Gender Disparities in Gastroenterology Fellowship Director Positions in the United States

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AAMC Data from 2013 show women are:
- 46.1% of trainees across all specialties
- 35.2% of Gastroenterology trainees
- 15% of practicing gastroenterologists

Background

2. GIE 83.4 (2016): 734-735
Background: Pipeline of women in academic medicine

3. Women in Academic Medicine AAMC Available at: http://www.aamc.org
Background: Full time academic faculty in 2014

Women

- Assistant Professor: 50%
- 19% Associate Professor
- 13% Full Professor
- 3% Other
- 15% Instructor

Men

- 30% Full Professor
- 22% Associate Professor
- 2% Other
- 7% Instructor
- 39% Assistant Professor

3. Women in Academic Medicine AAMC Available at: http://www.aamc.org
Background: Women increasing in leadership roles

3. Women in Academic Medicine AAMC Available at: http://www.aamc.org
Background

• A larger proportion of women were in academic practice 10 years after graduation, however had lower academic rank

• Women are under represented in all major department-based leadership in many subspecialties except in the residency program director role across 9 subspecialties

• Surgery programs have higher ratio of females in the program director position compared to department chair

4. AJG 103.7 (2008): 1589-1595
5. Obstetrics & Gynecology 127.3 (2016): 442-47
Hypothesis

• Gender disparity exists in the GI fellowship director role

• The disparity may not be as wide as in the Division Chief role
Aims

• Determine percentage of women program directors (PD) and associate program directors (APD) at GI fellowships in the US

• Compare to the number of female Division Chiefs (DC)
Methods

• 3 year GI fellowship programs in the US were identified from ACG and AAMC websites

• Each program website was accessed to identify the PD, APD and DC
Methods

• Data collected from program websites included:
  – Gender
  – Academic rank
  – Program size
  – Academic affiliation
  – Geographic region

• Incomplete program website:
  – Standard internet search engine
  – Doximity
  – LinkedIn
Statistical Analysis

- Fisher’s exact test used to evaluate the association between gender, academic rank and geographic region.

- Wilcoxon rank sum test used to determine the association between gender and size of the program.
RESULTS
• 163 PDs:
  – 29 women
  – 134 men
Academic Rank of Program Directors: lower for women

P\text{trend} = 0.019
Fewer female Associate Program Directors

- 107 APDs:
  - 30 women
  - 77 men
Academic Rank of Associate Program Directors: lower for women

- Instructor: Male - 2, Female - 1
- Assistant Professor: Male - 34, Female - 22
- Associate Professor: Male - 10, Female - 3
- Full Professor: Male - 16, Female - 0

$P_{\text{trend}} = 0.003$
Much fewer female Division Chiefs

- 150 DCs:
  - 11 women
  - 139 men
Academic Rank of GI Division Chiefs: lower for women

P_{trend} = 0.049

<table>
<thead>
<tr>
<th>Rank</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Full Professor</td>
<td>103</td>
<td>6</td>
</tr>
</tbody>
</table>
DC gender and PD gender

- **Women**: 45% Men, 55% Women
  - Men: 45%
  - Women: 55%

- **Men**: 17% Men, 83% Women
  - Men: 17%
  - Women: 83%

**P = 0.0327**
If your Division Chief is:

Female
- 45% of program directors are women
- 55% of program directors are men

Male
- 7% of program directors are women
- 83% of program directors are men

Program Director gender
Programs with more trainees have female program directors

NUMBER OF PROGRAMS

NUMBER OF TRAINEES

Females

Males

P_trend = 0.061

< 5
6 TO 10
11 TO 15
15 TO 20
> 20

0
5
22
57
2
6
9
0
3
1

P_trend = 0.061
Results: Pipeline of women in Gastroenterology

- 44% Medicine Residents
- 35% Fellows
- 28% Associate program directors
- 18% Program directors
- 7% Divisions chiefs
Results

- No association between:
  - PD gender and APD gender
  - Number of trainees and APD gender
  - Number of faculty and PD or APD gender
  - Geographic region and PD, APD or DC gender
Results Summary

• Fewer women in GI program leadership roles than men

• Women in leadership roles hold lower academic rank than their male counterparts
Results Summary

- There is a higher proportion of female program directors than division chiefs in GI programs.
- Programs with female division chiefs are more likely to have a female program director.
Limitations

- Gastroenterology program websites were used to collect information:
  - May not be up to date
  - Unable to ascertain duration position held
  - Incomplete information

- Possible that our results are influenced by decreased career duration of women
Discussion

• Stereotype/Perceptions of PD Role:
  – Less prestige/power than other leadership roles
  – Nurturing role
  – More focus on education as compared to research/publication
  – Better work-life balance
Discussion

• Less research funding for women may all lead to less productivity and in turn less promotion

• Women are less willing to promote themselves and ask for advancement

4. AJG 103.7 (2008): 1589-1595
Conclusions

• Women continue to be under represented in fellowship leadership positions in Gastroenterology

• Reasons unclear and likely multifactorial
Future Directions

• Further studies are needed to investigate trends over time with regards to promotion and academic productivity to explain these differences

• Improve mentorship for female trainees and increase awareness of the prevalence of gender disparity in practice