

Degrees of Deficiency: Doctors and Vitamin D

Dear Sir,

The recent editorial "Vitamin D Deficiency: Is the Pandemic for Real?" rendered an insightful analysis on the true nature of the issue; indicating that prevalence was overstated by inappropriate reference values.^[1] While interest in this public health problem grows, there has also been escalating concern over the incidence and effects of vitamin deficiency among medical professionals. Paradoxically, physicians prescribing supplementation could be at the same or greater risk than the general population that they serve.

The largest study till date on Vitamin D levels among Indian medical health professionals estimated that 79% were deficient, 15% were insufficient and only 6% of subjects achieved vitamin D sufficiency.^[2] On closer scrutiny, the definition of sufficiency taken as serum vitamin D level of >more than 75 nmol/L, was more conservative than the Institute of Medicine (IOM) recommendation of sufficiency at 50-75 nmol/L.^[2,3] Applying the IOM reference values to this study, vitamin D levels were sufficient in 21% of subjects. Despite this recalculation, it is evident that the vast majority (79%) had levels that were either insufficient or deficient even by IOM standards. Another study conducted exclusively on Indian resident doctors found that 88% had either insufficiency or deficiency by IOM standards.^[4]

Residents in training have been found to have a particularly high risk of low vitamin D levels because of extended work hours and lack of outdoor exposure.^[5] Of particular concern are anaesthetists and surgeons who are for the large part of any given working day within the artificially lit confines of the theatre complex. Emerging evidence links low vitamin D levels with disrupted sleep patterns, excessive daytime sleepiness, neurocognitive impairment, musculoskeletal pain and fatigue.^[6] These effects would be expected to amplify, given the existing state of sleep deprivation among doctors on long shifts and residents in particular. Regrettably, the combination of limited awareness of the effects of deficiency and poor health seeking behaviour among doctors often leads to diagnosis by exclusion rather than one guided by clinical suspicion.

It is indisputable that vitamin D deficiency is an important public health issue for which health policy must promote awareness and education while judiciously employing strategy such as food fortification. Medical professionals and resident doctors in particular must be cognizant of the occupational risks and disease manifestations for the

sake of their own health as well as the ability to provide optimal care to their patients.

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There are no conflicts of interest

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