

1 **Title:** Gender Bias and Stereotypes in Medicine: A Medical Student Experience.

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Contributor Role	Role Definition	Authors					
		1	2	3	4	5	6
Conceptualization	Ideas; formulation or evolution of overarching research goals and aims.	X	X				
Data Curation	Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later reuse.	X	X				
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Discussion Points:

1. Gender discrimination may occur during medical school or hospital rotations, suggesting that the environment where women study has an impact on their perspective of their future.
2. It is important that we, as a society, educate ourselves in identifying stereotypes and gender-biased situations to eliminate gender discrimination in science.
3. Male and female doctors are free to choose and practice the specialty they wish to without being questioned, criticized, and discouraged for wanting to stand out.

1 **THE EXPERIENCE.**

2 **Introduction**

3 Gender bias is a universal phenomenon. It is represented as men seen as the human default and the
4 generic masculinity that is embedded in human society.¹ It exists at home, at the workplace, and on every
5 field originating consequences that have social and economic impact.¹⁻² Up to the year 1903 no woman
6 had ever won a Nobel Prize, and it was until 1990 that women in science –and specifically women in
7 medicine– began to increase exponentially.³⁻⁴ However, gender discrimination is still an issue despite
8 emerging scientific, social, and cultural changes.

9
10 **Student experience**

11 Since I entered medical school, I knew that I could run the risk of facing comments or situations in which
12 being a woman was considered a disadvantage since one of the specialties that interested me the most
13 was trauma surgery – a field that is well known for sexist behavior and gender discrimination.⁵

14 As I progressed, my interests changed, and the world of psychiatry became my passion and main area of
15 interest. However, I never imagined what would happen a few years later.

16
17 In spring 2021, I began the fourth year of my career in a Mexican medical school with a six-year program.
18 At the end of the semester, our assigned doctor asked the group some questions to get to know each other
19 better and learn about our interests in the future. When he found out I was interested in becoming a
20 psychiatrist, he explained that psychiatry is not a specialty for women, since “being in a consult and listening
21 to a woman who is hysteric or depressed is emotionally exhausting, and that as a woman, it would be very
22 difficult to spend the whole day listening to patients complain and then come home to take care of my
23 children.” He also explained that at least in our institution, “psychiatry is a department of men” –since the
24 majority of teachers and resident trainees are male. At that moment, I was shocked and struggled on how
25 to react, so I only replied that psychiatry was still my main interest.

26
27 Living through that situation I realized that we can never cater to everyone’s opinions, which reinforced my
28 decision to follow my interests regardless of others’ prejudices about my gender. However, several
29 questions arose in my mind: What impact had this situation among my colleagues and fellow classmates –
30 male and female– who were present? Had they identified the discrimination? What if his comment was
31 influential enough not to pursue my dream (or others’) of becoming a psychiatrist?

32 After a few days, I discussed this situation with some of my female colleagues, and more than one had
33 gone through similar situations which led us to conclude the importance of eliminating gender stereotypes
34 and opportunity biases within the medical area.

35
36 **Possible Solutions**

1 *Raise awareness*

2 Stone et al. (2020) writes about distinguishing benevolent from hostile sexism. The latter is easier to identify
3 since it consists of hostile behaviors in the basis of gender, whereas the former is associated with elements
4 such as patronizing women and gender stereotypes —women are seen as kinder therefore they should
5 focus on “softer specialties”.⁵ We propose the inclusion of topics such as gender-based discrimination in
6 the medical curriculum and to assess its impact not only on health workers but also on the community.
7 Another solution is to implement medical training that focuses on differences in presentation, diagnosis,
8 and treatment of diseases between sexes to achieve better outcomes.

11 *Education programs*

12 Discrimination has also been reported by health care professionals of different minority groups such as the
13 LGBT community and people of color who face social ostracization, discriminatory treatments, and
14 workplace harassment.⁶⁻⁸ Educational programs that involve *all* medical students (male and female) led by
15 the institutions, which address gender bias, discrimination, and stereotypes in medicine need to be
16 implemented. These programs should include testimonies and activities based on experiences to help
17 students and physicians identify implicit gender bias and discrimination in real-life situations as well as ways
18 to act against it. Empathizing with the discrimination experiences could drive efforts to create respectful and
19 fair workplaces for physicians.²

21 *Attend to everyone’s needs*

22 Investigate what female students, resident trainees, and doctors need to have a more comfortable and
23 advantageous experience in the institution –Faculty and Hospital. Develop new policies and study their
24 impact. Amir Ali (2015) studied the gender differences in the acquisition of surgical skills, proving that male
25 and female medical students differ in their visuospatial abilities and gaming experience, but providing
26 females with instructor feedback and training seems to eliminate these differences.⁹ Another action that
27 could help to attend everyone’s needs is the implementation of childcare services in Faculty and Hospital
28 to facilitate and promote healthy and inclusive parenthood models among doctors.

30 *Women mentorship and representation*

31 We need to increase female role models in teaching, mentorship, and research. Discrimination against
32 women limits the representation of half of the population and their scientific advances avoiding the
33 creation of more inclusive environments that could have implications for the care we provide to patients.²
34 Including more women in decision-making and policy-making positions promotes equity among
35 representative and directive committees. A way to achieve equity in committees and departments is the
36 implementation of policies that encourage the set of a minimum limit on the number of females recruited
37 each year to balance out the male:female ratio.

1 **Conclusion**

2 Today we are the ones who are behind the desk, but tomorrow we will be doctors, mentors, and researchers
3 who will transmit knowledge and different perspectives to students, forging them as future specialists. It is
4 important that we, as a society, educate ourselves in identifying stereotypes and gender-biased situations
5 to eliminate gender discrimination in science. We need to understand that male and female doctors are free
6 to choose to practice the specialty they wish to without being questioned, criticized, and discouraged for
7 wanting to stand out.
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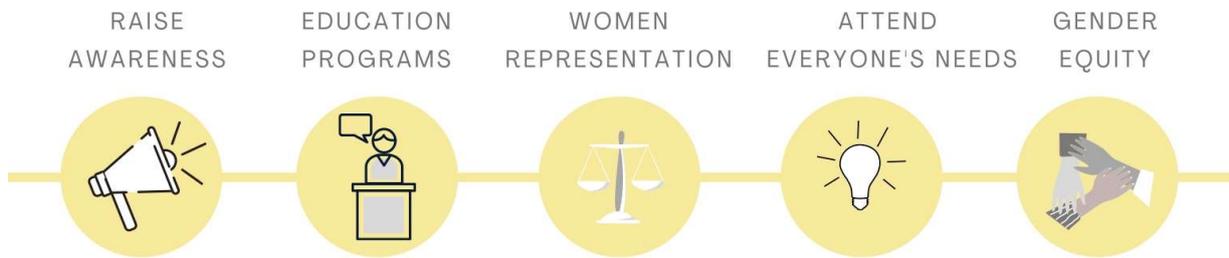
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1 **Figure 1. Possible solutions to address gender bias and stereotypes in medicine.**

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