

40. **A PRELIMINARY STUDY OF MENSTRUAL CHANGES AMONG JORDANIAN WOMEN FOLLOWING COVID-19 VACCINATION.**

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INTRODUCTION: During the last two years, the world witnessed an urgent need for vaccines to tackle the coronavirus disease 2019 (COVID-19) pandemic. Several side effects, mainly non-life-threatening, were reported following COVID-19 vaccination. There are increasing concerns about the potential effects of COVID-19 vaccines on menstrual cycle (MC) changes amid a paucity of scientific studies on this crucial issue. The present study aimed to assess the changes in menstrual cycle (MC) among Jordanian women after receiving a COVID-19 vaccine. **METHODS:** An online-based cross-sectional study was conducted from 10 to 24 August 2021. The main menstruation-related complaints were identified and included in the survey tool that targeted Jordanian women who received at least one dose of a COVID-19 vaccine. **RESULTS:** A total of 633 married and unmarried women were recruited, 222 (35.1%) and 411 (64.9%), respectively. Unmarried women showed a significantly higher occurrence of menstruation dysfunctions after getting a COVID-19 vaccine compared to married women ($p = 0.001$). During MC, around 34.3% of participants were suffered from increasing back and abdominal pains. The most common dysfunction was a prolonged MC (24.8%), while only 16.1% experienced pre-menstruation bleeding. Additionally, 19.4% of participants stated that the MC dysfunctions last for one month, 8.7 % for two months, and 35.4% for more than two months. **CONCLUSION:** This study showed that COVID-19 vaccines negatively affected the MC in terms of the occurrence of dysfunctions and accompanying symptoms. However, further studies are required to investigate the characteristics of women who are more likely to be affected and the potential mechanisms underlying these effects.

Key words: COVID-19; SARS-CoV-2; Vaccine; Menstrual cycle; Side effect; Adverse reaction.