

Assessment of Knowledge and Attitudes Regarding Vitamin D and Its Deficiency among Undergraduates in a Tertiary Educational Institution In Sri Lanka; A Descriptive Cross-Sectional Study

VPOH Pramodhya¹, WSMD Abeysinghe¹, RN Perera¹, PV Bhagya¹,
JADK Wimanshika¹, PJ Wijekumar^{1#} and S Chakrewarthy²

¹*Department of Biomedical Science, Faculty of Health Sciences, KIU, Sri Lanka*

²*Department of Biochemistry, Faculty of Medicine, University of Kelaniya, Sri Lanka*

#jalini@kiu.ac.lk

Many people in tropical Asian nations suffer from vitamin D deficiency or insufficiency, despite receiving sufficient sunlight throughout the year. Because inadequate vitamin D can cause a deficiency, which increases the risk of disease in adulthood, the knowledge, and attitudes of undergraduate students about vitamin D deficiency must be emphasized. This study aimed to assess the relationship between knowledge and attitudes regarding vitamin D and its deficiency among undergraduates in a tertiary educational institution in Sri Lanka. A descriptive cross-sectional study using a validated, self-administered questionnaire was carried out among undergraduates. The questionnaire consists of knowledge questions covering participants' knowledge about the role of vitamin D, sources of vitamin D, exercise habits, symptoms of vitamin D deficiency and risk categories. The attitude questions covered participants' sun exposure attitudes, diet, harmful effects, supplementation and general features of individuals. A total of 374 students (279 females and 95 males) participated. SPSS version 25 was used for analysis. The mean age of the sample was 24.28 ± 2.39 years. 18.8% (n = 68) had good knowledge with a good attitude level, 13.6% (n = 50) had poor knowledge and attitudes, and 7.75% (n = 29) had moderate knowledge with a moderate attitude level. The undergraduates showed a significant association between knowledge and attitudes ($P=0.003$). The total scores for knowledge and attitude were significantly correlated, according to the Spearman correlation ($p=0.000$, $r = 0.268$). Positive correlations between knowledge and attitudes indicate that better knowledge can lead to positive attitudes. Interventions including health education, awareness of dietary sources of vitamin D, and promotion of regular outdoor activities are needed to improve knowledge and attitudes regarding vitamin D and to prevent its insufficiency and deficiency.

Keywords: *vitamin D, vitamin D deficiency, knowledge, attitudes, undergraduates*