COVID-19 Infection on Menstrual Disorders

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ABSTRACT

Introduction: COVID-19 is a type of viral disease caused by infection with the COVID-19 virus. Since the beginning of the COVID-19 epidemic, several reports state that women have experienced menstrual changes, including changes in the frequency of menstruation, increased dysmenorrhea, and exacerbation of premenstrual syndrome. Menstruation significantly impacts the quality of life and imposes a substantial social and economic burden on families and their health. In Iran, comprehensive research on this topic has not been conducted. Considering that women make up 50% of society and these problems can lower their quality of life, it is important to identify the practical factors in menstrual disorders. This study aimed to examine the impact of COVID-19 infection on the prevalence of menstrual disorders in female patients with a history of COVID-19 in Isfahan Shariati Hospital in 2022.

Methods and Materials: This research is a cross-sectional-analytical study. The statistical population of this study consisted of female patients of reproductive age with a history of COVID-19 in the past 6-24 months who visited Isfahan Shariati Hospital from September 2022 to March 2023. We obtained clinical and demographic data from questionnaires. People diagnosed with COVID-19 were identified through PCR testing. Menstrual disorders are defined as the scores that respondents assign to specific questions in the researcher's questionnaire. We determined the explanation of normality and abnormality with Kolmogorov- Smirnov, and descriptive and inferential statistics (Mann-Whitney U, Chi-square, and t-test) were used to analyze the data. Data analysis was performed using SPSS software version 26.

Results: A total of 200 individuals participated in the study, with the youngest being 19 years old and the oldest being 45. Among the woman, 65% had been infected with COVID-19 more than one year ago. Of these, 53% experienced moderate severity and received outpatient treatment, while only 3% required hospitalization. Furthermore, a significant association was found between COVID-19 infection and menstrual disorders, premenstrual syndrome (p = 0.000), and anxiety disorders (p = 0.001). The stress level of women after contracting COVID-19 changed from normal and mild to moderate to severe. Based on the paired sample t-test, anxiety changes showed 13.5% more than before COVID-19 (p = 0.001).

Conclusion and Discussion: We should recognize that individuals with COVID-19 are at an increased risk for anxiety and mood disorders. Research indicates that mood and menstrual disorders may develop following a COVID-19 infection. By informing women about these potential risks, we can help prevent the severity of these disorders through appropriate treatment.

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