020) and radiation oncology (Weng et al., 2019), we did not find a similar relationship among leading dermatology journals. This could be explained by a number of factors. First, this could indicate a selection problem; female dermatology editors in top academic positions may not be representative of female dermatologists in general. However, within our sample, we did not find evidence that seniority of editor position was associated with holding more pharmaceutical relationships. Second, although male editors outnumber female editors, industry payments typically reflect professional advancement (Weng et al., 2019). Based on this alone, it would not be surprising if the degree of funding were similar between gender or other demographic groups. This does not exclude the possibility that women in academic dermatology encounter unique difficulties in advancing their career. Interestingly, among the 43 editors who received $100,000, only 15 (34.9%) were female.

Limitations of our study include the cross-sectional design, limited number of journals queried, and the possibility that journal editors may not have held positions during the period of inquiry (2013–2018). Furthermore, we cannot determine whether the lack of payment differences by gender is related to a selection problem, financial incentives, career motivation, or personal concerns about accepting money from pharmaceutical companies.

There is no explicit evidence that pharmaceutical payments influence editorial actions and individual publication outcomes. At the same time, our work does highlight that pharmaceutical payments exist among dermatology editors, providing a rationale for future research to address whether editor bias related to pharmaceutical payments exists. Future research can further explore the impact of gender by controlling for research productivity and years since completing residency. Removing all forms of editor bias is impossible; thus, we suggest that journals reevaluate their conflicts of interest policies to be in line with changing practices across science calling for full disclosure (International Committee of Medical Journal Editors, 2020) to enhance readership trust and editorial transparency.

**Conclusion**

There are significant relationships with industry among journal editors who accepted pharmaceutical payments in leading dermatology journals. These may be a natural extension of one’s career output. We did not find evidence that gender or seniority is associated with pharmaceutical relationships, but we encourage journals to refine their conflicts of interest policies to promote full disclosure of editors.

**Conflict of interest**

None.

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None.

**Study approval**

The author(s) confirm that any aspect of the work covered in this manuscript that has involved human patients has been conducted with the ethical approval of all relevant bodies.

**Supplementary materials**

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.jiwd.2021.02.008.

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