Reviewer's report

Title: The Effect of Vitamin D Supplementation on Hemoglobin Concentration: A Systematic review and Meta-analysis

Version: 0 Date: 16 Jun 2019

Reviewer: Abdulbari Bener

Reviewer's report:

The aim of this review was to investigate the effect of vitamin D supplements on hemoglobin concentration in subjects aged 17.5-68 years old; using randomized controlled trials (RCTs).

Methods: Relevant RCT studies were identified from January 2000 to January 2019 by using MeSH terms in PubMed, Embase, Cochrane Library, Clinical trials, Scopus databases and gray literature. The studies were reviewed systematically, and quality assessments were evaluated by the guidelines of the Cochrane risk of bias. The effect of vitamin D supplements (n = 14) on hemoglobin concentration was considered as primary outcome, while its effects on the levels of ferritin, transferrin saturation and iron status were derived as secondary outcomes.

Unfortunately, the current review concluded that supplementation with vitamin D had no significant effect on hemoglobin and ferritin levels while positive effects on transferrin saturation and iron status were observed, which is not correct and contradicting with literature.

Overall, the current study addresses nonconclusivel but very serious issue concerning major public health problem. The study based on convenient available retrospective data. This study is well written but not well designed. The authors should provide key points and the contribution of current study to literature and what messages are provided with the present study?

Limitations: The authors not reported the key limitations of this study, I think the major concern of this submission is it lacks sufficient novelty, as many of such similar reports were seen published in previous literature.

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An article of limited interest

Quality of written English
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