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My Thoughts / My Surgical Practice

Women trauma surgeons penetrating the glass ceiling

In 1863, America recognized its first female surgeon, Dr. Mary Edwards Walker, a pioneering female surgeon who served during the Civil War and still the only woman to ever receive the Medal of Honor. However, 157 years later, gender equality in surgery remains an unsolved mainstream issue.[1,2] There are positive and profound effects of having a gender-diverse workforce and that gender inequities can contribute to burnout—which women surgeons disproportionately suffer from[3]— and given that burnout in medicine can potentially result in increased medical errors, as well as attrition from the workforce, this issue is of utmost importance.

Furthermore, leadership roles in national organizations play a crucial role in setting the stage for equal opportunities. For example, in 1987 the American Bar Association (ABA) formed the Commission on Women in the Profession, which recognized that women did not advance professionally at a similar rate as their male counterparts.[4] Soon after publishing these results, more women lawyers assumed positions of power; and shortly thereafter, the law began to protect women in the workplace. Similarly, women in surgery have made strides since the formation of the Association of Women Surgeons (AWS) by Dr. Patricia Numann in 1981, and the American College of Surgeons Women in Surgery Committee (ACS-WiSC) in 1998.

The persistent and dedicated efforts of these organizations, as well as the continued talk of gender bias, and campaigns such as #MeToo and #HeForShe have increased awareness of the obstacles resulting from and challenges relating to gender equity. Presidential addresses from numerous surgical societies such as the American Surgical Association and the Academic Surgical Congress have focused on gender equality. For example, during his 2018 Eastern Association for the Surgery of Trauma (EAST) Presidential Address, Dr. Andrew Bernard discussed issues regarding gender equity, diversity, and inclusion in surgery.[5] Under his leadership, the EAST equity, quality, and inclusion task force was formed and #EAST4ALL was created.[5]

The purpose of our paper is to highlight the significant advances women in trauma surgery have made and to summarize recommendations for continued improvement from the literature. We examined the national leadership roles held by women surgeons in three notable national trauma surgery associations in the United States.

1. Women surgeons as national leaders in trauma surgery

The major trauma associations in the United States include the American Association for the Surgery of Trauma (AAST), the Western Trauma Association (WTA), and EAST. The AAST was founded in 1938 and the first woman trauma surgeon was elected president 60 years later in 1998. Another 18 years passed before the AAST would see another female president. The WTA was founded in 1971 and the association's first female president was elected 38 years later in 2009. Since then, two more women surgeons have served as WTA presidents in 2015 and 2019. EAST was founded in 1988 and the association's first female president took office 19 years later in 2007. The association has had two more women surgeon presidents in 2014 and 2016.

Considering the aforementioned, we must take into account that women trauma surgeons began entering the field later than their male counterparts. Thus, the presence of women trauma surgeons on the executive boards of national trauma surgery associations should be celebrated. Below are several recommendations on how to further increase the number of women surgeon leaders in the future.

2. Obstacles and recommendations for continued improvement

While remarkable strides have been made over the years, a number of obstacles at all levels of training hindering the path towards leadership for women surgeons are frequently reported in the literature.[3,5] The challenges associated with women's advancement into national leadership positions in trauma surgery associations necessitates a multifaceted multidimensional solution. The underlying challenges can be broadly categorized into five main areas: 1) medical education/surgical training, 2) research, 3) leadership/extracurricular involvement, 4) family planning/home life, and, 5) overarching general issues.

3. Education and surgical training

Approximately 40% of all surgical residents are currently female yet female surgeons continue to face gender-specific challenges in the advancement of their careers.[1–5] A recent survey administered to all American Council for Graduate Medical Education (ACGME) accredited general surgery residents (with a 99.3% response rate) revealed the disconcerting fact, that women general surgery residents were more likely to experience burnout symptoms and suicidal ideations than their male counterparts.[3] They were also more likely to experience physical, emotional, and verbal abuse.[3] The authors of the survey recommended employee gender-specific sensitivity training to reduce mistreatment by attending surgeons and other faculty members as well as other residents. Training residents and faculty how to appropriately respond to mistreatment by a patient or their family members or when witnessing mistreatment of a female co-resident is paramount.[3]

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Furthermore, women surgical resident's leave their program at a higher rate than their male counterparts do. Reasons for leaving their programs include concerns of poor mental health and a deficiency in avenues for seeking support. Authors of a study analyzing gender-specific experiences of male and female general surgery residents found that female trainees were more likely to feel uncomfortable during their training due to others making lewd comments and exhibiting aggressive behaviors.[6] If female surgeons do not make it through training, then they surely cannot become national leaders of surgical associations.

We recommend training sessions to raise awareness and increase consciousness be conducted at individual institutions as well as by professional associations. A safe environment, i.e., one that is free from sexual harassment, lewd remarks, and discrimination, is an antecedent to an environment, which is conducive to learning, where everyone can flourish.

4. Research

Female investigators are underrepresented as first or last authors in peer-reviewed publications and also have lower productivity and citation impact as measured by the h-index than male investigators. They are also more likely to receive smaller grants.[7] Recommendations in the literature to improve such findings include presenting more research opportunities to interested female students, residents, fellows, and practicing surgeons.[8] Public speaking should also be encouraged to showcase their abilities.[8] Poster presentation sessions and podium sessions should be encouraged at local, state, and national meetings.[8] More research opportunities result in a greater number of publications and can open up doors to receiving grants and other sources of funding for continued research.

5. Leadership & extracuricular involvment

Organizational support and creating increased opportunities for women during all stages of training is crucially important. Upon contacting national trauma surgery associations' leadership to assess the trends and the number of women surgeon speakers at trauma annual meetings, we were informed that gender data is either not collected, not considered, or cannot be shared. While we encourage gender blind grading or screening of research abstracts, for example, we recommend that organizational leadership independently monitor and trend this important information over time in order to identify and address any implicit gender biases by the individuals screening submissions. Alternatively, more transparency in this process or with the selection process of inviting discussants to annual conferences would be useful for future investigations. In addition, we recommend that organizational leadership be acutely cognizant of selecting an all-men speaker panels and take action to remedy this. The Association of Women Surgeons has created a directory of women surgeon speakers to help meeting organizers find qualified women surgeon speakers for invited talks and panels.

Women often identify the lack of a female mentor as a barrier to forward progress and growth. Women resident surgeons also shared in this sentiment. To combat this, female surgeons should be encouraged to attend national organization meetings and join professional societies to connect with female surgeon mentors. The value of networking in finding a mentor cannot be emphasized enough. While mentorship is invaluable, however, sponsorship is instrumental for female trauma surgeons— or any surgical subspecialty— in attaining higher ranks of academic power.

6. Family planning & home life

Many of the issues identified by surgical trainees included the lack of a work-life balance, not having enough time to spend with children or for maternity and paternity leaves, among others. The issue of childcare and maternity/paternity leave have been particularly scrutinized due to ambiguous policies. The issue of gender inequity in surgery may be predominantly due to lack of options when it comes to childcare. The absence of a uniform protected parental leave policy for residents even brought the ACGME Council of Review Committee Residents (CRCR) together, proposing several recommendations.[9] These included a protected and paid leave policy for males and females alike, including a protected leave for parents adopting children, and budgeting for physician extenders or internal moonlighting opportunities for co-residents or fellows, to account for time taken off by a resident.[9] Increased availability of maternity/lactation rooms and greater options for affordable childcare would also assist in reducing the challenges associated with parenthood for surgeons.

7. Overarching & other

Women surgeons perceived both conscious and unconscious gender bias as an impediment to advancement. Bias training beginning at the medical school level and continuing as mandatory CME should be implemented for both males and females. Implicit biases must be acknowledged. We recommend standing committees to assess and address issues of gender inequality and bias at training institutions across the nation.

Furthermore, equal pay remains an issue with the salary gender gap in surgery reported most recently as $83,000 [10]. Adding to this disparity in salary, unfunded work such as committee responsibilities are often allocated to female surgeons, taking away time that could have been used to participate in a national position instead. Once residency and fellowship training are completed, employment contracts for male and female surgeons should mirror those of others with the same or similar experience and training. Women surgeons should not categorically be presented with lower salary employment contracts—if employers are concerned about surgeons taking time off to focus on childbearing, for example, this should be discussed individually with each surgeon. Interestingly enough, 40% of women surgeons do not have children while 92% of male surgeons have children.[10]

While women trauma surgeons have started to penetrate the glass ceiling, as evidenced by the few national surgical association presidential positions held by women, the glass ceiling must be shattered once and for all. Utilizing a concerted multifaceted approach will catalyze the progress of women into national trauma surgery association leadership positions. Also, the current opportunity for male surgeons to make a difference for the advancement of women surgeons into positions of leadership and authority is paramount for the harmonious and equitable advancement of medicine.

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Saamia Shaikh, DO, JD, Elkbuli Adel, MD, MPH*
Department of Surgery, Division of Trauma and Surgical Critical Care, Kendall Regional Medical Center, Miami, FL, USA

* Corresponding author. Department of Surgery, Division of Trauma and Surgical Critical Care, Kendall Regional Medical Center, Miami, FL, USA.
E-mail address: Adel.elkbuli@hcahealthcare.com (E. Adel).

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