

EMBARGOED FOR RELEASE: 7-FEB-2019 18:30 ET (7-FEB-2019 23:30 GMT/UTC)

The Lancet: Only one in three biomedical studies includes data on sex, significantly restricting real-world relevance of findings

Female authors are more likely than male authors to report sex-differences, highlighting that diversity in the workforce is essential to produce the most rigorous research; the article is part of a special issue by The Lancet on Advancing Women in Science

THE LANCET

Almost three quarters (70%) of biomedical research papers do not report outcomes for men and women, according to a new analysis of over 11.5 million medical research papers published between 1980 and 2016. Additionally, female authors were more likely to report on sex-differences, highlighting that diversity in the workforce - as well as the research population - is essential to produce the most rigorous and effective research.

The study is published as part of a special issue of *The Lancet* on advancing women in science, medicine and global health (full press release & issue content available below).

Numerous studies have shown there are sex-based differences at the genetic, cellular, biochemical, and physiological levels. Despite this, female participants are often under-represented in research, with grave consequences. One example is the failure to consider sex differences in how drugs work. Of the ten drugs withdrawn from the market between 1997 and 2001, eight posed greater health risks for women than men.

Between 1980 and 2016, sex-related reporting increased across all types of health research included in the paper - from 59% to 67% in clinical medicine and from 36% to 69% in public health. However, progress in biomedical research was slower, increasing from 28% to 31%.

Papers with a female first and last author were more likely to report sex, and journals with high impact factors were less likely to report sex.

"Exclusion of sex reporting in research can hamper policy making, service provision, and health and development outcomes, and must be taken into account throughout the lifecycle of research. Furthermore, by identifying a link between authorship and sex-reporting, our findings show that gender disparities in science have consequences for the health of the entire population. Diversification in the scientific workforce and in the research populations--from cell lines, to rodents, to humans--is essential to produce the most rigorous and effective medical research," says author Dr Vincent Larivière, Université de Montréal (Canada) [1].

###

NOTES TO EDITORS:

The study was supported by the Canada Research Chairs.

[1] Quotes provided directly by authors and cannot be found in the text of the article.

For news media only:

THE LANCET SPECIAL ISSUE ON ADVANCING WOMEN IN SCIENCE, MEDICINE AND GLOBAL HEALTH - full press release and links to all of the content from the issue available at: <http://www.thelancet-press.com/embargo/LancetWomenPR.pdf>

For interview with the author, please contact Dr Vincent Larivière E) vincent.lariviere@umontreal.ca

For embargoed access to the Article & Comment, see: <http://www.thelancet-press.com/embargo/LancetWomen.pdf>

NOTE: THE ABOVE LINK IS FOR JOURNALISTS ONLY; IF YOU WISH TO PROVIDE A LINK FOR YOUR READERS, PLEASE USE THE FOLLOWING, WHICH WILL GO LIVE AT THE TIME THE EMBARGO LIFTS:

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32995-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32995-7/fulltext)

Disclaimer: AAAS and EurekAlert! are not responsible for the accuracy of news releases posted to EurekAlert! by contributing institutions or for the use of any information through the EurekAlert system.

Media Contact

Lancet Press Office
pressoffice@lancet.com
44-020-742-44249

🐦 @TheLancet

<http://www.thelancet.com/home> ↗