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Impact of Gender on Requests for ASGE Leadership Assignments

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Abstract

Background and Aims—Committee membership in gastroenterology (GI) national societies is considered prestigious, opening the door for leadership roles and professional advancement. Some have hypothesized that women ask for leadership opportunities less frequently than men. Our aim was to examine the gender representation of requests for placement on an American Society for Gastrointestinal Endoscopy (ASGE) committee.

Methods—We analyzed de-identified records of all requests for assignment to ASGE committees from 2011 to 2014 including applicant's gender, prior service to ASGE, year of application, and whether the applicant was appointed. The primary outcome was the proportion of requests from women compared with the overall ASGE female membership.

Results—There were 513 requests for ASGE committee appointments; 101 (20%) were from women, exceeding active ASGE female membership (15%; $p=0.004$). Overall, the total number of committee requests increased over time from 89 to 195 ($p=0.08$); the proportion of requests from women remained stable at 16% to 21% ($p=0.51$). Compared with men, women were significantly less likely to have had previous ASGE service (28% vs 42%; $p=0.01$) and more likely to have a statement of endorsement from a mentor (33% vs 24%; $p=0.06$). The rate of appointment to a committee was 47% (95% CI, 41 – 52) overall, 42% (95% CI, 37 – 48) for male applicants and 65% (95% CI, 54 – 76) for female applicants. Female gender (OR, 2.6; 1.5–4.5), endorsement

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from a mentor (OR, 3.4; 2.1–5.6), and prior ASGE service (OR, 2.3; 1.5–3.5) predicted committee appointment.

Conclusions—For ASGE committee appointments, it appears that women who make requests are successful in receiving these appointments. Future work should evaluate requests and appointments by gender among other gastroenterology societies and explore whether service translates into leadership opportunities for women.

Keywords

committee; gender; disparities

Introduction

The proportion of women in the field of medicine, including gastroenterology, is increasing. In 1972, only 9% of medical school graduates were female compared with 40% by 1996.¹ Since 2005, women have comprised nearly 50% of medical school graduates.² Over the last 30 years, the proportion of women entering gastroenterology fellowships has tripled, increasing from 11% in 1992 to 33% in 2012.^{3,4} Despite these advances, however, the percentage of women in leadership positions remains low.^{5,6} Within academic medicine, only 20% of professors and 32% of associate professors are women.⁶ Female professors make up only 5% of all fulltime faculty at U. S. medical schools compared with male professors who make up 19% of all fulltime faculty. Similarly, women hold fewer leadership positions; only 22% of division or section chiefs, 14% of department chairs, and 12% of medical school deans are women. Although the specific factors accounting for the low rates of women in leadership roles in medicine remain unclear,⁷ some have hypothesized that women may ask for leadership opportunities less often than men.⁸

Committee membership in gastroenterology (GI) national societies is considered prestigious, opens the door for leadership roles, and contributes to the development of a national reputation, promotion within an academic institution, and overall professional advancement.⁹ A review in 2007 found that women occupied 11% of top gastroenterology society leadership (defined as president, past-president, president-elect) and editorial boards (defined as editor, coeditor, editor-in-chief).⁹ This rate was on par with the proportion of women in gastroenterology at the time. Given that committee work and its contributions are factors that may help identify individuals for society leadership, we sought to examine whether women make requests for such appointments. There are no existing data on the rates of requests and appointments by gender for committee membership within professional medical societies. Therefore, the aim of this study was to examine the gender representation of requests for placement on an American Society for Gastrointestinal Endoscopy (ASGE) committee.

Methods

Setting

The ASGE is a not-for-profit organization dedicated to advancing patient care and digestive health by promoting excellence and innovation in gastrointestinal endoscopy. The ASGE

has 24 committees with specific charges. Members may apply to serve on a committee by self-nomination and have the option of including a curriculum vitae (CV) and having a mentor write a letter of recommendation. The ASGE president-elect then selects nominees for committee appointment for up to a 3-year term.

Approach and variables

De-identified records of all requests for assignment to ASGE committees from 2011 to 2014 were analyzed. Data included applicant's gender, whether a CV was included with the application, prior service to ASGE, supporting mentor endorsement, gender of mentor, year of application, and whether the applicant was subsequently appointed to a committee. Applicant and mentor gender were identified by personal knowledge of the applicant by one author (CMS), by self-identification, or by evaluation of the applicant's CV or on-line resources including institutional materials available on-line.

Outcomes

The primary outcome was the proportion of requests from women compared with the overall ASGE female membership. An additional outcome was the identification of independent predictors of successful appointment including applicant gender, inclusion of CV or mentor support with application, gender of mentor, and prior ASGE service.

Statistical analysis

We performed descriptive statistics, reporting frequencies and proportions with 95% confidence intervals (CI) where appropriate. Categorical variables were compared using chi-square test or Cochran-Armitage test for trend where appropriate. Univariable logistic regression was used to evaluate the association between a single predictor and the likelihood of appointment to a committee. Multivariable logistic regression was used to model the likelihood of appointment to a committee accounting for variables significant in univariable analysis. In terms of sample size consideration, we sought to include all available requests over the most current 3-year period. We estimated that with 500 total requests, any point estimate of frequency would have a 95% CI of ± 0.04 , which would provide adequate precision. This study used de-identified data that did not contain any HIPAA-protected information and thus was considered exempt from IRB review.

Results

Between 2011 and 2014, there were 513 requests for ASGE committee appointments, of which 101 (20%) were from women, exceeding the proportion of women who were active ASGE members (15%) over the same time period ($p=0.004$). Although the number of committee requests increased over time from 89 to 195 ($p=0.08$) per year, the proportion of requests from women remained stable ranging from 16% to 21% ($p=0.51$) (Figure 1). Compared with men, women were significantly less likely to have had previous ASGE service (28% vs 42%; $p=0.01$). Women, however, were more likely to have a statement of endorsement submitted by a mentor (33% vs 24%; $p=0.06$). Applicant gender was not associated with the gender of the mentor, with both women and men receiving support from women infrequently (9% each). The percentage of applications that included a CV increased

over time from 55% in 2011 to 86% in 2014 ($p<0.0001$) and did not differ by gender ($p=0.97$).

The overall rate of appointment to a committee was 47% (95% CI, 41 – 52). The rate of appointment for male applicants was 42% (95% CI, 37 – 48) compared with 65% (95% CI, 54 – 76) for female applicants. Female gender predicted the likelihood of appointment to a committee with an odds ratio (OR) of 2.6 [95% CI, 1.5 – 4.5] (Table 1). Endorsement from a mentor (OR, 3.4; 95% CI, 2.1 – 5.6) and prior ASGE service (OR, 2.3; 95% CI, 1.5 – 3.5) were also predictors of committee assignment. In a multivariable analysis including gender, endorsement from a mentor, and prior ASGE service, female gender remained a significant predictor of committee appointment (adjusted OR, 2.9; 95% CI, 1.6 – 5.2) as did endorsement from a mentor (adjusted OR, 3.6; 95% CI, 2.2 – 6.1) and prior ASGE service (adjusted OR, 2.5; 95% CI, 1.6 – 4.0).

Discussion

In this gender evaluation of requests for appointment to committees of the ASGE, the rate that women make requests (20%) exceeds the female active membership (15%). In addition, female gender was associated with 3 times increased odds of successful appointment. These data suggest that women *do* ask for service opportunities within a national GI society and are more likely to be given opportunities compared with men when they do ask.

To our knowledge, this is the first study to examine *requests* for committee assignments within a medical professional society. A study of otolaryngologists found that female representation in specialty society leadership positions was proportionate to their membership across all societies; however, women were underrepresented as directors, chiefs and chairs of departments.¹⁰ Morton et al⁹ quantified the percentage of top leadership positions within professional societies and editorial boards held by women and found that for gastroenterology, the rate was similar to the proportion of women in the field. In 2004, only 5.6% and 14.3% of board members of the American Gastroenterological Association and the American College of Gastroenterology, respectively, were women.⁹ A recent study of the gender distribution of faculty of ASGE-sponsored programs found that there was a significantly increasing trend of female faculty participation in ASGE programs, most notably as lecturers and course directors.¹¹ Overall, the proportion of female ASGE-sponsored program faculty exceeded that of its general membership.

Although existing literature suggests that women are less likely than men to aspire to leadership roles,¹² women in gastroenterology and those who have chosen to become members of ASGE may be a select group with perhaps more willingness to take on responsibility and leadership roles at least in the form of committee membership. Training within a procedure-based specialty and for a subset, choosing to acquire advanced procedural training may differentiate ASGE members from general gastroenterologists or internists. Perhaps the former may be more assertive, more likely to seek higher levels of support and advancement, and more likely to aspire to leadership roles than other non-procedural based fields in medicine. Women in this study were more likely to have a mentor letter of endorsement in their application, suggesting perhaps that mentors encouraged them

to pursue committee membership or that they consulted with mentors before applying. Alternatively, younger applicants may be more likely to seek out a mentor letter of support because they would not have prior service as a qualification, and perhaps female applicants to ASGE leadership roles were earlier in their career paths. Furthermore, although the ASGE has typically represented a specialty of medicine that has been male-dominated, one of ASGE's long-held objectives has been to eliminate disparities in healthcare for patients with GI diseases and conditions, and as such, the society leadership has actively sought a diverse membership including women. As more women at the senior level take on leadership roles, it is likely that women earlier in their career will also participate, speaking to the importance of role models and mentorship in this arena. Interestingly, there is some literature to support that women are evaluated for promotions primarily on performance, whereas men are often promoted on potential,¹³ thus making professional society work even more valuable for career advancement for women.

The strengths of this study include its novelty in evaluating requests for committee appointment in addition to actual rates of appointment. This provides insights into how often women ask for leadership opportunities, and the results from our study are clearly encouraging. These data provide one piece of a larger puzzle in understanding potential gender disparities in gastroenterology leadership.

We acknowledge several limitations. We did not have access to other variables such as age of applicant, years since completion of training, number of attempts at committee assignment, nor duration and quality of prior ASGE service, all of which might impact interpretation of the results. In particular, addition of these variables might provide further insights into the impact of gender on committee requests and appointments and whether specific variables like age and years since completion of training confound this relationship. Female members of the ASGE tend to be younger than male members, with women making up 31% of ASGE members <40 years old (21%) compared with only 11% of ASGE members <40 years old (79%). If the average age of applicants to ASGE committees is <40 years old, then it is possible that women make requests for committee assignment at a lower rate than expected. We also did not have access to other demographic information such as geographic location, practice setting, or career track. Based on our study, we cannot comment on whether appointment to a committee translated directly into other leadership opportunities, such as committee chair, board of directors, or promotion. Last, our data are limited to one society focused on endoscopy and provides a snapshot regarding a specific group of gastroenterologists. Nationally, 15% of active practicing gastroenterologists are female,¹⁴ and the proportion of female membership in the ASGE (15%) mirrors this well. It would be interesting to evaluate all GI societies for a comprehensive overview and to compare whether the findings in this study are seen among other GI societies and vary by sub-specialty (eg, general GI, hepatology, inflammatory bowel disease).

In conclusion, based on the available data, it appears that women who make requests for ASGE committee roles are successful in receiving these appointments. In other words, women in the ASGE *do* ask and when they do, they are likely to receive. This study sets the stage for future gender evaluations in gastroenterology and at the society level to identify areas to target gender disparity interventions. Future work should evaluate requests and

appointments by gender among other gastroenterology societies and explore whether ASGE service translates into leadership opportunities for women.

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Acronyms

ASGE	American Society of Gastrointestinal Endoscopy
CI	Confidence intervals
CV	Curriculum vitae
GI	Gastroenterology

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Figure 1. Number of ASGE committee assignment requests between 2011 and 2014 by year and the proportion of requests from women versus men. There was no significant increase in the proportion of requests from women over time ($p=0.51$).

Table 1

Effect of variables on the likelihood of committee appointment.

Variable	Likelihood of Committee Appointment			
	Unadjusted		Adjusted	
	Odds Ratio (95% CI)	<i>P</i> value	Odds Ratio (95% CI)	<i>P</i> value
Female gender	2.6 [1.5–4.5]	0.001	3.0 [1.7–5.4]	0.0003
Prior ASGE service	2.3 [1.5–3.5]	0.0002	2.9 [1.8–4.6]	<0.0001
Endorsement from mentor	3.4 [2.1–5.6]	<0.0001	3.6 [2.2–6.1]	<0.0001