Title
Gender micro-inequities in medical education

Author
Whitchurch, Theresa

Publication Date
2019

ISP Presentation Write Up
Theresa Whitchurch
twhitchu@ucsd.edu

Gender Micro-Inequities in Medical Education

Introduction

Presented a live streamed webinar on April 23rd at 12pm PST, the presentation is available for viewing at the following website: https://www.youtube.com/watch?v=2EycMEcKrk8.

It was viewed lived by 4 persons with 2 live questions, and in the 3 days proceeding the live stream has been viewed approximately 80 times.

A post-presentation survey was posted in the description and a total of 4 responses have been gathered as of April 25, 2019. See 'Achievements/Impact' for results of survey.

Rationale

Gender discrimination and sexual harassment in medical education is not an unstudied topic. Since 1849 when Elizabeth Blackwell became the first women to receive a medical degree in the United States, women in medicine have had to combat and overcome some very obvious and egregious hurdles. In 2017, for the first time more women were accepted into medical school than men at 50.7% . When put into the perspective that <10% of accepted medical school applicants were women in 1965, it shows incredible growth in equality. However, there is more to equality than simply accepting more women into medical school. Women physicians are still less likely to be a professor, tenured, department chair or to be a Dean (1). Women studying to become a physician encounter increased exposure to gender discrimination and sexual harassment across all academic and nonacademic contexts. (2)

While macro aggressions are still an issue for women in the medical field, these are easily identifiable. However, while there are countless anecdotal articles online about women in medicine experiencing what Mary Rowe called "micro-inequities" the data isn't as simple to gather. Mary Rowe defined micro-inequities as "small events which are often ephemeral and hard to prove, events which are covert, often unintentional, frequently unrecognized by the perpetrator, which occur wherever people are perceived to be different." (3) These anecdotal articles highlight minor, potentially trivial annoyances that can have cumulative effects over a women's medical education. In Brenda Beagan's Micro Inequities and Everyday Inequalities (4) which surveyed and interviewed third year medical students and faculty at a Canadian medical school, she looks at the effects race, gender, sexual orientation, and class have on one's medical school experience. In her section on gender she demonstrates that in interviews with the female students they would state that gender was not an issue, however, would subsequently give many examples, many more than their male counterparts, of times in which their gender heavily influenced their experience, both in outright discrimination as well as subtle micro-inequities. One example that was discussed was how women in medical school are addressed. Fourteen percent of women were never

addressed as doctor vs. 0% of men. It was noted that many women were referred to as 'Miss' while their male counterparts were referred to as 'Doctor'. This seemingly small act can have a large impact.

Beagan's study in 2001 found that women were less likely to go into surgical fields, in part due to the micro-inequity experiences they encountered in this particular field, but also because of the lifestyle restrictions associated with it. Women in this study, at this one school, rated parental and marital status as more important in making their career choice than their male counterparts. Gargiulo et al (5) in 2006 surveyed medical students and surgical (general surgery and OB/GYN) residents and found that women were not more likely to be deterred by lifestyle, work load issues, or even lack of female role models. The main deterrent found in this study was the male culture of surgery – the "macho" field. Almost half of the women in their study perceived sex discrimination in surgery which influenced their choice.
One study has shown that female medical students have less confidence in their knowledge and performance, despite performing equally to their male medical student counterparts. (6) Another study showed that women physicians on faculty while being equally engaged and sharing similar leadership goals as man on faculty, are less likely to feel supported by their institutions and report a lower sense of belonging. (7) While correlation is difficult to make, both studies speak to the environment women in medicine encounter and the need to continue to evaluate the hurdles women in medicine still face today.

1.The State of Women in Academic Medicine: The Pipeline and Pathways to Leadership, 2015-2016, AAMC - https://www.aamc.org/members/gwims/statistics/
2.Nora LM, McLaughlin MA, Fosson SE, et al. Gender discrimination and sexual harassment in medical education: perspectives gained by a 14-school study. *Acad Med*. 2002;77:1226-1234.
3.Rowe M. Micro-affirmatios & Micro-inequities. *Journal of the International Ombudsman Association*. 2008;1:45-48.
4.Beagan B. Micro Inequities and Everyday Inequalities: "Race," Gender, Sexuality and Class in Medical School.26:583-610.
5.Gargiulo DA, Hyman NH, Hebert JC. Women in surgery: do we really understand the deterrents? *Arch Surg*. 2006;141:405-407; discussion 407-408.
6.Blanch DC, Hall JA, Roter DL, et al. Medical student gender and issues of confidence. *Patient Educ Couns*. 2008;72:374-381.
7.Pololi LH, Civian JT, Brennan RT, et al. Experiencing the culture of academic medicine: gender matters, a national study. *J Gen Intern Med*. 2013;28:201-207.

<u>Project Objectives</u>

1. To explore the topic of gender micro-inequities, both on a personal level and on a professional level
2. To evaluate literature on the topic. This includes evaluating the different ways to study this topic (survey, focus group, longitudinal interviews, etc), as well as the specific populations studied and critically consider the positives and negatives of the different methods.

3. To plan and give a professional lecture/webinar, including seeking feedback and evaluation.

Methods/Outline

The following papers were presented during the webinar:

1. Micro-Affirmations and Micro-Inequities
    a. Published 2008 in the Journal of the International Ombudsman Association
    b. Definition of Micro-Inequities by Mary Rowe, an economist who worked for MIT.
2. Sex Differences in Physician Salary in US Public Medical School
    a. Published in 2016 in JAMA
    b. Among physicians with faculty appointments at 24 USpublic medical schools, significant sex differences in salary exist even after accounting for age, experience, specialty, faculty rank, and measures of research productivity and clinical revenue.
    c. This article was to point out macro-inequities still exist, but to emphasize that micro-inequities are more subtle and nuanced.
3. Experiencing the Culture of Academic Medicine: Gender Matters, A National Study
    a. Published in 2012 in Journal of General Internal Medicine
    b. National multi-institution study evaluating the cultural state in academic settings. 2381 responses over 26 medical college faculty.
    c. “Faculty men and women are equally engaged in their work and share similar leadership aspirations. However, medical schools have failed to create and sustain an environment where women feel fully accepted and supported to succeed. “
    d. Only paper talking specifically about culture with faculty, to point out that this isn’t something that ends with medical school.
4. A Climate Survey for Medical Students
    a. Published 1996 in Evaluation and the Health Professions
    b. 77 medical students who had completed their preclinic years, with a survey on 6 scales climate.
    c. Gender Insensitivity (GI): the degree to which students feel that attitudes toward men and women are different as reflected in the visibility of the two sexes, the use of language, responses to women’s isues and concerns, and evaluation and feedback regarding academic performance. Ex “classroom questions from women students are treated with less respect by faculty than those from men students” This was the only scale which was statically significant with women having more then men, though overall it was still found that of those surveys most found all scales to not be a problem more than a problem.
5. Micro Inequities and Everyday Inequalities: “Race, “ Gender, Sexuality, and Class in Medical School
    a. Published in 2001 in Canadian Journal of Sociology
    b. Points out that micro-inequities can be due to gender, but also race, sexuality, and class.

    c. Did a survey of an entire MS3 class (53% response rate) and interviewed 25 students + 25 faculty.
    d. 'A certain ambiguity became apparent in the interviews, where most students stated that gender is really not an issue in medical school; classes are almost exactly gender balanced and everyone gets treated similarly. Having said this, however, most women and some men then went on to give examples of how gender does make a difference, ranging from quite blatant sexism and sexual harassment to a more subtle climate of gendered expectations that may make things intangibly easier for male students'
    e. They found that 14% of woman were never called doctor vs. 0% of men.
    f. Found that while both men and women had concerns about appears, the women had more complex and extensive and often had concerns related to how people would perceive and treat them.
6. Gender Discrimination and Sexual Harassment in Medical Education: Perspectives Gained by a 14-school study
    a. Published in 2002 in Academic Medicine
    b. 1314 responses from medical students after they had submitted their ROL
    c. Found 83 vs 41% of women experienced sexual harassment/gender discrimination (SH/GD)in all contexts, stastically significant across all experience types (core, elective, preclinical, and non academic settings). The greatest difference was found in core clerkships.
    d. Rotations in which women had statistically more SH/GD were general surgery, EM, IM, hospital based specialites, and neuro.
7. 'I'm too used to it': A longitudinal qualitative study of third year female medical students' experiences of gendered encounters in medical education
    a. Published 2012 in Social Science and Medicine (UCSF/Yale)
    b. 12 MS3 females during the 2006-2007 school year were interviewed before their core clerkships and then after each one.
    c. They found that participants quickly learned how to confront and respond to inappropriate behavior from male patients and found interactions with female patients and supervisors particularly rewarding. However, they did not feel equipped to respond to the unprofessional behavior of male supervisors, resulting in feelings of guilt and resignation over time that such events would be a part of their professional identity.
    d. Study is a longtitudinal study with no one lost to follow up where the main outcome to gendered experiences is denial and minimalization that has been promoted and encouraged by their supervisors.
8. Medical student gender and issues of confidence
    a. Published in 2008 in Patient Education and Counseling
    b. 131 MS3s at Indiana University SOM were recorded during their OSCE and coded for confidence in language and behavior.
    c. Despite performing at a level equivalent to male medical students in academic competence and even excelling in clinical communication and patient-centered

care, female medical students consistently report more anxiety and less confidence in their abilities than their male counterparts.
    d. This study found that in alignment with previous studies where women self reported feeling less confident, women were found to appear less confident during their OSCE performances.
    e. This article is important because issues of confidence can have long lasting effects, including oral board scores, negotiation skills which can affect future wage gaps, and future patient satisfaction. One hypothesis is that the gender discrimination women experience influences their confidence levels.
9. Experiences of the gender climate in clinical training – a focus group study among Swedish medical students
    a. Published in 2016 in BMC Medical Education
    b. 24 participants (15 women, 9 men) in a senior medical school class involved in different focus groups
    c. Described 2 main themes:
        i. Experiencing gendered conditions
        ii. Navigating those experiences from a dependent position
    d. One of the main points from this article is that the gendered conditions women experienced could either be made more or less frustrating depending on their peers responses. Acknowledgement is an important aspect of gendered conditions.
    e. All participants wanted to be seen as physicians rather than as a man or woman.

<u>Achievements/Impact</u>

Overall the webinar was well received both in verbal feedback and from the survey. The main feedback given were examples of things the listener would be interested in knowing (in addition to what I presented) or interest in more specific examples of micro-inequities. As far as examples go, learning about other medical student experiences and reading about them was one of my favorite parts of this project, and given more time or an in person lecture I agree that more examples would have been impactful. As this was my first time planning and executing an approximately hour long lecture, I was concerned about time and did leave out many of the things that I read and learned about while researching this project. One of the hardest parts of this project was deciding what to put in and what to leave out. I read probably 5 times the amount of articles then I actually ended up using, and trying to come up with a cohesive and well thought out lecture while also including the things I thought most relevant was challenging, and based on some of the feedback listeners were definitely interested in some of the other topics that I read about. Perhaps if I had done an in person lecture they would have asked questions relevant to those articles and I would have been able to talk about them, even if they were not presented.

The positive feedback talks to the well-researched nature of the talk and how it goes beyond anecdotal examples. As this was one of the highlights of this talk I am glad that it was well received in that way.

I plan to interact with this topic more in the future. I feel that being able to read and learn about this topic in a similar fashion as I would other topics in medical school has given me a solid base in which I can continue to be involved in this topic. One of the main points of this project was a deeply personal one. I wanted to know that I was not the only one encountering gendered conditions in medicine, and I wanted a scientific way to evaluate and frame my own personal experiences. I feel that I have accomplished that goal, and am glad I was given the opportunity to research and interact with this topic in such an extensive way.

Thank you to both of my chairpersons and my committee for their encouragement and help with this project.

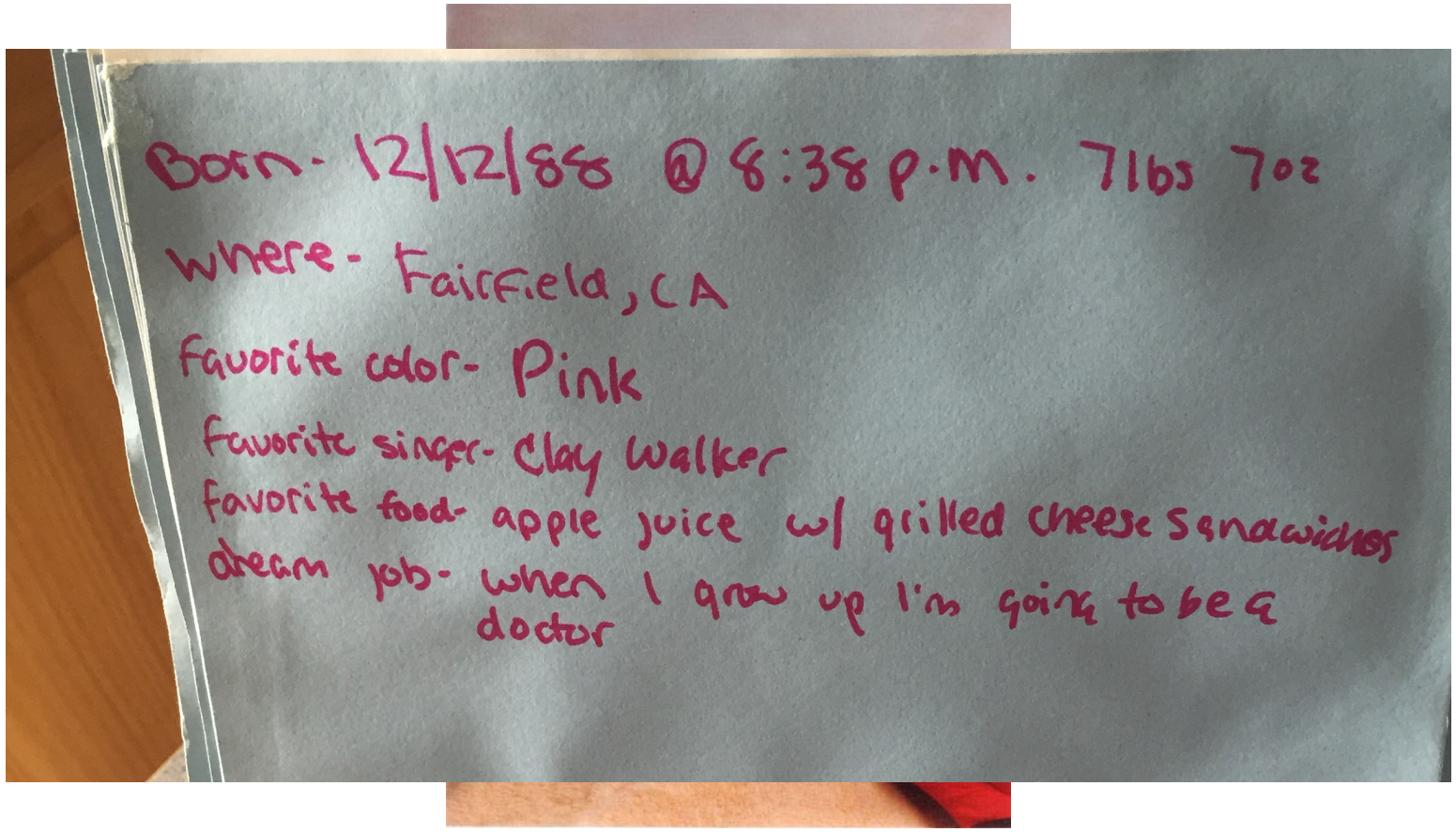
UC San Diego
School of Medicine

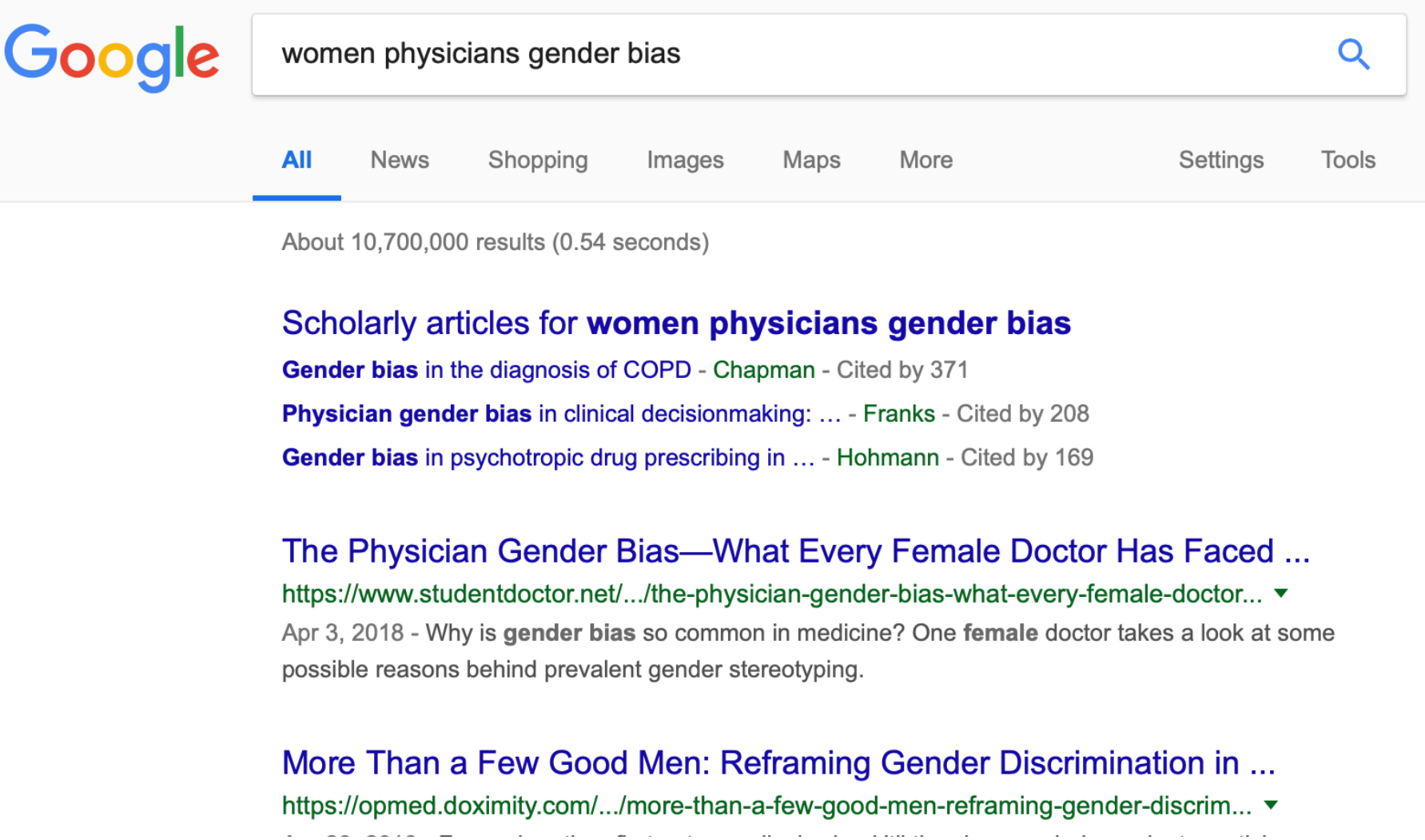
Gender Micro-Inequities In Medical Education

Theresa Whitchurch

theresawhitchurch@gmail.com

MS4 University of California, San Diego SOM


Born- 12/12/88 @ 8:38 p.m. 7lbs 7oz
where- Fairfield, CA
favorite color- Pink
favorite singer- Clay Walker
favorite food- apple juice w/ grilled cheese sandwiches
dream job- when I grow up I'm going to be a doctor


Google
women physicians gender bias
All
News
Shopping
Images
Maps
More
Settings
Tools
About 10,700,000 results (0.54 seconds)
Scholarly articles for women physicians gender bias
Gender bias in the diagnosis of COPD - Chapman - Cited by 371
Physician gender bias in clinical decisionmaking: … - Franks - Cited by 208
Gender bias in psychotropic drug prescribing in … - Hohmann - Cited by 169
The Physician Gender Bias—What Every Female Doctor Has Faced ...
https://www.studentdoctor.net/.../the-physician-gender-bias-what-every-female-doctor...
Apr 3, 2018 - Why is gender bias so common in medicine? One female doctor takes a look at some possible reasons behind prevalent gender stereotyping.
More Than a Few Good Men: Reframing Gender Discrimination in ...
https://opmed.doximity.com/.../more-than-a-few-good-men-reframing-gender-discrim...

The New York Ti THE BUFFALO NEWS

Being a Doctor Is Hard. It's Harder for Women.

Female medical residents and physicians endure bias and a larger burden with home duties. They also face a greater risk of depression.

By Dhruv Khullar

Dec. 7, 2017

107

ury 12, 2019

OM/INTENT/TWEET)

ER

que

emer

By Caitlin Bass

November 4, 2018

Dr. Sassor

credentials while she treated a passenger who had a medical emergency.

ALiEM
Academic Life in Emergency Medicine

MEdIC Series | Medical Education in Cases Series
Case 1.03 The Case of the Woman in White

The Case of the Woman in White

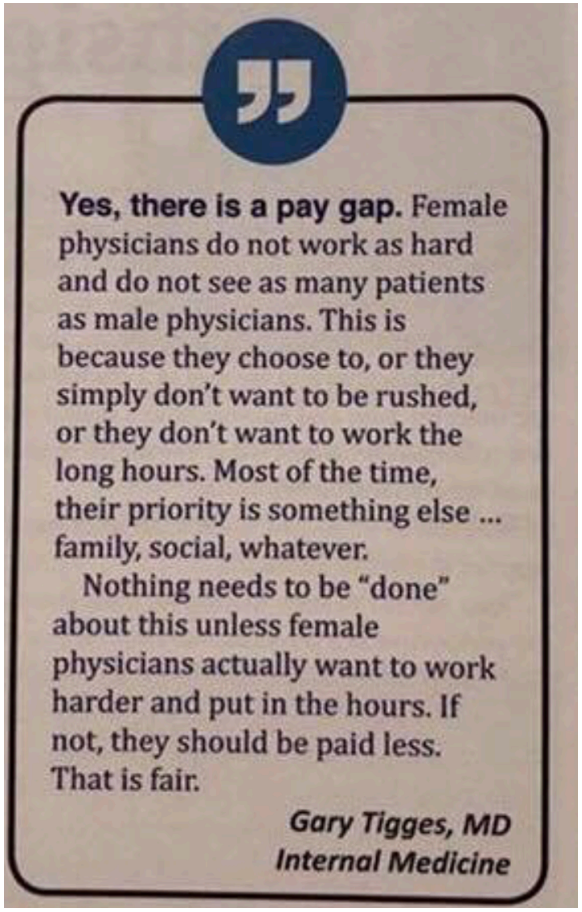
Case Written by Dr. Amy Walsh

Mary Rowe "Micro-inequities"

"apparently small events which are often ephemeral and hard-to-prove, events which are covert, often unintentional, frequently unrecognized by the perpetrator, which occur wherever people are perceived to be 'different.'"

Rowe M. Micro-affirmatios & Micro-inequities. Journal of the International Ombudsman Association. 2008;1:45-48.

Rowe, Mary. "Gender Microinequities." *The Sage Encyclopedia of Psychology and Gender*, by Kevin Nadal, Sage Publications Ltd., 2017, pp. 679–682, dx.doi.org/10.4135/9781483384269.n.



Yes, there is a pay gap. Female physicians do not work as hard and do not see as many patients as male physicians. This is because they choose to, or they simply don't want to be rushed, or they don't want to work the long hours. Most of the time, their priority is something else ... family, social, whatever.

Nothing needs to be "done" about this unless female physicians actually want to work harder and put in the hours. If not, they should be paid less. That is fair.

Gary Tigges, MD
Internal Medicine

JAMA Internal Medicine | Original Investigation

Sex Differences in Physician Salary in US Public Medical Schools

Anupam B. Jena, MD, PhD; Andrew R. Olenski, BS; Daniel M. Blumenthal, MD, MBA

Experiencing the Culture of Academic Medicine: Gender Matters, A National Study

Linda H. Pololi, MD[1], Janet T. Civian, EdD[1], Robert T. Brennan, EdD[2], Andrea L. Dottolo, PhD[1,3], and Edward Krupat, PhD[4]

[1]Women's Studies Research Center, National Initiative on Gender, Culture and Leadership in Medicine: C - Change, Brandeis University, Waltham, MA, USA; [2]Harvard School of Public Health, Boston, MA, USA; [3]Department of Psychology, University of Massachusetts, Lowell, MA, USA; [4]Harvard Medical School, Boston, MA, USA.

A CLIMATE SURVEY FOR MEDICAL STUDENTS

A Means to Assess Change

MERLYNN R. BERGEN
CASSANDRA M. GUARINO
CHARLOTTE D. JACOBS
Stanford University School of Medicine

RESEARCH REPORT

Gender Discrimination and Sexual Harassment in Medical Education: Perspectives Gained by a 14-school Study

Lois Margaret Nora, MD, JD, Margaret A. McLaughlin, MD, Sue E. Fosson, MA, Terry D. Stratton, PhD, Amy Murphy-Spencer, EdS, Ruth-Marie E. Fincher, MD, Deborah C. German, MD, David Seiden, PhD, and Donald B. Witzke, PhD

Contents lists available at SciVerse ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

"I'm too used to it": A longitudinal qualitative study of third year female medical students' experiences of gendered encounters in medical education

Palav Babaria [a,*], Sakena Abedin [b], David Berg [b], Marcella Nunez-Smith [b]

[a] University of California-San Francisco, Internal Medicine, 505 Parnassus Ave., San Francisco, United States
[b] Yale University School of Medicine, United States

ELSEVIER

Patient Education and Counseling 72 (2008) 374–381

Patient Education and Counseling

www.elsevier.com/locate/pateducou

Medical student gender and issues of confidence

Danielle C. Blanch [a,*], Judith A. Hall [a], Debra L. Roter [b], Richard M. Frankel [c]

[a] *Northeastern University, Boston, MA, USA*

[b] *Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA*

[c] *Indiana University School of Medicine, Indianapolis, IN, USA*

Received 21 February 2008; received in revised form 13 May 2008; accepted 28 May 2008

Kristoffersson *et al. BMC Medical Education* (2016) 16:283
DOI 10.1186/s12909-016-0803-1

BMC Medical Education

RESEARCH ARTICLE Open Access

Experiences of the gender climate in clinical training – a focus group study among Swedish medical students

Emelie Kristoffersson[1,2], Jenny Andersson[1], Carita Bengs[3] and Katarina Hamberg[1*]

Mistreatment:

Mistreatment categories defined:

- Racial/Ethnic: Subjected to inappropriate comments or disparate treatment based on race or ethnic background;
- Sexual: Subjected to unwanted advances or remarks, asked to exchange favors for grades;
- Gender/Sexual Orientation: Denied opportunities or received lower evaluations based on gender or sexual orientation;
- General: Belittled, threatened, asked to perform personal services, etc.

This information will not be released to the clerkship director until after grades are submitted. You can also report mistreatment by contacting Deans Kelly, Mandel or Willies-Jacobo separate from this evaluation process or anonymously via the student affairs anonymous feedback form at https://meded-portal.ucsd.edu/webportal/index.cfm?c=MS%201&curpage=anonFB

18.* During the course / clerkship did you experience mistreatment?

o Yes **X No**

19. Please describe if you answered Yes to the mistreatment question:

Thoughts for the future…

Micro-affirmations & Micro-inequities


Thank you!
UC San Diego
School of Medicine