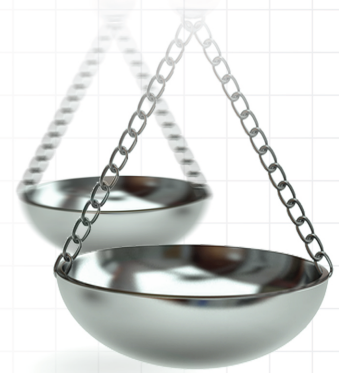




Letter in Reply: considering equity in clinical trials for highlighting impact of social determinants and inequities on health outcomes

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“Joint effort of the entire research community is needed to properly consider equity in clinical trials for highlighting impact of social determinants and inequities on health outcomes”

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Lui and White [1] provided encouraging words about our recent manuscript in which we explored reporting of sex/gender and race/ethnicity in trials published in the highest-ranking anesthesiology journals from 2014 to 2017 [2]. In our study, we have reported that the trial authors have extremely rarely used stratification of participants based on sex/gender, or race/ethnicity and few reported results for these aspects. This makes anesthesiology trials vulnerable to a source of bias associated with these participants' characteristics [2].

Lui and White [1] aptly commented that researchers need to be more cognizant of such participants' characteristics as covariates, and potential impact of social determinants of health on disparities that may influence health outcomes.

O'Neill *et al.* have recently suggested a list PROGRESS that can help authors of new intervention studies and systematic reviews to design their studies while explicitly considering equity. PROGRESS is an acronym for Place of residence, Race/ethnicity/culture/language, Occupation, Gender/sex, Religion, Education, Socioeconomic status, Social capital [3]. Multiple studies, including ours [2], have shown that these aspects of equity are poorly considered. Petkovic *et al.* have recently reported that even high-quality systematic reviews suffer from this flaw; their findings indicated that sex/gender reporting in Cochrane and Campbell systematic reviews was inadequate [4].

Attwood *et al.* analyzed physical activity interventions based in primary care, by using indicators under the acronym PROGRESS-Plus (place of residence, race/ethnicity, occupation, gender, religion, education, social capital, socioeconomic status, plus age, disability and sexual orientation). Their results showed that the majority of analyzed trials recorded sufficient information about PROGRESS-Plus factors to enable analysis of differential effects, but very few trials actually reported that they conducted analyses that would enable insight into which populations would benefit, or be further disadvantaged, from the intervention [5].

Research methodology has seen many positive advances within a recent decade, including abundance of various reporting checklists and methodological tools for improvement of study design, conduct and reporting, and reduction of research waste. Further effort is now needed to ensure that researchers pay attention to equity, and use social determinants in their studies. Interventions that could be explored to motivate researchers to pay attention to indicators of equity include actions toward research ethics committees and funders, to make them aware of the need for the equity dimension at the stage of study design. Clinical trial registers could provide information for authors, recommending them to include determinants of equity in consideration. Editors and peer reviewers can ask for the same during evaluation of manuscripts. Joint effort of the entire research community is needed to properly consider equity in clinical trials for highlighting impact of social determinants and inequities on health outcomes.

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