



Vitamin D Deficiency Levels- Oral Manifestations and Considerations in Children

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Introduction

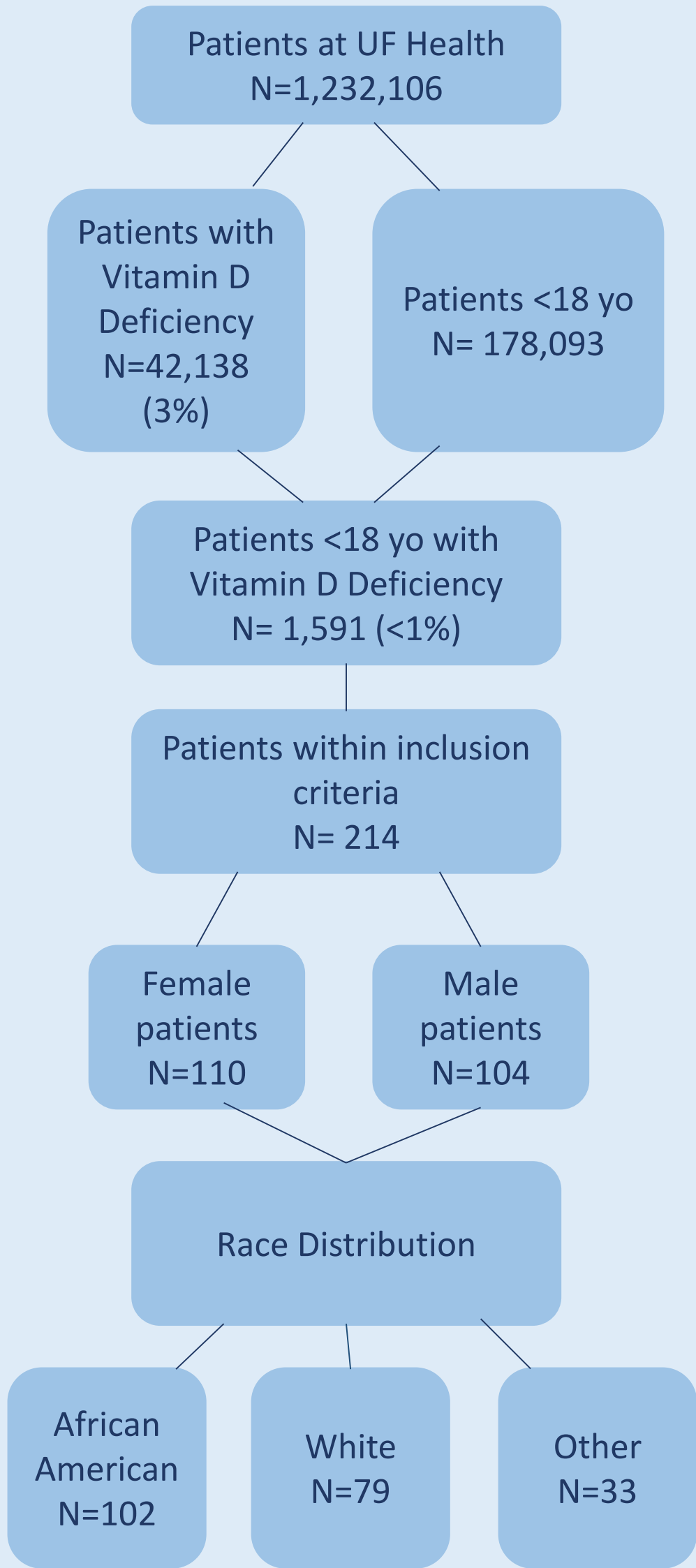
- Vitamin D is an essential vitamin that aids in the growth, development, and maintenance of overall health.
- Vitamin D deficiency occurs due to inadequate dietary intake with insufficient exposure to sunlight, inability to absorb Vitamin D from the intestine, and the inability to process Vitamin D due to kidney or liver disease.
- Inadequate Vitamin D levels are associated with dental caries experience and may be considered a risk factor for caries development.

Purpose

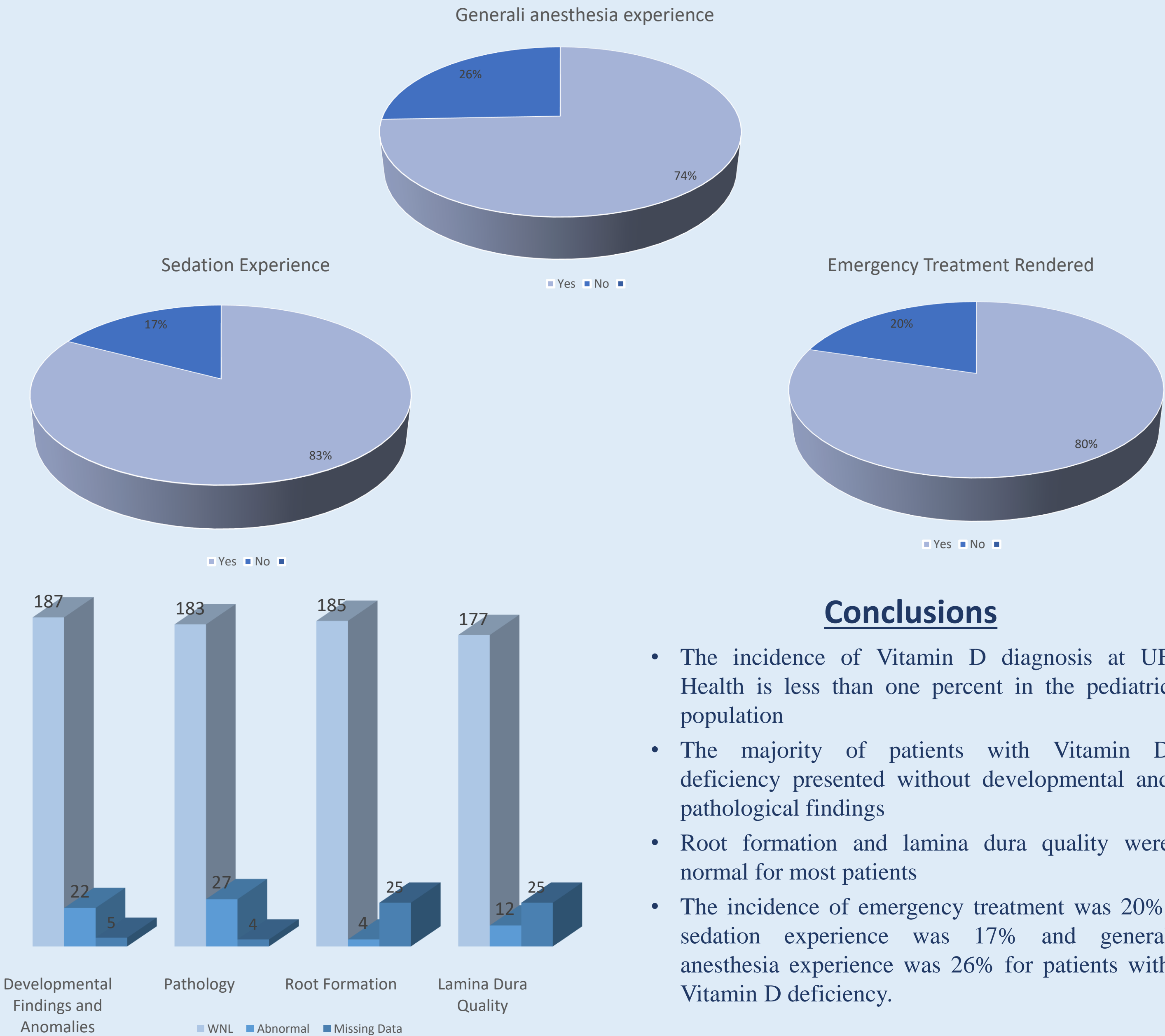
The aim of this study was to examine the relationship between Vitamin D deficiency levels and hard and soft tissue manifestations in a pediatric population.

Methods

- Deidentified aggregated data, provided by the chief data officer (Informatics for Integrating Biology and the Bedside I2B2) was used to identify patients with Vitamin D deficiency (ICD 10 E55.9).
- Prevalence of Vitamin D deficiency at UF Health was determined based on age.
- Patients were identified that had Vitamin D deficiency diagnosis, medical record number in EPIC and electronic dental records via AXIUM.
- A Chart review was performed and the following data extracted into an electronic spreadsheet: age at first dental visit, developmental findings and anomalies, presence of clinical and radiographic pathology, root formation, lamina dura quality, the need for emergency treatment, sedation and general anesthesia experience.



Results



Conclusions

- The incidence of Vitamin D diagnosis at UF Health is less than one percent in the pediatric population
- The majority of patients with Vitamin D deficiency presented without developmental and pathological findings
- Root formation and lamina dura quality were normal for most patients
- The incidence of emergency treatment was 20%, sedation experience was 17% and general anesthesia experience was 26% for patients with Vitamin D deficiency.