Creating Safe and Equitable Environments in Academic Medicine

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Outline

• Nature and causes of gender inequity in academic medicine and oncology
  – Not simply due to a slow pipeline
  – Rather, reflects the differential impact of
    • Unconscious biases
    • Gendered expectations of society
    • Harassment

• Evidence-based interventions
Women in the Medical Profession

Representation of Women in the Medical Profession, 1965 to 2015

- Students Enrolled in Medical School
- Physicians in the US
Women in Leadership

From AAMC, The State of Women in Academic Medicine: The Pipeline and Pathways to Leadership, 2013-14, Courtesy Diana Lautenberger
The “Gender Gap” in Authorship of Academic Medical Literature — A 35-Year Perspective

Reshma Jagsi, M.D., D.Phil., Elizabeth A. Guancial, M.D.,
Cynthia Cooper Worobey, M.D., Lori E. Henault, M.P.H., Yuchiao Chang, Ph.D.,
Rebecca Starr, M.B.A., M.S.W., Nancy J. Tarbell, M.D.,
and Elaine M. Hylek, M.D., M.P.H.

RESEARCH LETTER

The Representation of Women on the Editorial Boards of Major Medical Journals: A 35-Year Perspective

Reshma Jagsi, MD, DPhil
Nancy J. Tarbell, MD

Lori E. Henault, MPH
Yuchiao Chang, PhD
Elaine M. Hylek, MD, MPH
Consequences

• Both deontological and teleological arguments can be articulated about the need to promote gender equity
• In medicine, certain teleological arguments are highly compelling
Should We Just Be Patient?

• Pipeline hypothesis
  – 15 cohorts graduating medical school 1979-1993
  – proportion of women who advanced to associate professor significantly lower than expected in all but 2 of the 15 cohorts
  – even women who reached the rank of associate professor less likely to become full professor than male counterparts
  – criticisms

• Need for further research
• 5-yr rate of R01 attainment: 19% among women and 25% among men

• Gender (HR 0.8, p=0.002) independently significant predictor of R01 attainment on multivariable analysis controlling for K award type, year of award, funding institute, institution, and specialty
Compensation

- 800 MDs who were still working at academic institutions responded to our surveys of K awardees from 2000-2003
- Significant gender difference in annual salary even after adjustment for numerous measures of success/productivity, specialization, and other factors
  - Age
  - Race
  - Marital status
  - Parental status
  - Additional doctoral degree
  - Academic rank
  - Leadership positions
  - Specialty
  - Current institution type (public/private)
  - Current institution region
  - Current institution NIH funding rank group
  - Whether changed institutions since K award
  - K award type
  - Years since K award
  - K award funding institute
  - Receipt of R01 or >$1 million in grants
  - Publications
  - Work hours
  - Percent time in research
What Drives These Differences?

• Specialty “choice”
  – Women may be encouraged to occupy lower-paid specialties, specialties chosen by women may pay less partly because they are predominated by women or involve less valued “feminine” behaviors

• Differences in productivity, hours, and “willingness” to change institutions
  – Constraints of a gender-structured society

• Differences in rank and leadership
  – May reflect biased processes for determining rewards

• But a substantial unexplained gender difference remained even after accounting for all of these factors and more
Gender Differences in Values or Behavior?

• Perhaps mothers are more likely to sacrifice pay for unobserved job characteristics such as flexibility and fathers wish to earn more to support their families
  – Relatively homogeneous job type
  – No interaction between gender and parental status; even women without children had lower pay than men

• Perhaps women don’t ask
Differences in Employer Behavior towards Men and Women?

• Statistical discrimination
  – employers make inferences based on group characteristics (such as mean productivity level) rather than considering individual characteristics when setting salaries

• The concept of the family wage
Unconscious Biases

• Deeply ingrained notions of gender roles
• NAS report
  - “An impressive body of controlled experimental studies and examination of decision-making processes in real life show that, on the average, people are less likely to hire a woman than a man with identical qualifications, are less likely to ascribe credit to a woman than to a man for identical accomplishments, and, when information is scarce, will far more often give the benefit of the doubt to a man than a woman.”
Multiple Identities
Not a Level Playing Field

- Seemingly gender-neutral norms, practices, and policies can have a disparate negative impact upon women
  - Examples
    - Leave policies
      - Magudia, Bick, Cohen, Ng, Weinstein, Mangurian, Jagsi, *JAMA* 2018
    - Expectations regarding work hours
    - Tenure clocks & limits on grant eligibility
  - Mechanisms
    - forcing collision of biological & professional clocks
    - magnifying the inequities of the traditional gendered division of labor
Among married or partnered respondents with children, after adjustment for work hours, spousal employment, and other factors, women spent 8.5 more hours per week on domestic activities.

In the subgroup with spouses or domestic partners who were employed full-time, women were more likely to take time off during disruptions of usual child care arrangements than men (42.6% vs. 12.4%).

The Iceberg of Sexual Harassment

Image courtesy of and copyright held by Lilia Cortina
### Self-Reported Experiences of Recipients of NIH K08 and K23 career development awards from 2006-2009 (survey conducted in 2014)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Women No. (%)</th>
<th>Men No. (%)</th>
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<tbody>
<tr>
<td>Respondents who perceived gender-specific bias in the academic environment</td>
<td>343 (69.6)</td>
<td>125 (21.8)</td>
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<tr>
<td>Respondents who reported they personally experienced gender bias in professional advancement</td>
<td>327 (66.3)</td>
<td>56 (9.8)</td>
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<tr>
<td>Respondents who reported they personally experienced harassment *</td>
<td>150 (30.4)</td>
<td>24 (4.2)</td>
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* “In your professional career, have you encountered unwanted sexual comments, attention, or advances by a superior or colleague (yes or no)?”
In your professional career, have you encountered unwanted sexual comments, attention, or advances by a superior or colleague?

- 59% perceived a negative effect on confidence in themselves as professionals
- 47% reported that these experiences negatively affected their career advancement
Dr. Jagsi,

Your paper struck a particular chord with me... I brushed what happened under the rug; and **in a residency program where the chair invites the male (and not female) residents & attendings over every week for poker, these things largely go unnoticed.**

Over the past 4 years, I've wondered if something was pathologically wrong with me that I invited that kind of behavior (was it because I wasn't smart enough, was it because I was soft-spoken, was it because there was something so wrong with me that I couldn't even recognize it) and whether it would keep me from achieving anything of merit.

I read your article with a mixture of simultaneous dismay and relief - dismay because how could such successful women be subject to that kind of discrimination - **relief because** despite what they endured, they were successful...and if they have gone through similar things, then maybe I'm not defective.

I don't think I can ever talk about my experiences partially because of fear, partially because it seems ungrateful to do so...

I hope institutions pay attention. I hope people care. Your article helped me gain the closure that I didn't realize I needed.
Sexual Harassment in Medicine — #MeToo

Reshma Jagsi, M.D., D.Phil.
What Can Medicine Learn from Social Scientific Studies of Harassment?


- **Organizational Psychology Findings**
  - Harassment more common:
    - In historically male-dominated fields
    - Where big power differentials/hierarchies exist
    - Where women are in the minority
  
- *And when institutions are perceived to tolerate the behavior*
Interventions

• To address strikingly high rates of harassment in medicine, must learn from evidence:
  • Gather data
    • Improve understanding (especially regarding women in under-represented or vulnerable groups)
    • Inform interventions
    • Demonstrate commitment
  • Facilitate reporting and offer choices
  • Clarify policies
    • Lowest rates of sexual harassment in organizations that proactively develop, disseminate, and enforce sexual harassment policy (Gruber 1998)
  • Address harassment by patients & families
FIG. 1. Sexual harassment of faculty from insiders and patient and patients' families by faculty gender. This figure depicts rates with which 705 faculty respondents to a survey at a single academic medical institution endorsed at least one experience in each category within the past year. Insiders are defined as other institutional staff, students, and faculty, both on and off campus. SEQ is the validated Sexual Experiences Questionnaire that was modified for use to measure sexual harassment in the current study.
Why Does the Iceberg Form?

EQUITY IS ESSENTIAL

- Change the structures that support harassment
  - Employ more women
  - Promote more women
  - Integrate more women into every level of the organization

Goal: “a ‘well-integrated, structurally egalitarian workplace,’ in which women and men equally share power and authority” (Schultz 2003 qtd in Cortina & Berdahl 2008)
Time Really is Up

Variation in Distribution By Specialty, 2015

- Internal Medicine:
  - Female Professors: 1000
  - Male Professors: 6000
  - Female Residents: 3000
  - Male Residents: 2000

- Surgery:
  - Female Professors: 100
  - Male Professors: 500
  - Female Residents: 1000
  - Male Residents: 300

- Ob/Gyn:
  - Female Professors: 200
  - Male Professors: 50
  - Female Residents: 100
  - Male Residents: 10

- Pediatrics:
  - Female Professors: 10
  - Male Professors: 50
  - Female Residents: 100
  - Male Residents: 20
Mentoring Programs

• May allow women access to opportunities that otherwise might be allocated by an informal old-boy’s network to which they are not privy

• May help women to “play games” not learned in childhood

• May teach negotiation skills

• Should help develop mentor networks rather than hierarchical dyads

• And consider sponsorship as well

• Still, must be careful not to focus exclusively on “fixing the women”
Institutional Changes

• Ultimately, gender equity must be promoted through recognition and changes at the institutional level
  • Evidence-based implicit bias training
    • Carnes M et al. The effect of an intervention to break the gender bias habit for faculty at one institution: a cluster randomized, controlled trial. Acad Med 2015.
  • Cultural transformation
    • Michigan ADVANCE, Hopkins Task Force
  • Transparent and consistent criterion-based evaluation, promotion, compensation processes
Unplugging the Pipeline — A Call for Term Limits in Academic Medicine

Whitney H. Beeler, M.D., Christina Mangurian, M.D., M.A.S., and Reshma Jagsi, M.D., D.Phil.
Promote Work-Life Integration

Distinguished Scholar Awards


On-Site Childcare at Conferences


Time Banking

Parenting during Graduate Medical Training — Practical Policy Solutions to Promote Change
Debra F. Weinstein, M.D., Christina Mangurian, M.D., and Reshma Jagsi, M.D., D.Phil.

<table>
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<tr>
<th>Recommendations for Supporting Parenting during GME.*</th>
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<tr>
<td><strong>National oversight organizations</strong></td>
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<tr>
<td>Establish a minimum of 6 weeks of paid leave for all GME trainees, with an intent to move toward 12 weeks</td>
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<td>Abandon requirements for making up time and for minimum numbers of cases or procedures in favor of competency assessments</td>
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<tr>
<td>Track and report national data related to parenting during GME</td>
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<td>Facilitate institutional development of part-time training options</td>
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<td><strong>Sponsoring institutions</strong></td>
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<tr>
<td>Ensure that institution-level policies address parental leave</td>
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<td>Extend 12 weeks of leave provided under FMLA to all trainees</td>
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<td>Continue full salary for at least 6 weeks of family leave</td>
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<tr>
<td>Ensure sufficient staffing to protect trainees from negative effects when colleagues are on leave</td>
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<tr>
<td>Facilitate access to child care and lactation facilities</td>
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<td>Cultivate cross-specialty trainee parenting collaboratives</td>
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<td><strong>Individual residency and fellowship programs</strong></td>
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<td>Clarify implications of parental leave for applicants and trainees</td>
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<tr>
<td>Develop creative pilots that will enhance flexibility for trainee-parents</td>
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In honor of Marie Curie’s birthday on November 7th, the Society for Women in Radiation Oncology (SWRO) is spearheading the #WomenWhoCurie Day which aims to:

- celebrate the amazing female radiation oncologists across the world that are treating patients with cancer and conducting research
- increase awareness of radiation oncology alongside other oncologic specialties
- increase awareness of radiation oncology as a fantastic specialty among female medical students who are interested in oncology.

Similar to the recent #ILookLikeASurgeon social media movement, we encourage you to take a picture of yourself and/or female physician colleagues that captures what it means to be a radiation oncologist. Examples include posing next to your LINAC, engaging in treatment planning, or performing a brachytherapy procedure. Then post to social media (Twitter, Facebook, Instagram, department’s website, etc) on 11/07/2018 with #WomenWhoCurie!
From #MeToo to TIME’S UP


• We inhabit a momentous time in history
• Opportunity to move from awareness to action
• Health care quality improvement framework: structures, processes, outcomes
• Address root causes of inequity (including unconscious bias and challenges of society’s gendered expectations)
• Critical to promote equity for its own sake and to promote each of the worthy ends the profession serves (clinical, pedagogical, and scholarly)
Conclusions

• Women do not share equally in power and authority in the field of medicine or the specialty of oncology.
• The cause is not simply a slow pipeline: even similarly situated men and women do not appear to be rewarded similarly even today.
• To recruit, retain, and advance women’s careers, evidence-based interventions must target the root causes of gender inequity.
• More attention to tailor interventions for women from under-represented groups sorely needed.
• Must share insights about how best to transform culture and climate.
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