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**Prevalence of vitamin D deficiency in children from 136 countries, living in the United Arab Emirates**

Afrozul Haq<sup>1</sup>, Jitka Svobodová<sup>2</sup> and Andrea Jindrová<sup>2</sup>

<sup>1</sup>Gulf Diagnostic Center Hospital, UAE

<sup>2</sup>Czech University of Life Sciences Prague, Czech Republic

The prevalence of vitamin D deficiency viz. having serum 25(OH)D concentrations less than 75 nmol/mL is a common phenomenon worldwide. This study has been undertaken keeping in mind that the previous studies done and published were more general in nature. The aim of this study has been to be more accurate with respect to clearly defining the variables for example children are now clearly categorized by a combination of multiple variables together (age, gender, nationality). In the previous studies, the analysis was done separately for each variable. The data presented in this paper is specifically of the juvenile population living in the United Arab Emirates i.e., residents aged less than 18 years. Data showed highest prevalence of severe vitamin D deficiency (< 25 nmol/L) in two groups of UAE female teenagers viz. age groups of 13–15 years and 16-18 years old. Considering nationality and the age in correspondence analysis, the optimum level of vitamin D (75-200 nmol/L) is found in babies between the ages of 1-3 years irrespective of their nationality. In the juvenile population, the study shows an inverse correlation between age variable and serum 25(OH)D levels variable (with an increase in age, the level of vitamin D decreases). Irrespective of the nationality, the highest incidence of insufficient level of vitamin D (50-74 nmol/L) was found in children aged between 4 and 6 years. On the other hand, optimum levels of vitamin D (75-200 nmol/L) were found in males irrespective of their nationality. For predicting the level of 25(OH)D ( $p < 0.01$ ) in children; variable 'age' is the most important factor followed by the variable 'gender' for children up to

the age of 12 years and variable 'nationality' for children between the age of 12-18 years. These startling data warrant further studies leading to drafting a national policy to overcome this epidemic of vitamin D deficiency among juveniles in the United Arab Emirates. We speculate that similar data exists in other GULF countries.

**Speaker Biography**

Afrozul Haq is working as a Director of Research & Development at Gulf Diagnostic Center Hospital (GDCH), Abu Dhabi, UAE. He is the pioneer of Vitamin D research and testing in the UAE and serving as the Founding President and Chairman of the International Conference on Vitamin D Deficiency, Nutrition and Human Health continuously conducted for the last 6 years at Abu Dhabi, UAE. He is a graduate of Aligarh Muslim University, India and started his professional career from All India Institute of Medical Sciences (AIIMS), New Delhi in 1984. He has more than 35 years of experience as a Basic & Clinical Research Scientist working in a number of research labs, and hospitals around the world including Pasteur Institute, Paris, France; McGill University, Montreal, Canada; King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia, Mafraq Hospital, Sheikh Khalifa Medical City, VPS Healthcare, Abu Dhabi, UAE. He is serving as Guest Editor for the *Journal of Steroid Biochemistry and Molecular Biology* for the last 2 years and Editor-in-Chief, Editorial Board Member and Advisor for several international journals in the field of Medical Research and Health Sciences.

e: haq2000@gmail.com