Vitamin D Deficiency has a Strong Negative Affect on Sleep

Philcy Kaiyaleth and Marc Nahmani

Having sufficient sleep is crucial for maintaining good health, as it enhances our ability to perform skills like problem-solving and decision-making. As individuals age, various biological and physical factors can reduce sleep duration, leading to an increased risk of developing sleep disorders. A factor that contributes to the proper functioning of the body is maintaining optimal vitamin D levels. Vitamin D is essential for growth, bone health, and other processes in the body. However, it is unclear whether vitamin D deficiency can increase the risk of developing sleep disorders in adults. In this literature review, we aimed to determine whether increasing vitamin D levels in the body could decrease the risk of sleep disorders. We examined many primary and secondary sources to understand the relationship between sleep and vitamin D functioning in the body. Our analysis found that decreased levels of vitamin D in the body are associated with lower sleep duration during the night. In addition, adequate vitamin D levels in the body are necessary for essential processes like growth and bone health. Furthermore, vitamin D deficiency can lead to dysfunction of the circadian cycle and melatonin hormone, eventually resulting in increased sleep disorders. In summary, we discovered that having adequate vitamin D is necessary for normal bone health and body growth and that lack of vitamin D can lead to weaker bones and associated body pain during the night, leading to disturbed sleep and reduced sleep duration. Therefore, our research suggests that individuals should strive to get 600 IU of vitamin D per day to help ensure that they have a longer duration of sleep as they age and reduce their risk of sleep disorders.