Infectious diseases are the cause of exacerbation of most chronic respiratory conditions. A meta-analysis of recent studies of supplementation with vitamin D has shown a decrease in number or symptoms of COPD exacerbations, especially in patients with severe vitamin D deficiency [9]. Curiously vitamin D supplementation has also shown to ameliorate asthmatic exacerbations, probably due to its immunomodulatory functions [11]. Up-to-now vitamin D supplementation as an add-on therapy for tuberculosis or pneumonia has not shown utility [9].

In conclusion, Vitamin D has an important role both in innate and adaptive immunity. Hypovitaminosis D should be considered both in acute infectious diseases and in chronic diseases that predispose to infectious diseases.

References

systematic review and meta-analysis of individual participant data.