

General Principles

- Authors should use the terms sex and gender carefully in order to avoid confusing both terms
- Where the subjects of research comprise organisms capable of differentiation by sex, the research should be designed and conducted in a way that can reveal sex-related differences in results, even if these were not initially expected
- Where subjects can also be differentiated by gender (shaped by social and cultural circumstances), the research should be conducted similarly at this additional level of distinction.

Recommendation Per Section of Article

Title and abstract

If only one sex is included in the study, or if the results of the study are to be applied to only one sex or gender, the title and the abstract should specify the sex of animals or any cells, tissues and other material derived from these and the sex and gender of human participants.

Introduction

Authors should report, where relevant, whether sex and/or gender differences may be expected.

Methods

Authors should report how sex and gender were taken into account in the design of the study, whether they ensured adequate representation of males and females, and justify the reasons for any exclusion of males or females.

Results

Where appropriate, data should be routinely presented disaggregated by sex and gender. Sex – and gender-based analysis should be reported regardless of positive or negative outcome. In clinical trials, data on withdrawals and dropouts should also be reported disaggregated by sex.

Discussion

The potential implications of sex and gender on the study results and analyses should be discussed. If a sex and gender analysis was not conducted, the rationale should be given. Authors should further discuss the implications of the lack of such analysis on the interpretation of the results.

Interested in Learning More?

To consult about applying these principles to your own work, please contact Joanne Garcia-Moores, IEDI Advisor in Research, Research Services Office at jmoores@uoguelph.ca

References:

Heidari, S., Babor, T.F., De Castro, P. et al. Sex and Gender Equity in Research: rationale for the SAGER guidelines and recommended use. Res Integr Peer Rev 1, 2 (2016). <https://doi.org/10.1186/s41073-016-0007-6>