Review of: "Effect of Supplementation with Moringa oleifera on Antioxidant and Oxidative Stress Biomarkers of Infertile Women: A Pilot Open-Label Randomized Clinical Trial"

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Potential competing interests: No potential competing interests to declare.

Comments for the article

1. This study had a relatively small sample size (60 women), which may limit the ability of the study to be generalized to the population. The study design was an open-label case-control randomized clinical trial, which may cause bias and reduce the validity of the study. These factors need to be stated as limitations of the study.
2. In the discussion, the author should identify factors causing the results of the Moringa Oleifera supplementation, which was not significant between the two groups. One of the factors that can be explained is the relatively short time of the supplementation (only 4 weeks). A longer period of supplementation (3-6 months) may be needed to see the effect of Moringa Oleifera on the markers.
3. Although the study found lower levels of oxidative stress markers and higher levels of antioxidant markers in the supplemented group, statistically no differences were found. Therefore, it cannot be concluded that Moringa Oleifera has a beneficial effect on these markers, let alone improving fertility outcomes. The conclusions in the abstract and the discussion should be aligned with the results.
4. In the further study section, the authors need to advise to investigate the effect of Moringa Oleifera on more specific impacts of oxidative stress in infertility, such as DNA damage, oocyte mitochondrial function, hormonal regulation, etc.