

**HUBUNGAN KADAR SERUM VITAMIN D DENGAN TINGKAT
KEPARAHAN AKNE VULGARIS PADA MAHASISWI FAKULTAS
KEDOKTERAN UNIVERSITAS PENDIDIKAN GANESHA**

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ABSTRAK

Beberapa tahun terakhir, vitamin D diketahui berperan penting dalam proses imunomodulasi dan antiinflamasi yang dapat memengaruhi patogenesis akne vulgaris. Hasil penelitian sebelumnya mengenai hubungan kadar serum vitamin D dengan tingkat keparahan akne masih menunjukkan perbedaan temuan. Di sisi lain, prevalensi akne vulgaris di kalangan mahasiswa kedokteran cukup tinggi dan dapat menimbulkan dampak psikologis maupun penurunan kualitas hidup. Berdasarkan kondisi tersebut, penelitian ini dilakukan untuk mengetahui hubungan antara kadar serum vitamin D dan tingkat keparahan akne vulgaris pada mahasiswa Fakultas Kedokteran Universitas Pendidikan Ganesha. Desain penelitian yang digunakan adalah analitik observasional dengan pendekatan cross-sectional pada 32 mahasiswa yang memenuhi kriteria inklusi dan eksklusi. Penilaian tingkat keparahan akne dilakukan oleh dokter spesialis kulit dan kelamin menggunakan Global Acne Grading System (GAGS), sedangkan kadar serum vitamin D diukur dengan metode Enzyme-Linked Immunosorbent Assay (ELISA). Analisis data menggunakan uji korelasi Rank-Spearman menunjukkan nilai $\rho = 0,3$ dengan $p = 0,09$ ($p > 0,05$) dan 95% Confidence Interval (CI) = $-0,06$ hingga $0,6$, yang berarti tidak terdapat hubungan yang signifikan secara statistik antara kadar serum vitamin D dengan tingkat keparahan akne vulgaris pada penelitian ini. Arah korelasi positif lemah menunjukkan bahwa peningkatan kadar vitamin D tidak selalu diikuti dengan penurunan tingkat keparahan akne, faktor eksternal seperti penggunaan tabir surya dan keterbatasan responden.

Kata Kunci: Vitamin D, akne vulgaris, kadar serum, tingkat keparahan

**THE RELATIONSHIP BETWEEN SERUM VITAMIN D LEVELS AND
THE SEVERITY OF ACNE VULGARIS IN FEMALE STUDENTS AT THE
FACULTY OF MEDICINE, GANESHA UNIVERSITY OF EDUCATION**

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ABSTRACT

In recent years, vitamin D has been recognized for its crucial role in immunomodulation and anti-inflammatory processes, which can impact the pathogenesis of acne vulgaris. Previous studies on the relationship between serum vitamin D levels and the severity of acne have shown varying results. On the other hand, the prevalence of acne vulgaris among female medical students is quite high and can have psychological impacts and reduce the quality of life. Based on these conditions, this study was conducted to determine the relationship between serum vitamin D levels and the severity of acne vulgaris in female students at the Faculty of Medicine, Ganesha University of Education. The study design used was an observational analytical study with a cross-sectional approach involving 32 female students who met the inclusion and exclusion criteria. The severity of acne was assessed by a dermatologist using the Global Acne Grading System (GAGS), while serum vitamin D levels were measured using the Enzyme-Linked Immunosorbent Assay (ELISA) method. Data analysis using Spearman's rank correlation test showed a value of $\rho = 0.3$ with $p = 0.09$ ($p > 0.05$) and a 95% confidence interval (CI) = -0.06 to 0.6. This indicates a weak positive correlation that is not statistically significant, meaning that in this study, higher serum vitamin D levels are weakly associated with greater severity of acne vulgaris, but this association is likely due to chance. The lack of significance suggests that factors such as sunscreen use and participant limitations may influence these results.

Keywords: Vitamin D, acne vulgaris, serum levels, severity