NOT Imposter Syndrome!

Reshma Jagsi, MD, DPhil
Newman Family Professor
Deputy Chair, Department of Radiation Oncology
Director, Center for Bioethics and Social Sciences in Medicine
University of Michigan
Imposter Syndrome
Treat the Cause, Not the Symptom

A few weeks ago, a Twitter account called @womeninmedchat facilitated an online conversation about imposter syndrome in medicine. *Imposter syndrome* is a psychological term that refers to a pattern of behavior wherein people (even those with adequate external evidence of success) doubt their abilities and have a persistent fear of being exposed as a fraud.
Imposter Syndrome
Treat the Cause, Not the Symptom

[I]mposter syndrome might be viewed less as a personal challenge affecting a few than a systemic problem...with real, detrimental consequences to those affected.

Samyukta Mullangi, MD, MBA
Division of Healthcare Delivery Science and Innovation, Weill Cornell Medicine, New York, New York; and Department of Medicine, New York-Presbyterian Hospital, New York.

Reshma Jagsi, MD, DPhil
Department of Radiation Oncology, Michigan Medicine, Ann Arbor; Center for Bioethics and Social Sciences in Medicine, University of Michigan, Ann Arbor; and Institute for Healthcare Policy and Innovation, University of Michigan, Ann Arbor.
Imposter syndrome is but a symptom; inequity is the disease. Promoting equitable representation of women and minorities among the leaders of medicine through concerted systems-level intervention is the most appropriate treatment.
Imposter Syndrome: What Is It and What Impact Does It Have?

A Virtual Workshop on Impostor Syndrome: What Is It and What Impact Does It Have?

Thursday, May 19
1 - 4 p.m. (EST)

What is impostor syndrome? Is it a syndrome or a phenomenon? Who is most likely to experience it? Are women more likely to experience it than men? Does it improve with age? Is it an issue best addressed through mentorship and coaching of individuals or by changing policies and cultural norms at an organizational level? What is driving this increasing public interest in, and scholarly study of, impostor
Outline

• Nature and causes of gender inequity in academic medicine
  – 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 Leadership

Executive Summary

Representation of Women in Academic Medicine 2018-2019

- Medical School Applicants: 51%
- Medical School Graduates: 48%
- Residents: 46%
- Faculty: 41%
- Division Chiefs: 29%
- Full Professors: 25%
- Senior Associate Deans: 34%
- Department Chairs: 18%
- Deans: 18%
The “Gender Gap” in Authorship of Academic Medical Literature — A 35-Year Perspective

Reshma Jaggi, M.D., D.Phill., 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.
In cohorts of med school grads from 1979-2013, women assistant professors were less likely than their male counterparts to be promoted to associate professor (HR, 0.76).

Similar disparities existed in promotions to full prof (HR 0.77) and dept chair appts (HR 0.46).

Sex differences in promotions and appointments did not diminish over time and were not smaller in the later cohorts than in the earlier cohorts. The differences were even larger in the later cohorts with respect to promotion to full professor.
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 held by all

• 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.”

Science faculty’s subtle gender biases favor male students

Corinne A. Moss-Racusin, John F. Dovidio, Victoria L. Brescoll, Mark J. Graham, and Jo Handelsman

Department of Molecular, Cellular and Developmental Biology, Department of Psychology, School of Management, and Department of Psychiatry, Yale University, New Haven, CT 06520

Edited by Shirley Titchener, Princeton University, Princeton, NJ, and approved August 21, 2012 (received for review July 2, 2012)

Despite efforts to recruit and retain more women, a stark gender disparity persists within academic science. Abundant research has gender disparity in science (9–11), and that it “is not caused discrimination in these domains” (10). This assertion has
Multiple Identities

Key NASEM Reports

BEYOND BIAS AND BARRIERS
FULFILLING THE POTENTIAL OF WOMEN IN ACADEMIC SCIENCE AND ENGINEERING

CONSensus Study Report
Promising Practices for Addressing the Underrepresentation of Women in Science, Engineering, and Medicine
OPENING DOORS

CONSensus Study Report
Sexual Harassment of Women
Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine

CONSensus Study Report
THE IMPACT OF COVID-19 ON THE CAREERS OF WOMEN IN ACADEMIC SCIENCES, ENGINEERING, AND MEDICINE
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%).

Work-Related Burnout in Physician-Scientists

Surveyed 816 Participants

Prevalence of Work-Related Burnout

Drivers of Gender Differences in Burnout

Implications

NIH K grant recipients still in academia 5 to 8 years after award

Women 41%

Men 32%

Time pressures

Perceptions of work climate

Need to improve work climate through civility & respect and mitigate competing demands

Perumalswami, Griffith, Jones, Stewart, Ubel, Jagsi. JAMA Internal Medicine, October 2019.
The Iceberg of Sexual Harassment

Image courtesy of and copyright held by Lilia Cortina
59% perceived a negative effect on confidence in themselves as professionals

47% reported that these experiences negatively affected their career advancement
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
An Ethical Imperative to Act

Standing Up against Gender Bias and Harassment — A Matter of Professional Ethics

Michelle M. Mello, J.D., Ph.D., and Reshma Jagsi, M.D., D.Phil.
Causal Mechanisms

- Unconscious Bias
- Sexual Harassment
- Gendered Division of Domestic Labor

Gender Inequity
Why Does the Iceberg Form?


- Sexual coercion
- Unwanted sexual attention
- Gender harassment

Factors:
- Male-dominated power and authority
- Unconscious biases
- Lack of sponsorship or mentorship
- Isolated work environments
- Lack of role models
- Incivility
- Gendered division of domestic labor
- Hierarchical work environment
- System-wide policies that disadvantage mothers
- Dearth of allies
Perspective

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.
Don’t Fix the Women: Fix the Systems

- Gender equity must be promoted through recognition and changes at the institutional level
  - Mentorship and Sponsorship Programs
  - 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
Promote Work-Life Integration

Family/Medical Leave Policies

Distinguished Scholar Awards

On-Site Childcare and Facilitating Use of Funds to Support Dependent Care Expenses

Time Banking
Social Media

#WomenWhoCurie

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.

#HerTimeIsNow

Promote Her
Promoting Equity for Women in Medicine — Seizing a Disruptive Opportunity

Reshma Jagsi, M.D., D.Phil., Elena Fuentes-Afflick, M.D., M.P.H., and Eve Higginbotham, M.D., M.L.
Conclusions

• We inhabit a momentous time in history
• Opportunity to move from awareness to action
• Principles
  – Dignity, safety, equity
    • Fair equality of opportunity
    • Equal pay for equal work
• Health care quality improvement framework
  – Structures, processes, outcomes
  – Not treating symptoms—treating the underlying cause!
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