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#### Status of Sex and Gender in Emergency Medicine A Five Year Follow Up Report

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# A Five Year Follow Up Report Basmah Safdar, MD, MSc,<sup>1</sup> Kimberly E. Ona Ayala, BA,<sup>1</sup> Syed Shayan Ali, MD,<sup>1</sup> Benjamin J. Seifer, BSME,<sup>2</sup>

## Status of Sex and Gender in Emergency Medicine – Michelle Hong, BS, MS,<sup>2</sup> Marna Rayl Greenberg, DO, MPH,<sup>2</sup> Esther K. Choo, MD, MPH,<sup>3</sup> Alyson J. McGregor, MD, MA<sup>4</sup>

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## INTRODUCTION

Despite a clear need for the inclusion of sex and gender based medicine in emergency medicine (SGEM) research, a 2011 review showed that EM, unlike the fields of cardiology, psychiatry, and oncology, failed to apply sex/gender considerations to research design. Two percent examined sex/gender as a primary outcome and 29% within the study analysis. This project provides a five-year follow up on SGEM status following the 2014 AEM consensus conference on sex/gender research within EM. The objective was to evaluate the scope of the inclusion of sex and gender in publications by emergency medicine researchers.

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### METHODS

Using MEDLINE, the term "emergency" was used to identify all English-language, EM-affiliated studies of adult human subjects published between 1/2014 and 2/2017 in which the first, second, or last author belonged to an EM section, division, center, or institution functioning as an emergency department. Five trained abstractors reviewed the data using a standardized data abstraction form. Articles were coded for sex/gender composition, use of sex/ gender as a control variable, independent variable, or a component of the primary objective. Inter-rater reliability (IRR) was calculated with 95% confidence intervals (CI).

#### RESULTS

The search revealed 6,442 articles using the selected "emergency" terms and 2,628 original studies coded as EM-affiliated publications were reviewed; 2,233 met inclusion criteria and were analyzed. The five study areas contributing the most articles were







cardiovascular (20%), administration/crowding (17%), infectious diseases/sepsis (10%), trauma (10%), and emergency medical services (7%). Ninety percent of the published studies were descriptive and 10% experimental. Eighty-six percent (n=1,921) of articles reported the sex/gender composition of the sample and 0.4% (n=8) reported transgender identity. Thirtyfour percent reported sex/gender in the study composition, with 27% (n=609) reporting it as a control variable, 24% (n=543) as an independent variable, and 2% using sex/gender as a component of the primary outcome. The adjusted IRR for data abstraction was 97% (95% CI=95.4%, 98.6%).

### CONCLUSION

Compared to the 2011 report, the number of EM driven scholarship reporting sex/gender in its study composition has increased from 29% to 33%, while those evaluating it as a primary outcome remains unchanged.







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