

## **Abstract:**

### **Gender Composition of Peer Reviewers for Family Medicine Journals**

Vanessa Rose, MD

PGY 3 Resident, Northwestern McGaw Family Medicine at Lake Forest

#### **Background**

A strong publication record is essential to career advancement in academia, and peer reviewers often act as scientific gatekeepers within the academic publishing model. As the process of peer review is imperfect and relies heavily on subjective opinions of individuals, this is an area susceptible to bias. In this study, we present empirical explorations of the gender composition of peer reviewers for family medicine journals during the 2019 – 2020 calendar years.

#### **Methods**

We analyzed the proportion of women serving as peer reviewers for four prominent family medicine journals, including: the Journal of the American Board of Family Medicine (JABFM), Family Medicine (Fam Med), American Family Physician (Am Fam Phy), and the Annals of Family Medicine (Ann Fam Med). Reviewer data were published in print or via social media websites by each journal to acknowledge reviewers for their service. Gender was derived algorithmically using the genderizeR package for the R programming language. The exact binomial test was used to compare proportions of female reviewers to the hypothesized value of .50.

#### **Results**

Overall, women comprised 46% of the peer reviewers in our sample. Data were further disaggregated to determine if specific publications employ more women reviewers. Women were underrepresented as peer reviewers in Ann Fam Med (observed proportion = .42), Am Fam Phy (observed proportion = .32), and JABFM (observed proportion = .44) compared to the hypothesized proportion of .50. Family Medicine was the only journal in our sample with a greater proportion of women reviewers (observed proportion = .56) compared to our hypothesized benchmark.

#### **Conclusions**

This study found gender disparities among peer reviewers in prominent family medicine journals. Limitations in the data do not allow us to explore article submission decisions among peer reviewers of different genders. Further research may be warranted to clarify the impact of gender in peer review processes, and to identify interventions to mitigate gender disparities in academic publishing and the broader field of academic medicine.