

ABSTRAK

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HUBUNGAN ANTARA KONSUMSI VITAMIN D3 DENGAN TERJADINYA PAPARAN INFEKSI COVID-19 DI JAKARTA UTARA

(XVII + 54 halaman: 2 gambar, 9 tabel, 3 lampiran)

Latar Belakang: Pada awal pandemi COVID-19, Indonesia mengalami kesulitan dalam mendiagnosis penyakit tersebut akibat peningkatan kasus dari penyebaran virus COVID-19. Hingga saat ini, pencegahan intensif dibutuhkan untuk memerangi pandemi COVID-19. Salah satu bentuk pencegahan virus adalah dengan mengonsumsi suplemen vitamin D3 (1,25(OH)2D3) yang diketahui memiliki kandungan yang baik dalam meningkatkan sistem kekebalan tubuh sebagai respon terhadap infeksi COVID-19. Dalam penelitian ini, penulis memfokuskan pada subjek penelitian yaitu masyarakat di wilayah Jakarta Utara. Penelitian ini diharapkan akan memperoleh informasi lebih lanjut terkait karakteristik dari konsumsi vitamin D3 dan hubungannya dengan terjadinya paparan infeksi COVID-19 di Jakarta Utara.

Tujuan: Penelitian ini bertujuan untuk mencari hubungan antara konsumsi vitamin D3 dengan terjadinya paparan infeksi COVID-19 di Jakarta Utara.

Metodologi: Penelitian ini menggunakan studi potong lintang dengan teknik *purposive sampling* terhadap 96 responden masyarakat wilayah Jakarta Utara. Data diperoleh secara daring dengan *platform Google Form*. Data yang terkumpul dianalisis menggunakan metode *Chi-Square* dengan program *Statistic Package for Social Science* (SPSS) versi 26.

Hasil: Dari 96 responden yang memenuhi kriteria inklusi, didapatkan sebanyak 57 (59.4%) responden yang terdiri dari 5 (27.8%) tidak konsumsi dosis vitamin D3, 36 (62.1%) konsumsi vitamin D3 dosis rendah (< 5000 IU), dan 16 (80.0%) konsumsi vitamin D3 dosis tinggi (\geq 5000 IU) mengakibatkan tidak terinfeksi COVID-19. Sedangkan terdapat sebanyak 39 (40.6%) responden yang terdiri dari 13 (72.2%) tidak konsumsi dosis vitamin D3, 22 (37.9%) konsumsi vitamin D3 dosis rendah (<5000 IU), dan 4 (20.0%) konsumsi vitamin D3 dosis tinggi (\geq 5000 IU) mengakibatkan terinfeksi COVID-19. Hasil uji Chi Square menunjukkan nilai $p=0,004$ sehingga terdapat hubungan antara konsumsi vitamin D3 dengan terjadinya paparan infeksi COVID-19.

Kesimpulan: Konsumsi suplementasi vitamin D3 efektif dalam meningkatkan sistem imun tubuh terhadap paparan infeksi COVID-19. Penelitian ini menunjukkan adanya hubungan yang signifikan antara konsumsi vitamin D3 dengan terjadinya paparan infeksi COVID-19 di Jakarta Utara.

Kata Kunci: Konsumsi vitamin D3 dan terjadinya paparan infeksi COVID-19.

ABSTRACT

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ASSOCIATION BETWEEN VITAMIN D3 CONSUMPTION AND OCCURRENCE OF EXPOSURE TO COVID-19 INFECTION IN NORTH JAKARTA

(XVII + 54 pages: 2 pictures, 9 tables, 3 attachments)

Background: At the beginning of the COVID-19 pandemic, Indonesia faced difficulties to diagnose the disease due to the increase in cases from the spread of the COVID-19 virus. Until now, intensive prevention is needed to combat the COVID-19 pandemic. One form of virus prevention is consuming vitamin D3 (1,25(OH)2D3) supplementation which is known to have good content in boosting the immune system in response to the COVID-19 infection. In this study, the author focuses on the research subject, namely the people in the North Jakarta area. This research is expected to obtain further information regarding the characteristics of vitamin D3 consumption and its association with the exposure to COVID-19 infection in North Jakarta.

Objective: This study aims to determine the association between consumption of vitamin D3 and the exposure to COVID-19 infection in North Jakarta.

Methodology: This study uses a cross-sectional study design with a purposive sampling technique towards 96 respondents in North Jakarta. Data was obtained online using the Google Form platform. The collected data was analyzed using the Chi-Square method with the Statistical Package for Social Sciences (SPSS) program version 26.

Results: From the 96 respondents who met the inclusion criteria, there were 57 (59.4%) respondents consisting of 5 (27.8%) who did not consume vitamin D3 dose, 36 (62.1%) consumed low dose of vitamin D3 (< 5000 IU), and 16 (80.0%) consumed high dose of vitamin D3 (\geq 5000 IU) resulted in not being infected with COVID-19. While there were 39 (40.6%) respondents consisting of 13 (72.2%) who did not consume vitamin D3 dose, 22 (37.9%) consumed low dose of vitamin D3 (<5000 IU), and 4 (20.0%) consumed high dose of vitamin D3 (\geq 5000 IU) resulted in being infected with COVID-19. The results of the Chi Square test showed a p value = 0.004, hence there is a relationship between vitamin D3 consumption and the exposure to COVID-19 infection.

Conclusion: Consumption of vitamin D3 supplementation is effective in boosting the body's immune system against the exposure to COVID-19 infection. This study shows that there is a significant relationship between vitamin D3 consumption and the exposure to COVID-19 infection in North Jakarta.

Keywords: vitamin D3 consumption and exposure to COVID-19 infection.