

Letters

COMMENT & RESPONSE

Sex, Gender, and Precision Medicine

To the Editor We enthusiastically agree with the conclusion of Bartz et al¹ that sex and gender should play a central role in everyday personalized medical care. However, in our experiences as early-career physicians and scientists, we observe critical barriers to actualizing this ideal. Sex- and gender-informed approaches to care are founded on community standards appropriately representing biological sex and the complex sociocultural construct of gender. Although more research is available to provide sex-specific evidence, significant shortcomings remain in effectively implementing sex-informed care.² Regarding gender, a community standard could help drive basic and clinical science education for learners, clinical and translational or health services research, and, ultimately, the delivery of evidence-based gender-sensitive medical care.³ But, to our knowledge, such a standard does not yet exist.

Some young internists, such as us, are dedicated to the study of sex- and gender-sensitive medicine. Through work done by the European Federation of Internal Medicine's Internal Medicine and Assessment of Gender Differences in Europe (IMAGINE) Working Group,⁴ we are aware that in general internal medicine, there may be a less broad portfolio of sex- and gender-specific medical knowledge and skill than other medical specialties. Additionally, context matters, because in some languages, sex and gender are translated identically (eg, *geschlecht* in German). We believe that undergraduate, graduate, and continuing medical education need enhancements to account for diverse patient populations with respect to sex and gender.

Because of the lack of standard methods by which to measure gender, research and health care delivery may be significantly hampered when focused on sex- and gender-diverse individuals. Fortunately, international funding agencies in Europe, Canada, and the US are increasingly issuing grant calls aimed at incentivizing sex- and gender-informed research. Without these data, we face a bottleneck in advancing basic, translational, and clinical scientific knowledge about the intersectionality of sex and gender with other aspects of human health. There is an abundance of literature that identifies shortcomings of clinical guidelines as they apply to

minority demographic patients due to exclusion criteria or selective recruitment; this also applies to sex- and gender-diverse individuals,^{2,5} who, if not represented in the data, do not benefit from the latest scientific research.

Learning to practice medicine with attention to individual diversity is an essential competency of the medical profession. As we envision our long careers ahead, we imagine being able to deliver to patients—of all sexes and genders—personalized, high-quality care as developing scientific knowledge guides increasingly sex- and gender-informed approaches to care.

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Published Online: June 8, 2020. doi:10.1001/jamainternmed.2020.1599

Correction: This article was corrected on June 17, 2020, to add a potential conflict of interest disclosure.

Conflict of Interest Disclosures: Dr Biskup reports being a volunteer member of the executive board of the Women's Brain Project, an international nonprofit organization advocating for and carrying out research on gender differences in brain and mental health diseases. No other disclosures were reported.

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