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Female Presenting Trends in Oncology Orthopedics – An Analysis of the Past 5 Years

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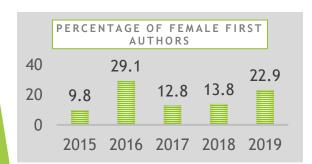
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Introduction

- The number of females in medicine has increased in the past few years, still remains low in orthopedic surgery (10-15%).
- Oncology orthopedics is also not a very popular choice among females who apparently choose hand, foot and ankle or pediatric orthopedics more.
- The number of females in oncology orthopedics has also remained low at 6-7.6%.
- In other areas of medicine, even when the female numbers increase, female colleagues continued to be underrepresented in leadership positions as well as when presenting in conferences.
- The proportion of females presenting, as guest speakers and as senior authors are inferior to the number they represent in the workforce.

<u>Purpose</u>

- To assess if women were proportionally represented in the percentage of presenting authors, senior authors and guest speaker roles in Oncology Orthopedics conferences.
- Additionally, the study aims at assessing if there were any changes in the trend of those numbers in the past five years.



Methods and Materials

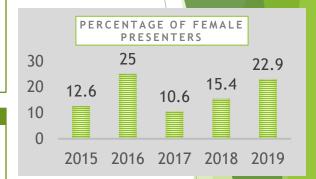
- The final conference programs of the most important oncology orthopedics conferences, from 2015-2019 were analyzed.
- Final programs of the MSTS conference were assessed for number of females presenting, female senior authors, female moderators and female guest speakers.
- For the year 2015, MSTS was combined with ISOLS, thus the combined program was used for analysis.
- Observed proportions of women in leadership positions compared with the expected proportion of overall faculty were assessed.
- Rates of representation of women across each year based on the presence or absence of a woman in research leadership positions were compared.
- A value of P < 0.05 was considered statistically significant.

Results

- Over 350 papers presented in the last 5 years (2015-2019) were assessed (N=364).
- The percentage of female presenting authors varied over the years, with 2017 being the year with least female presenters, only 13.4%.
- The same occurred with females as first authors, with only 6 of the 47 papers being presented by a woman in 2017.
- The percentage of female moderators has remained stable over time, with a maximum of 33.3% in 2016 versus 9.4% in 2015.
- The number of females as senior authors in the papers presented, continued the trend with a minimum in 2017 with only 6.4% of the manuscripts.
- · None of the conference presidents or chair were females.
- For the percentage of female oncology orthopedists, the numbers do not show an underrepresentation in most categories except conference chair and conference president.

Discussion

- Gender disparity is known to exist in the academic setting which is magnified at the faculty and chair level.
- Women enrolling in US medical schools exceeds the number of men, women remain underrepresented in academic medicine.
- There is a necessity towards providing mentorship and advancement initiatives for women and to incorporate women into all levels of oncology orthopedics.



Conclusions

- Gender disparity exists in the academic practice locations in many areas of medicine, which is magnified at the research production level
- The impact that can be attained from using the potential of women in leadership roles is currently under appreciated in many areas of this field.
- Even though females are underrepresented in orthopedic surgery (10-15%) and even more in oncology orthopedics (6-6.7%) compared to the male counterparts, they attain higher percentage of representation in conference leadership positions.

Contact

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References

Linda L, Davis UC, Irvine UC, Atlanticschmidt F: Table A-1: U. S. medical school applications and matriculants by school, state of legal residence, and sex, 2015-2016. 2016:2015-6.
O'Connor Mt. Medical school experiences shape women students' interest in orthopaedic surgery. Clin Orthop Relat Res 2016;474:1967-72.

O'Connor MI: Medical school experiences shape women students' interest in orthopaedic surgery. Clin Orthop Relat Res 2016;474:1967-72.

Cannada LK, Luhmann SJ, Hu SS, Quinn RH. The fellowship match process: the history and a report of the current experience. J Bone Joint Surg Am. 2015;97:e3(1–7).

Grabowski G, Walker JW. Orthopaedic fellowship selection criteria: a survey of fellowship directors. J Bone Joint Surg Am. 2013; 95:e154(1-6)
Niesen MC, Wong J, Ebramzadeh E, Sangiorgio S, Soohoo NF, Luck JV, Eckardt J. Orthopedic surgery fellowships: the effects of interviewing and how residents establish a rank list. Orthopedics. 2015;38:175–176.

Pico K, Gioe TJ, Vanheest A, Tatman PJ. Do men outperform women during orthopaedic residency training? Clin Orthop Relat Res. 2010;468:1804–1808. WHO Spotlight on statistics. Gender and health workforce statistics, 2008.

Connection A. ASCO: women in oncology: breaking down barriers and looking to the future, 2016:14–19.

Jagsi R, Guancial EA, Worobey CC, et al. The "gender gap" in authorship of academic medical literature—a 35-year perspective. N Engl J Med 2006;355:281–7