Dear Editor,

Vitamin D deficiency in pregnancy remains widespread globally. Adequate Vitamin D status is needed for optimal pregnancy outcome. Very high prevalence of Vitamin D deficiency was reported in Tunisian mothers (98%) and their newborns (97%) with severe deficiency in most cases. Vitamin D deficiency exposes to adverse outcomes such as osteomalacia, preeclampsia, gestational diabetes, cesarean delivery, genital infection, preterm birth, low birth weight, hypocalcemia, and neonatal rickets.

Previous Tunisian studies reported the association between inadequate Vitamin D status and the risk of fetal neural tube defects and preeclampsia. Although Tunisia is a sunny country, sun exposure was reported to be insufficient and dietary Vitamin D intake does not achieved the dietary reference intakes in most women. Thus, Vitamin D supplementation is needed.

There are persistent controversies about the need and the effectiveness of Vitamin D supplementation during pregnancy to improve pregnancy outcome. Recent updated Cochrane review states that supplementing pregnant women with Vitamin D increases serum 25-hydroxyvitamin D (25 (OHD)) at term and may reduce the risk of preeclampsia, low birth weight, and preterm birth. However, the review concluded that there were insufficient data to advise Vitamin D supplementation during pregnancy and recommended further high-quality research to answer more evidence of the effectiveness of Vitamin D supplementation on maternal and offspring outcomes.

Recent reviews reported significant increase in circulating 25 (OHD) in pregnant women who received Vitamin D supplementation and suggested that Vitamin D supplementation can safely be utilized during pregnancy.

For Tunisian pregnant women, given the high prevalence and the severity of Vitamin D deficiency, it would be relevant to establish Vitamin D supplementation to achieve adequate Vitamin D status. Recent recommendations indicate that pregnant women should receive 600 IU/day of supplemental Vitamin D to ensure adequacy of maternal serum 25 (OHD) levels. There is continuing controversy over the appropriate dose of Vitamin D supplementation during pregnancy. The recommendation does not consider the severity of deficiency. Hence, there are some concerns in generalizing recommendations. A recent study conducted in a population of pregnant women with severe Vitamin D deficiency reported that with doses as high as 4000 IU/day, normalization of Vitamin D status was achieved in only 15% of the studied population. In view of the recent literature data, we recommend research to determine the appropriate doses of Vitamin D supplementation in Tunisian pregnant women, and we wish to appeal policies maker for introducing Vitamin D supplementation in the Tunisian prenatal care program.

In conclusion, Vitamin D deficiency is prevalent in Tunisian pregnant women and was reported to be associated with adverse outcomes in mothers and their newborns. We hope for soon Tunisian recommendations of Vitamin D supplementation during pregnancy.

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Conflicts of interest

There are no conflicts of interest.

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