

## **ABSTRAK**

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### **HUBUNGAN PEMBERIAN JENIS VAKSIN COVID-19 TERHADAP GANGGUAN MENSTRUASI PADA MAHASISWI FAKULTAS KEDOKTERAN UNIVERSITAS PELITA HARAPAN**

(XIV + 65 halaman : 4 gambar; 7 tabel; 6 lampiran)

**Latar Belakang:** Pada bulan Maret Tahun 2020, COVID-19 ditetapkan menjadi pandemi oleh *World Health Organization (WHO)* karena tingkat penyebarannya terjadi secara cepat dan global. Ada berbagai jenis vaksin yang dikembangkan dan disetujui dalam waktu kurang dari 1 tahun dari awal mula virus pertama kali ditemukan. Jenis vaksin yang telah disebarluaskan di Indonesia dan disetujui oleh BPOM ada 5 yaitu Sinovac, AstraZeneca, Sinopharm, Pfizer dan Moderna. Semenjak vaksinasi COVID-19 dilaksanakan, ada beberapa pelaporan bahwa vaksin COVID-19 menyebabkan sejumlah gangguan menstruasi, termasuk siklus yang tidak teratur, kram dan pendarahan. Siklus menstruasi diatur oleh *hypothalamic-pituitary-ovarian axis* yang dapat dipengaruhi oleh stresor kehidupan, lingkungan, dan kesehatan. Vaksin COVID-19 dapat menciptakan respons imun atau stresor yang kuat, yang untuk sementara dapat memengaruhi *hypothalamic-pituitary-ovarian axis* sehingga menyebabkan gangguan menstruasi. Apabila seseorang mengalami gangguan menstruasi kronis dapat menyebabkan infertilitas, anemia dan kanker endometrium.

**Tujuan Penelitian:** Untuk mengetahui apakah ada hubungan antara pemberian vaksin COVID-19 dengan gangguan menstruasi pada mahasiswa Fakultas Kedokteran Universitas Pelita Harapan.

**Metode Penelitian:** Penelitian dilakukan berdasarkan studi observasi analitik komparatif tidak berpasangan dengan studi *cross-sectional*, dan dilaksanakan pada bulan Januari-April 2023 di Fakultas Kedokteran Universitas Pelita Harapan. Penelitian ini dilakukan dengan cara pengisian kuesioner *Adnex-1 Questionnaires* dan dengan metode *purposive sampling* sebagai teknik pengambilan sampel. Hasil

penelitian diolah menggunakan program *Statistical Package for the Social Sciences* (SPSS) 25 dan dilakukan pengujian statistik dengan metode *chi-square*.

**Hasil:** Dari 123 responden kriteria inklusi, didapat sebanyak 114 (92,7%) mahasiswi tidak mengalami gangguan menstruasi pasca vaksinasi COVID-19 sedangkan 9 (7,3%) mahasiswi lainnya mengalami gangguan menstruasi. Dari total 9 (7,3%) mahasiswi yang mengalami gangguan menstruasi, gangguan yang terjadi berupa gangguan durasi menstruasi, gangguan volume menstruasi, dan gangguan regularisasi menstruasi. Berdasarkan uji *Chi Square* didapatkan nilai p sebesar 0,618 sehingga *P Value* > 0,05 dan menunjukkan tidak terdapat hubungan antara pemberian jenis Vaksin COVID-19 terhadap gangguan menstruasi.

**Kesimpulan:** Tidak terdapat hubungan yang signifikan antara pemberian jenis Vaksin COVID-19 terhadap gangguan menstruasi pada mahasiswi Fakultas Kedokteran Universitas Pelita Harapan dengan nilai p 0,618

**Kata Kunci:** Vaksin COVID-19, Gangguan menstruasi, gangguan regularisasi, durasi, volume dan berat aliran menstruasi.

**Referensi:** 40 (2018 - 2022)

## **ABSTRACT**

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### ***THE RELATIONSHIP BETWEEN COVID-19 VACCINE ADMINISTRATION AND MENSTRUATION DISORDERS IN FACULTY OF MEDICINE STUDENT OF PELITA HARAPAN UNIVERSITY***

*(XIV + 65 pages : 4 figures; 7 tables; 6 attachment)*

***Background:*** In March 2020, COVID-19 was declared a pandemic by the World Health Organization (WHO) because the level of spread occurs quickly and globally. There are various types of vaccines developed and approved in less than 1 year from when the virus was first discovered. There are 5 types of vaccines that have been disseminated in Indonesia and approved by BPOM, namely Sinovac, AstraZeneca, Sinopharm, Pfizer and Moderna. Since the COVID-19 vaccination was implemented, there have been reports that the COVID-19 vaccine has caused a number of menstrual disorders, including irregular cycles, cramps and bleeding. The menstrual cycle is regulated by the hypothalamic-pituitary-ovarian axis which can be influenced by life stressors, the environment, and health. COVID-19 vaccines can create a strong immune or stressor response, which can temporarily affect the hypothalamic-pituitary-ovarian axis thus causing menstrual disorders. If a person experiences chronic menstrual disorders it can cause infertility, anemia and endometrial cancer.

***Objectives:*** To find out whether there is a relationship between the administration of the COVID-19 vaccine and menstrual disorders in female students of the Faculty of Medicine, Pelita Harapan University.

***Method:*** The study was conducted based on an unpaired comparative analytical observational study with a cross-sectional study, and conducted in January-April 2023 at UPH medical Faculty. The research was conducted by filling out the Adnex-1 Questionnaire and purposive sampling method as a sampling technique. The research results processed by using the Statistical Package for the Social Sciences

(SPSS) 25 program and statistical testing was carried out using the chi-square method.

**Results:** Of the 123 respondents with inclusion criteria, 114 (92.7%) female students did not experience menstrual disorders after the COVID-19 vaccination, while 9 (7.3%) other female students experienced menstrual disorders. Out of a total of 9 (7.3%) female students who experienced menstrual disorders, the disturbances that occurred were disturbances in menstrual duration, menstrual volume disturbances, and menstrual regularity disturbances. Based on the Chi Square test, a p value of 0.618 was obtained so that the Value  $> 0.05$  and showed that there is no relationship between the administration of the COVID-19 vaccine type and menstrual disorders.

**Conclusion:** There was no significant relationship between COVID-19 vaccine administration and menstrual disorders in UPH Faculty of Medicine Student with a p value of 0.618.

**Keywords:** COVID-19 vaccine, menstrual disorders, irregularity, duration, volume and weight of menstrual flow.

**Reference:** 40 (2018-2022)