

## **SUPPLEMENTAL MATERIALS**

**To accompany:** Rioux C., Weedon S., London-Nadeau K., Paré A., Juster R-P., Roos LE., Freeman M. & Tomfohr-Madsen LM. Gender-inclusive writing for epidemiological research on pregnancy. *J Epidemiol Community Health*.

## **REVIEW OF GENDERED LANGUAGE IN CURRENT PREGNANCY-RELATED RESEARCH**

### **Method**

To examine the prevalence of (cis )woman-centric and gender-inclusive language in the field, we reviewed recent scientific publications in pregnancy-related health research. A search for the MeSH major topic<sup>1</sup> “pregnancy” was conducted in PubMed on July 23, 2021, with restrictions for publications from the last year (i.e., capturing articles published between 07/22/2020 and 07/23/2021), human research, and the English language. This yielded a total of 2011 references.

Previous reviews examining prevalence in the use of certain methods in scientific research, either across all available research or a subset of studies, have reviewed between 23 and 291 studies.[2-13] We expected gender-inclusive language in pregnancy-related health research to have very low prevalence, thus requiring a larger number of articles to capture its prevalence. In balancing feasibility purposes and this expected low prevalence, we extracted results and 500 publications were randomly selected for review. To do so, all 2011 references were listed in Microsoft Excel. The rand() function was used to attribute a random number

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<sup>1</sup>All references indexed in PubMed are given labels called Medical Subject Headings (MeSH), which are official words/phrases assigned by indexers from the U.S. National Library of Medicine after consulting each article [1]. For each article, some MeSH terms are designated as the major topic. Thus, a search for the pregnancy MeSH major topic would capture all articles labeled by indexers as having pregnancy as a major topic, regardless of whether the term “pregnancy” was used in the title and abstract.

between 0 and 1 for each article, and articles were listed from the smallest to highest generated number. Papers were reviewed following this random order, excluding articles that were not empirical or review studies about pregnant populations (e.g., case studies were excluded since the gender of the patient/participant is then known), until 500 eligible articles were reviewed (see <https://doi.org/10.17605/OSF.IO/JZ6PV> for supplementary spreadsheet with further details on study selection and full list of studies reviewed).

For each article, we took note of whether gender-inclusive language was used. For example, terms such as “women”, “girls”, “mothers”, “maternal”, and “maternity” were considered (cis )woman-centric when referring to pregnant participants and populations. When such (cis )woman-centric language was used, we checked whether gender identity was acknowledged in the article (e.g., as a demographic variable, a note, or a limitation). When gender-inclusive language was used, we took note of the terms used to refer to pregnant individuals. We also coded the research field and the country of first authors. The associations between the use of gender-inclusive language and first authors’ field and country were examined using chi-square tests via IBM SPSS Statistics version 27.

## Results

Results showed that 1.2% (n = 6) of articles used gender-inclusive language, while the remaining 98.8% (n = 494) used (cis )woman-centric language. Terms in articles using gender-inclusive language included *patients*, [14-17] *parents*, [18, 19] and *pregnant teens*. [18] The field of first authors was associated with the use of inclusive language ( $\chi^2(19) = 84.83$ ,  $p < .001$ ). Five out of the six articles using gender-inclusive language were by first authors in medicine, which is consistent with most instances of inclusiveness having used the term “patient.” The sixth article

using gender-inclusive language was the only reviewed article by a first author in communication.[18] There was no geographical pattern, with the association between first authors' countries and the use of gender-inclusive language being non-significant ( $\chi^2(60) = 27.74, p = 1.00$ ). Articles using gender-inclusive language were from Australia, China, Pakistan, Spain, and the USA (2 articles).

Out of the articles using (cis )woman-centric language, 0.6% (n = 3) acknowledged or mentioned gender identity. In one of these articles, a table showed that participants were asked whether they felt that they were treated poorly by care providers because of their sexual orientation or gender identity. However, the measure and results were not discussed in the text, demographics on gender identity were not reported, and participants were referred to as women throughout.[20] The second study conducted qualitative interviews with 14 participants, and the article reported that one participant was genderfluid but referred to the overall sample as females/women.[21] Finally, the third article was a review that acknowledged that not all pregnant people are women, while mentioning that the term “women” was used because studies included in the synthesis used that term.[22] Although this was not among the coded variables, we also observed that most articles mentioning “gender” used the term when referring to sex assigned at birth (e.g., fetal/newborn gender) or measured and discussed gender in a cisnormative binary manner (e.g., men/women, when respondents were pregnant people and their partners or healthcare providers). This is consistent with previous findings that sex and gender are frequently conflated in research.[23, 24]

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