Gender Equity and Inclusion in Academic Publication Increases with a Resident Managed Peer-Mentoring Program in an Academic Radiology Department

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BACKGROUND

• Surveys show FEWER women (radiologists and radiology residents) engaged in academic activities than their male counterparts.

• Women radiologists have fewer publications.

• Non-radiology medical specialties trend toward increases in females in their residencies and in their high academic positions.

• Women in radiology rarely reach high academic positions or serve as editorial board members, instead tending to remain in junior faculty positions.

Amrein et al, Gender Medicine. 2011
Factors affecting women residents and radiologists:

- Fewer research opportunities offered
- Lack of mentorship
- Insufficient research time
- No research methodology training
- Fewer women at higher academic positions

Fite et al, Molecular Imaging and Biology. 2021
• Identifying factors that hinder women’s progress in academic radiology is very important for building a gender equitable and inclusive radiology community.

• Considering this need, we reviewed data we had accumulated from our resident managed peer mentoring program through the lens of its affect on cultivating gender equity and inclusion in academic pursuits in our department of radiology.
Work Undertaken

• Using a “Resident managed peer mentoring program”, supervised autonomy was given to qualified preceptors (faculty or residents) to coordinate and manage teams of medical students and residents in research projects with laddered mentoring.

  - Resident (preceptor) with research experience finds a research project suited for the learner
  - Learner (medical student) and preceptor agree on expectations and deadlines
  - Increase in research productivity and number of participants

Lakhani et al, Academic Radiology. 2022
RESEARCH GOAL

• To analyze the effect of our Resident Managed Peer Mentoring program in promoting gender inclusiveness and equity.
METHOD

• Tabulation of the following for women radiologists and radiology residents in our department over the course of 4 academic years (2 before and 2 after our intervention)

1. Number of PMID-indexed publications for which women in our department (radiologists or radiology residents) were authors or co-authors.

2. Number of women in our department (radiologists or radiology residents) who participated in PMID-indexed publications during the study.
RESULTS

PMID-indexed publications by women radiologists increased after intervention (100%, n=15 in year-1; 313%, n=31 in year-2)

n here indicates the total number of participants in scholarly activity

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Resident</th>
<th>Faculty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2018</td>
<td>1</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2018-2019</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>2019-2020</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>2020-2021</td>
<td>7</td>
<td>24</td>
<td>31</td>
</tr>
</tbody>
</table>

Indicates when the Resident Managed Peer-Mentoring program was implemented
The number of women radiologists authoring PMID-indexed publications increased. The effect was largest for early career women.
CONCLUSION

• Total number of PMID-Indexed publications with women (radiologists & radiology residents) as authors or co-authors, increased with participation in a resident managed peer mentoring program.

• Total number of individual women (radiologists & radiology residents) who participated in PMID-Indexed publications increased with their participation in a resident managed peer mentoring program.

• As apparent from the above results, there was an increase in both the number of faculty members who published and overall number of publications.

• Resident managed peer mentoring is an approach that was effective for increasing gender equity and inclusion in academic publication in our department.

• This approach may be transferrable to other departments that value increases in gender equity, gender inclusiveness, and overall academic productivity.
FUTURE GOALS

• Extend implementation of resident managed peer mentoring approach to other academic department in our academic health center and determine its effectiveness in other disciplines.
Thank you!