

EFEK DEFISIENSI VITAMIN D PADA PERTUMBUHAN SENDI LUTUT ANAK GENU VALGUM VS GENU VARUM : *SYSTEMATIC REVIEW*

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ABSTRAK

Pendahuluan: Defisiensi vitamin D merupakan suatu bentuk kekurangan vitamin D dengan kadar dalam serum $\leq 37,5$ nmol/L. Salah satu manifestasi klinis yang dapat ditemukan pada anak dengan defisiensi vitamin D ini berupa gangguan pertumbuhan pada sendi lutut. Hingga saat ini, belum ada konsensus mengenai efek defisiensi vitamin D pada pertumbuhan sendi lutut anak. Beberapa penelitian terdahulu menunjukkan perdebatan mengenai efek defisiensi vitamin D pada lutut anak. Penelitian ini bertujuan untuk mengevaluasi efek defisiensi vitamin D pada pertumbuhan sendi lutut anak berupa genu valgum atau genu varum. **Metode:** Desain penelitian berupa *systematic review* dengan subjek penelitian berupa data sekunder yang berasal dari publikasi sebelumnya. Proses pencarian literatur didapatkan dari hasil penelitian yang dipublikasikan oleh *database online* yaitu *PubMed, Prime Pubmed, MedxRiv, dan Google Scholar*. **Hasil:** Berdasarkan 11 literatur penelitian yang didapat dan telah dilakukan seleksi dengan metode PRISMA-P dan uji kualitas literatur, ditemukan efek defisiensi vitamin D pada pertumbuhan sendi lutut anak berupa genu valgum sebanyak 3 artikel, sementara genu varum sebanyak 8 artikel. Artikel kemudian diidentifikasi metodologinya karena mempengaruhi *evidence-base* dari penelitian. **Kesimpulan:** Efek defisiensi Vitamin D pada sendi lutut anak dapat menyebabkan genu varum maupun genu valgum.

Kata kunci : Defisiensi Vitamin D, Genu Varum, Genu Valgum, Kaki X, Kaki O, Sendi lutut, Anak

***EFFECT OF VITAMIN D DEFICIENCY ON CHILDREN'S
KNEE JOINT GROWTH
GENU VALGUM VS GENU VARUM :
SYSTEMATIC REVIEW***

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ABSTRACT

Introduction: Vitamin D deficiency is a type of lack of vitamin D with serum level <37,5 nmol/L. One of the clinical manifestations that can be found in children with vitamin D deficiency is a growth disorder in the knee joint. Until now, there was no consensus about the effects of vitamin D deficiency on children's knees. Some previous studies have shown contrast result about the effects of vitamin D deficiency on children's knees. This study aims to evaluate the effect of vitamin D deficiency on the growth of children's knee joints in the form of genu valgum or genu varum. ***Method:*** The study design is a systematic review with the research subject are secondary data from previous publications. The literature search process was obtained from research results published by online databases, such as PubMed, Prime Pubmed, MedxRiv, and Google Scholar. ***Results:*** Based on 11 research literatures obtained and selected using the PRISMA-P method and literature quality test, it was found that the effect of vitamin D deficiency on children's knee joints growth in the form of genu valgum as many as 3 article, while genu varum as many as 8 article. The article then identified by the methodology it used because it affected the evidence-base of the research. ***Conclusion:*** Effect of vitamin D deficiency on children's knee joint causes either genu varum or genu valgum.

Keywords : Vitamin D Deficiency, Genu Varum, Genu Valgum, Bowlegs, Knock Knees, Knee, Children