

Review of: "Effect of Supplementation with Moringa Oleifera on Antioxidant and Oxidative Stress Biomarkers of Infertile Women: A Pilot Open-Label Case-Control Randomized Clinical Study"

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Potential competing interests: No potential competing interests to declare.

In the article titled "Effect of Supplementation with Moringa Oleifera on Antioxidant and Oxidative Stress Biomarkers of Infertile Women: A Pilot Open-Label Case-Control Randomized Clinical Study," the researchers explored the impact of Moringa Oleifera supplementation on antioxidant and oxidative stress markers in infertile women. The study revealed an association between increased oxidative stress and female infertility, suggesting that supplementation with Moringa Oleifera might contribute to improved pregnancy outcomes.

While the study is intriguing, there are several noteworthy concerns. Firstly, both researchers and participants were aware of the treatment administered, introducing potential biases. Additionally, despite the inclusion criteria specifying no antioxidant medication or supplements in the last six months, the study did not inquire about prior and concurrent regimens. Considering the Nigerian context, where certain herbs and nutrients may exhibit high antioxidant activities, this oversight could impact the study's interpretation.

A critical concern is the low sample size in the intervention group ($n=10$), rendering it insufficient for robust statistical analysis. This limitation diminishes the study's statistical power and the reliability of the observed effects.

Moreover, the article lacks crucial information regarding components with potential antioxidant activities in Moringa plants, the preparation method of the supplements (fresh, dried, extracts), and the possible mechanisms linking antioxidant activity to improved female fertility. Addressing these gaps is essential for a comprehensive understanding of the study's outcomes.

Minor issues, including style, grammar, and the use of abbreviations, should also be revisited for clarity and professionalism in communication. Overall, addressing these concerns will enhance the credibility and impact of the study.