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Key Words: gender representation, cardiothoracic surgery organizations

Discussion

Presenter: Dr Elizabeth A. David

Dr Rosemary F. Kelly *(Minneapolis, Minn)*. I'd like to thank the AATS, Dr Rosengart, and Dr Keshavjee for the opportunity to discuss this paper today. I'd also like to thank Dr David for providing me with the manuscript well in advance. In this time of global crisis and healthcare change, there's a profound need for exceptional leadership—and inclusivity is clearly part of that solution. The authors present a retrospective analysis of the cardiothoracic leadership in regional and national meetings, which highlights a persistent unconscious bias.

While undergraduate and medical schools have clearly achieved gender equity, the same achievement remains elusive for all surgical specialties. In review of women in academic medicine published in the *Annals of Surgery* in 2011, the authors found that despite an influx of women into academic medicine over the past 3 decades, there has not been equality for men and women faculty in terms of rank attainment, salary, leadership roles, and treatment by colleagues.

In 2017, only 12% of professors in surgical specialties were female, with the lowest number in CT surgery. As an academic surgical society, this is extremely concerning, as we are failing to develop and retain talented women surgeons. The authors are to be commended for their study, since the cure for an unconscious bias is to first recognize it. I applaud the program committee for selecting this topic as a plenary session presentation.

Although this is a descriptive study with its own inherent limitations, it is a critical first step in understanding the current state of our specialty and provides a platform for focused efforts necessary for improvement. Using session leaders at organizational meetings as the indicator of specialty leadership, the authors found that for the past 5 years, there's been a significant improvement in these roles to 16%. But this remains low, and when comparing the regional and national subspecialty trends, it is significant that there is true change only in thoracic surgery. The percentage of women on boards of directors and councils remained low and statistically unchanged from 2015 to 2019. These findings force a difficult conversation to address bias and to change the status quo. As we look to the future, women in cardiothoracic surgery and academic leadership are essential for our success. Men and women need to engage in the solutions.

I believe it will require dedicated leadership and attention to the bias to make substantial and sustainable change in this culture. I have a few questions.

As a subspecialty, thoracic surgeons did show the most significant improvement in the number of women session leaders over the study period and the lowest percentage of all-male session leaders. Was the number of unique session leaders for the subspecialty unchanged and did the program planning committees and organizational boards also have more women thoracic surgeons compared to cardiac or congenital specialties?

Dr Elizabeth A. David *(Los Angeles, Calif)*. Thank you, Dr Kelly, for your comments and feedback on the presentation. I think we are in agreement on a lot of these points. For our unique session leader analysis, we did not break it down by specialty. I did not mention this in the presentation, but we did include a lot of mixed sessions, things that would fall into

educational categories and some of the critical care sessions. I suspect that if we had included those sessions, the numbers actually probably would have been even worse, meaning that we would have seen fewer and fewer unique session leaders.

Regarding your question on the program committees, we had data on 18 out of the 20 program committees. Only 4 of those committees were led by a woman. Looking at the committees across the board, we found that if they were led by a woman or a man, it didn't really make any difference in terms of the proportion of session leadership. But we did look at trends in the percentage of women on boards of directors and councils over this time and we found an increasing trend toward women being represented on those boards, but it also did not correlate with female session leadership.

For your final question about how I feel about this as a thoracic surgeon, I think it's really related to the quote that I included at the end: "You can't be what you can't see." In thoracic surgery, there are more of us, and it is a self-fulfilling idea where we are seeing more women at the podium, on the board of directors, on the council, in the leadership, and we're seeing that we can do it. We're seeing that we can do it, and we can balance family, and we can balance the different career pressures that we face as women. And it also gives us more role models and more sponsors. And to why it's been faster in thoracic than in cardiac or congenital, I don't really have a great explanation for that. But I hope that these data will help.

Dr Kelly. The proportion of women as session leaders and moderators was significantly greater at regional meetings compared with national meetings. Were these also unique individuals? And in review of the regional organizations, were there any policies or leadership strategies that were present that encourage engagement of women surgeons?

Dr David. I think there are 2 factors at play here. The regional meetings are smaller. They're intended to be smaller. So it's a smaller scale, sometimes a more welcoming, less intimidating environment than the larger meetings. And so I think leadership and membership feel a little bit more freedom and flexibility in those meetings to give younger members and more junior members an opportunity to lead and be seen.

My other hypothesis about this is that we were actually hoping to get really granular data on the demographics of the membership and the demographics of specialty practices. That was very difficult, and some of the organizations actually said "we really can't provide you with that because it doesn't exist." And you know, there were a couple of organizations who actually don't even track gender of the members right now. And in that case, it's just not on anyone's radar to be really paying attention. Again, I hope that by raising some awareness and realizing that we need to recognize some of this, that alone will be enough to mitigate some of it.

Dr Kelly. Thank you. I think the same is true for our minority members. It's hard to track that data.

Dr David. Yes.

Dr Kelly. It's long been recognized that drawing women into the STEM fields requires a conscious dedicated effort on many fronts. Studies have also shown that medical students have the same degree of inherent interest in surgical specialties regardless of gender. To accelerate diversity in our specialty, we need to far exceed the percentage of senior women in cardiothoracic surgery. What strategies would you suggest to design programs that reflect all demographics rather than our current demographics?

Dr David. Thank you for asking this I. I think there are some really great programs that are already in existence that we need to continue to invest in. There are existing leadership academies and summits that are offered by some of our organizations, and these are key. I think we need to continue to focus on creating environments that allow individuals to develop. It's critical that when we offer a new role to an individual who hasn't previously fulfilled that role, they need to have direct mentorship and feel empowered to ask questions that help them have success in that role. I think some could argue that has traditionally not been the culture of the world of CT surgery. I think this is a place where we could all use a little bit of a cultural shift.

I also think that being very deliberate with our peer-selected invitations is very critical. Just a few weeks ago, I was involved in a planning session for an upcoming meeting. We planned the content as you normally would; we planned the content and went through and suggested a list of potential speakers, moderators, etc. And we went back a second time with that list and said, okay. Well, these people are always on the podium. So they're coming off the list, we're going to get new people on the list. Then we went through the new people and we said, "Alright, who is the person who can make sure that this person is going to be prepared for this role?" So that took extra time and it was an extra step, but hopefully that is something that we all consider doing in the future to improve our inclusivity in the field.

Dr Kelly. What practices would you suggest to promote inclusivity and greater awareness of gender bias for cardiothoracic surgery as a specialty? Would you endorse policies that compel diversity in organizational leadership or meeting participation?

Dr David. I don't feel that there is a need for policies to compel diversity. I think there gets to an issue with people being worried about sacrificing quality when they're compelled to include people. I think that's an issue that we should stay far away from. But I do think we should follow some of the other scientific fields and business fields in terms of modeling our productivity and celebrating the

positives of being more inclusive and more diverse. I would say we have a lot to learn from the business world in that standpoint.

As individual surgeons, there is a lot we can do to shape our field, such as paying attention in sessions and in meetings about who is not there. Looking around on Zoom or when you're in a boardroom, are you the only person who looks like you? And if you are, who can you invite to the table, suggest for a speaking or leadership role, who also looks like you? I think that's really critical for our field as we move forward into the future.

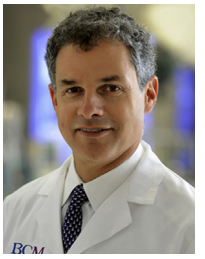
Dr Kelly. Thank you, and I want to again thank the Association and the authors for the opportunity to review this paper and to discuss it here today. Thank you.

Dr Shaf Keshavjee. Thank you, Dr Kelly. Dr David, I have a question for you. If we're going to show you a different profile in 2050, what do you think we could do differently now with our medical students to attract more diversity into cardiothoracic surgery?

Dr David. I think we need to show them that they can do it. And I think the way you do that is by putting someone in front of them or connecting them with somebody who is doing it. Unfortunately, what it means is that for the women who are leaders now in our field, we have to spend a certain amount of time actively engaging and supporting those medical students and residents and showing them that whatever it is they want to balance in their life, whether it's career/family, career/research, etc, we need to find a mentor for them. We know that there's a big dropoff in medical students expressing an interest in a surgical career and then those who follow through with it. So we're clearly missing something, and I think those one-on-one individual relationships can be hugely important. I think the Women in Thoracic Surgery organization is a hugely valuable organization for female trainees to participate in. So I think those are some of the big things.

Dr Keshavjeee. I would argue that it doesn't always have to be women mentoring women either. I believe that is what you've seen in thoracic surgery—a lot of very good mentors who I think were aware of these concepts early on.

Dr David. I agree with you completely, and I know a lot of our members and leaders have daughters, and I think if you mentor your medical students the way you would want someone to mentor your daughter, that will also be a recipe for success.



Dr Todd K. Rosengart *(Houston, Tex)*. Dr David, thanks for that great presentation. The trend toward more trainees versus the proportion of board-certified is obviously a hopeful sign. So I guess I'll ask you how hopeful you are. Do you think that portends an improvement in the number of leaders and discussants and the like? Or are there overarching problems, despite the increasing proportion that we're going to be seeing?

Dr David. I think it's twofold. I think we will see the number of board-certified women increase over the next 5 to 10 years, because we're seeing it even now. But I think we still have the issue of that big hurdle between associate professor and full professor that we really need to work toward. I think all of us, men and women, a lot of times will face some sort of mid-career crisis, and I think women are more susceptible to leaving the field of surgery, leaving the field of academic medicine, when they reach those points—and so that's why we see that big drop from associate professor to professor.

I think that is a real area of concern that needs attention. Even now in the COVID era, we're already seeing a dropoff in the number of academic submissions from women. Fewer women have been interviewed in this era about the way that their practice has been impacted and there's all sorts of theories related to "Well, women are having so take more of the role at home right now, in terms of handling children who are at home, etc." So, I think we are making improvements, but there's still a lot to be done.