



Editorial

Women physicians and radiologist: gender disparities

In this last editorial, we will address the issue of gender inequality. As stated in the two previous editorials, gender inequality engenders dissatisfaction and contributes to fatigue and burnout. Here we look at some inequality issues and try to explain how and why they contribute to dissatisfaction and fatigue and overall limit the advancement and progress of our specialty.

The *United Nations Development Programme* has created the gender inequality index (GII) which attempts to provide a comprehensive score for gender differences in the workforce around the world. Of 195 countries studied, those with the lesser gender inequality are Iceland, Finland, Norway, Sweden and Denmark. The United States ranks 43 and the countries with the highest GII (more inequality) are Afghanistan, Niger and Yemen. By comparison, Colombia ranks 89, having a higher GII than Ecuador (88), Peru (86) and Argentina (77) but less than Venezuela (101) (1).

Gender inequality occurs in all professions. For example, of the Fortune 500 companies, only 4% have female Chief Executive Officers (CEO) and of the 29 new companies entering this index last year, only one had a female CEO. Overall, salaries are also lower for females in most professions and an article published in the *New York Times* last year reported that women lawyers make 44% less than their males counterparts (2). Across all jobs in the United States, Hispanic women are the lowest paid as most perform unskilled jobs. A recent, large scale study, showed that over 80% of adults in the USA believe that there is significant gender inequality and less than 35% of women stated that now is a good time to be female (3).

Similar gender inequalities are seen in the salaries of physicians. Although urology continues to be a male-dominated specialty, since 1981 the percentage of female urologists has increased from 0.5% to 10% and nearly 30% of physicians entering this specialty today are females. Yet, there is US \$ 76,000.00 difference between the salaries of men and women (4). Since 2012, the salaries of female physicians (both general practitioners and specialists) in the USA have increa-

sed by 30-40%, but despite this increase, male general practitioners and specialists still make 15% and 25% more money than females respectively. The average difference between male and female doctor salaries is 24% (5). In the United States, male radiologists in private practice make an average of \$51,000.00 more than females but it is curious to note that in academia, female radiologists make an average of \$2000.00 more than males. The explanation for this is unclear but may be related to a greater number of females working part-time in private practice plus the increased regulations and oversight at Universities that, at least partly, controls for inequalities.

Despite the above-mentioned discrepancies, more females than ever are interested in medicine. Across the entire world, nearly 60% of all medical students are female and yet, their interest in radiology is very small. In Canada and the USA, only about 2% of all applications for radiology residency programs come from women. Thus, women are significantly underrepresented in radiology. Radiology is one of the four specialties with the lowest number of women (6). When asked their reasons for not considering radiology as a career, women state the following: the need for knowledge of physics, lack of job flexibility, lack of patient contact, exposure to radiation, long hours at work, dark work environments, and low salaries (7). Many of these reasons are valid but knowledge of physics and lack of patient contact are inherent to most of radiology and unlikely to change. Many female radiologists eventually specialize in mammography or "women's imaging" as this allows them greater patient contact. Women radiologists value patient contact much more than men. Exposure to radiation is a misconception, generally propagated by the lay press. Radiation oncology has now more female residents than ever while this is not happening in diagnostic radiology. As stated in our two previous editorials, longer workdays are now the norm and this conflicts with many women's family responsibilities. Lack of job flexibility is something that may be easily fixed by allowing women to work from home and tailor their work hours to their needs. Providing more part time

jobs for them and their male partners so that the latter can equally contribute in family responsibilities may also help decrease fatigue and burnout.

In conclusion, radiology continues to be a male-dominated specialty resulting in lack of diversity, a poorly balanced workforce with less women entering the specialty despite that the majority of medical students are nowadays female, lower salaries than men especially in private practices, frustration by women radiologists due to long hours at work and inflexible jobs leading to fatigue and burnout due to their disproportionate and unfair load of family responsibilities. To balance our workforce and attract more females to radiology, we must strive to solve these issues.

Referencias

1. United Nations Development Programme (UNDP). Gender inequality index (GII) [internet]. 2016 [citado 2017 sep. 21]. Disponible en: <http://hdr.undp.org/en/content/gender-inequality-index-gii>
2. Olson E. A 44% pay divide for female and male lawyers, survey says. New York Times, 12 de octubre de 2016.
3. PerryUndem Gender Equality Report. The State of the Union on gender equality, sexism, and Women's rights [internet]. 2017 [citado 2017 sep. 21]. Disponible en: <https://www.scribd.com/document/336804316/PerryUndem-Gender-Equality-Report>
4. Female urologists still earn less money than their male counterparts [internet]. 2016 [citado 2017 sep. 21]. Disponible en: <https://www.elsevier.com/about/press-releases/research-and-journals/female-urologists-still-earn-less-money-than-their-male-counterparts>
5. Medscape. Medscape physician compensation report 2016 [internet]. 2016 [citado 2017 sep. 21]. Disponible en: <http://www.medscape.com/features/slideshow/compensation/2016/public/overview#page=9>
6. Deville C, Hwang WT, Burgos R, Chapman, CH, Both S, Thomas CR. Diversity in graduate medical education in the United States by race, ethnicity, and sex, 2012. JAMA Int Med. 2015;175:1706-9.
7. Zener R, Lee SY, Visscher KL, Ricketts M, Speer S, Wiseman D. Women in radiology: exploring gender disparity. J Am Coll Radiol. 2016;13:344-50.



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