

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.

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

I would recommend major corrections based on the comments below before accepting

Page number	Comments
Abstract	
Page 1 – 2	
“... the effect of supplementation with <i>moringa oleifera</i> on antioxidant... ”	<i>Moringa oleifera</i> , not <i>moringa oleifera</i> , Moringa oleifera or <i>moringer oleifera</i> . Please be consistent throughout the manuscript.
“...infertile women supplemented with Moringa Oleifera than in the unsupplemented...”	
“Supplementation with <i>moringer oleifera</i> in infertile...”	
Introduction	
Page 2	
“Estimates from 1997 suggested that worldwide, about five percent (5%) of all heterosexual couples had unresolved infertility (Himmel <i>et al.</i> , 1997). Male infertility constitutes about 20% - 30% of infertility cases, while 20% - 35% are due to female infertility and 25% - 40% are due to combined problems in both sexes (Chowdhury <i>et al.</i> , 2017).”	References for this part are too outdated. Please cite more recent articles (preferably within the last 3 – 5 years) that discuss this particular issue and these statistics.
Page 3 – 4	
“used in traditional medicine and have been reported to possess diverse medicinal properties [Razis et al., 2014] to contain 17 times more calcium than that of milk and 10 times more Vitamin A than that of carrots [Plott, 2017].”	The format for in-text reference in this entire paragraph has changed, specifically the use of [...] instead of (...).
	Please check and be consistent.

Page 4	
“There is a dearth of clinical studies and information about this plant on infertility.”	Consider adding references for this statement.
Materials and Methods	
Page 4	Consider adding the year (s) in which this experiment was conducted (recruitment of patients to end of observation).
Page 7	What was the recommended temperature? Please add.
“The supplement was stored under the recommended temperature throughout the duration of the study, and the storage temperature was strictly monitored.”	
Results	
Page 9 – 10	
Table 1	Please check Table 1 formatting.
Page 10	
Table 2 – “N = 40, *p<0.05 (i.e. Significant).”	Authors did not include the asterisk in Table 2 for values that showed significance. Please check.
Table 1 and 2	Authors can consider converting either Table into a bar chart for clearer visualization and comparison of the presented data.
Discussion	
Page 11	
“The role of plasma concentrations of ROS in folliculogenesis, maturation of oocytes, and normal uterine function has been established by a previous study (Agarwal et al., 2008). Excessive production of free radical biomarkers has been reported to affect the normal reproductive process (Agarwal et al., 2005).”	Consider updating the references to include only more recent ones.
“Available evidence has confirmed the important interplay between ROS and the antioxidant system in ovulation, fertilization, steroidogenesis, and endometrial receptivity (Brzezinski, 1987; Ben et al., 2023)”	
Page 11	
“Due to economic challenges precipitated by the COVID-19 pandemic, many patients who were	This presents a significant concern for the reliability of this work. How many patients could not attend the follow-up? What effect did this have on the

Due to economic challenges precipitated by the COVID-19 pandemic, many patients who were supplemented with MO were not able to return for post-supplementation sample collection. This could account for the high loss to follow-up observed in this study."

results?

Conclusion

Page 11

"Supplementation with *Moringa oleifera* in infertile women could help in reducing the effects of OS, thereby improving pregnancy outcomes."

How can this be your conclusion when your results showed non-significance for the OS markers in control vs MO supplemented patients?