

Maternal thyroid status and its relation to ferritin and vitamin B12 in Saudi pregnant women

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Dear editor,

I read with interest the distinguished study by Mogahed *et al.* [1] published in April–June 2019 issue of the *Egyptian Journal of Internal Medicine*. The authors studied thyroid status in Saudi pregnant women and its relation to serum ferritin and vitamin B12. They found that serum thyroid-stimulating hormone level was lower in pregnant than nonpregnant women. The most common thyroid disorder was subclinical hypothyroidism (35.5%) followed by overt hypothyroidism (10%) and hypothyroxinemia (2.2%) in pregnant women. Blood hemoglobin (HB) and serum vitamin B12 levels were significantly lower in first and second trimesters of pregnancy compared with controls ($P=0.001$). Serum free thyroxine was positively correlated with blood HB and serum ferritin, whereas serum thyroid-stimulating hormone was negatively correlated with blood HB and serum ferritin [1]. I assume that these results must be interpreted with caution owing to the presence of the following methodological limitation. It is obvious that precise interpretation of thyroid hormones during pregnancy in a given population necessitates using local trimester-specific reference intervals. Truly, trimester-specific reference ranges for thyroid hormones have been constructed for certain populations [2,3]. In the study methodology, Mogahed *et al.* [1] mentioned that they referred to two standards in assessing thyroid status in their studied population, namely the guidelines of the American Thyroid Association for the diagnosis and management of thyroid disease during pregnancy and the currently available report that included normal pregnant participants from the Gulf region. I assume that both standards cannot be applied to the

Saudi pregnant population. The first standard was designed for white population [4], whereas the second standard was constructed for mixed ethnic pregnant population in the United Arab Emirates [5]. Kingdom of Saudi Arabia is not a multi-ethnic country. I assume that formulation of trimester-specific normative data of thyroid hormones for Saudi pregnant women is of utmost importance. Employment of that national standard in the clinical settings and researches could better define the prevalence of thyroid disorders and associated factors in Saudi pregnant women.

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Conflicts of interest

There are no conflicts of interest.

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