Response to Johnson and Beaudet's commentary: Moving beyond sex and gender reporting in health research

Dear Editor:

Over the last decade, more and more attention has been paid to the importance of sex and gender in health research.^{1–3} As part of these efforts, funding agencies and journals have been targeted as potential change agents. For example, Johnson and Beaudet's commentary "Sex and gender reporting in health research: Why Canada should be a leader"⁴ argues that Canada has "a unique opportunity...to demonstrate leadership in doing science better with sex and gender – and we should not let it be missed." The authors specifically propose that when submitting to journals, authors should be required to report and justify methodological choices about sex and gender in relation to study populations. Certainly, such calls have not been limited to Canada. The IOM⁵ and others⁶ have recommended that journal editors adopt guidelines and/or policies for sex and gender reporting, especially in relation to clinical trials, and there is some indication that some journals have started to implement such recommendations.⁷

While it is true that sex and gender are important determinants of health and that a significant amount of health research historically has excluded females, proposals such as those by Johnson and Beaudet⁴ present several challenges.

First, unlike the questions that distinguish between sex and gender which Johnson and Beaudet propose for journal submissions, contemporary understandings of sex/gender and health emphasize that it is not possible to identify a pure "sex" (i.e., physiologic) effect that is not influenced by "gender" (social and structural factors).⁸ Therefore, it is inaccurate and misleading to routinely and unquestionably report "sex" effects or "sex" differences as if to imply they operate independently of social construction.

Second, Johnson and Beaudot claim "sex and gender influence all domains of health" and that "every cell is sexed."⁴ These statements lack nuance and risk essentializing difference. Sex and/or gender may have relevance for an array of outcomes, but such statements may lead researchers to miss important similarities between men and women while contributing to high rates of statistically false "positives" for difference.⁹

Third, the authors' sole emphasis on sex/gender in isolation ignores other critical determinants of health. Not only are sex and gender hard to disentangle, they interact with other social determinants of health.¹ Such interactions are a *constant*, and thus health outcomes and inequities cannot be understood by only considering sex and gender or prioritizing these in relation to other factors.¹⁰ Health research must find ways to capture interlocking inequities and dimensions of difference, including

socio-economic status, race/ethnicity, sexual orientation, and geographic location, and in the process, de-center sex and gender as the preferred axes through which to frame research.

Johnson and Beaudet assert that "attention to both sex and gender considerations in reporting of health research does in fact make for better science."⁴ Arguably, true leadership in the field of health research and reporting requires a far more complicated and inclusive approach to creating an adequate and accurate evidence base for understanding salient differences and responding to inequitable health outcomes. The scientific community in Canada and abroad should focus on developing reporting standards that insist on an integration of *all* relevant factors that shape difference and inequity and which *may or may not* consistently prioritize or even consistently include sex and/or gender. Better science requires moving beyond sex and gender to address knowledge gaps and better respond to persistent and growing health inequities.

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