Gender Differences in Cardiology and Advanced Cardiology Fellowships
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Objective

This study is an attempt to identify gender differences among general cardiology fellowships and advanced cardiology fellowship programs in addition to other factors which may be associated with these differences.

Background

- Disparities between female and male cardiologists already in practice are well known and have been widely reported in the cardiology literature1-7.
- This robust literature has discovered that much of these differences in compensation, workplace activities, and procedural focus often begins in residency and fellowship.
- Given the importance of fellowship in the differentiation of future cardiology practice, surprisingly little information is available on gender disparities in the context of cardiology fellowship, save for anecdotal descriptions and small studies of practicing cardiologists.

Methods

- Data from the American Medical Association Fellowship and Residency Electronic Interactive Database (FRIEDA) was collected from publicly available data on the FRIEDA website (updated in March 2017 for the 2017-2018 application cycle).
- Data was imported into Tableau 2019.1 for analysis and Prism 8.0.2 for statistical testing as appropriate.

Results

- Of the general cardiology programs reporting gender composition data (n=77 of the total 207 programs), male fellows were noted to comprise 77.9% of the general cardiology fellowship population.
- In both electrophysiology (n=27 reporting of the total 103 programs) and interventional cardiology (n=43 reporting of the total 150 programs), failure male fellows comprised 90.6% of the advanced fellowship population. In Heart failure fellowships, (n= 11 of 70 reporting programs) female fellows represented 40.5%, on average, of the reporting programs.
- In general cardiology programs, those programs with a higher total percent of female faculty had great overall numbers of female trainees when compared to their peer programs (p=0.0311, Wilcoxon Matched Pairs Sign Rank Test, two tailed) while this difference was not statistically significant in electrophysiology (p=0.477) or interventional cardiology (p=0.275), heart failure (p =0.23).

Conclusions

Given the importance of fellowship training in establishing practice patterns, these findings, along with other programmatic elements investigated suggest that additional measures are required to ensure that the cardiology workforce has appropriate female representation in the future.

Table 1. Total numbers of program and demographics by gender

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number of programs</th>
<th>Number of programs reporting gender data</th>
<th>Average fellowship female %</th>
<th>Average male %</th>
<th>Average % of full time paid female physician faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Cardiology</td>
<td>207</td>
<td>77</td>
<td>21.3</td>
<td>77.9</td>
<td>16.9</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>70</td>
<td>11</td>
<td>40.5</td>
<td>58.6</td>
<td>25.8</td>
</tr>
<tr>
<td>Electrophysiology</td>
<td>103</td>
<td>27</td>
<td>9</td>
<td>90.6</td>
<td>10.2</td>
</tr>
<tr>
<td>Interventional</td>
<td>150</td>
<td>43</td>
<td>9</td>
<td>90.6</td>
<td>5.8</td>
</tr>
</tbody>
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References