Stellingen

1. Prenatal Mendelian randomization (MR) is subject to unique biases not found in other MR designs, and the impact of these biases in practice should be evaluated. (this thesis)

2. Observed data are not always compatible with the MR assumptions, especially when proposing multiple genetic variants as instruments. (this thesis)

3. When proposing multiple genetic variants as instruments in MR, bounds on the average causal effect can give evidence about the direction and possible magnitudes of effect without potentially implausible homogeneity assumptions. (this thesis)

4. Even when bounds on causal effects are wide, they can help researchers to understand how strongly their conclusions rely on particular assumptions. (this thesis)

5. Epidemiologists rely heavily on implicit homogeneity and consistency assumptions when using causal effect estimates to inform policy decisions, yet these assumptions are rarely evaluated or acknowledged. (this thesis)

6. A more thorough evaluation of historically-used methods, as well as methods used in other fields, could help to improve epidemiologic research as a whole.

7. Starting PhD programs in health sciences with set coursework focused on differentiating the goals of description, prediction, and causal inference research, and the concepts of counterfactuals, would reduce later confusion.

8. Efforts to specifically recruit and foster scientists of color who are underrepresented in Dutch health research, especially black scientists and scientists from areas impacted by Dutch colonialism, would not only help to correct an ongoing injustice, but would also improve the practice of epidemiology in the Netherlands and beyond.

9. More protections should be in place to maintain the work trajectory of female scientists, especially those who have or plan to have children.

10. Poorly conceptualized and biased research on the effects of pregnancy exposures on offspring outcomes tend to further locate responsibility for offspring health within the mother, and reinforce cultural narratives about policing the behavior of women of reproductive age.

12. “To approach the Other in conversation is to welcome his expression, in which at each instant he overflows the idea a thought would carry away from it. It is therefore to receive from the Other beyond the capacity of the I, which means exactly: to have the idea of infinity. But it also means: to be taught.” (Emmanuel Levinas, *Totality and Infinity*)