

Al-Qazaz HK, Al-Obaidy LM, Attash HM. COVID-19 vaccination, do women suffer from more side effects than men? A retrospective cross-sectional study. *Pharmacy Practice* 2022 Apr-Jun;20(2):2678.

<https://doi.org/10.18549/PharmPract.2022.2.2678>

Original Research

COVID-19 vaccination, do women suffer from more side effects than men? A retrospective cross-sectional study

Abstract:

The vaccine was the only way to fight against Coronavirus-19 (COVID-19) from its statement as a pandemic till day. COVID-19 vaccines were approved by the world health organization (WHO) in December 2020. Despite a large number of studies regarding the efficacy and safety of COVID-19 vaccines, to our knowledge, there were limited studies that outlined the gender disparity towards COVID-19 vaccine adverse effects. This study aims to outline the variety of side effects among men and women after getting COVID-19 vaccines (either single or two doses). It is a cross-sectional study accomplished electronically from September to November 2021. The participants involved were 843 Health Care Workers (HCWs) from different cities in Iraq. The majority of respondents were females (664). Around 65% of males experienced adverse effects compared to 77% of females. A high frequency of severe pain was reported among females. Regarding dermatological reactions like swelling, redness and skin rash were also higher reported among female subjects. In addition to that, higher frequencies of moderate and severe systemic adverse effects and mild to moderate nausea was also reported more frequently among females. In terms of cardiopulmonary adverse effects, all the reported adverse effects were found more frequently among females. In conclusion, COVID-19 vaccines produced limited adverse effects and the majority of them were reported among women. This may be associated with hormonal and psychological factors related to them.