

## GENDER DIFFERENCES IN ACADEMIC PUBLICATIONS

Carlos Jaquez (BS), MD Candidate at the University of Colorado School of Medicine;  
Jody Vogel (MD), Department of Emergency Medicine, Denver Health Medical Center,  
Denver, CO; University of Colorado School of Medicine, Aurora, CO.

### **Introduction**

Participation of women in medicine has increased over time. However, there are disparities in the gender of authors of original research and editorials in the medical literature. This is unsurprising given the overall gender inequality in academic medicine including differences in salary, availability of mentorship and sponsorship, research funding, and career flexibility affecting both recruitment and retention efforts of females. Gender equality in science, medicine, and global health is significant as it contributes to substantial health, social, and economic improvements within society. Previous investigations have demonstrated that women authors compose a minority of editorials and original research articles in major medical journal. However, limited data are available on more recent trends in academic publications by gender.

### **Methods**

The following article types were included in the study: original research articles, review articles, and editorials. These article types from six discrete years (1993, 1998, 2003, 2008, 2013, and 2018) which were written in English with either the first or last author from the United States, in the following journals were included in the study: New England Journal of Medicine (NEJM), Journal of the American Medical Association (JAMA), Annals of Internal Medicine, Annals of Surgery, Obstetrics and Gynecology, and Pediatrics.

## **Results**

In this investigation, 22,049 articles were identified within the time frame in question and of those, [\*\*\*] articles were included while [\*\*\*] were excluded. The observed proportion of female first authors was [\*\*\*]% in 1993 and [\*\*\*]% in 2018 demonstrating an increasing trend ( $p < [***]$ ). The observed proportion of female last authors over the study time period was [\*\*\*]% in 1993 and [\*\*\*]% in 2018, demonstrating an increasing trend ( $p = [***]$ ).

## **Discussion**

Our investigation demonstrated an increase in the proportion of female first and last authors in the academic publications in the articles evaluated for this investigation. However, across the 25-year study time period, female authors comprised the minority of authors in academic publications.