



COVID 19 Vaccine Effect on Females

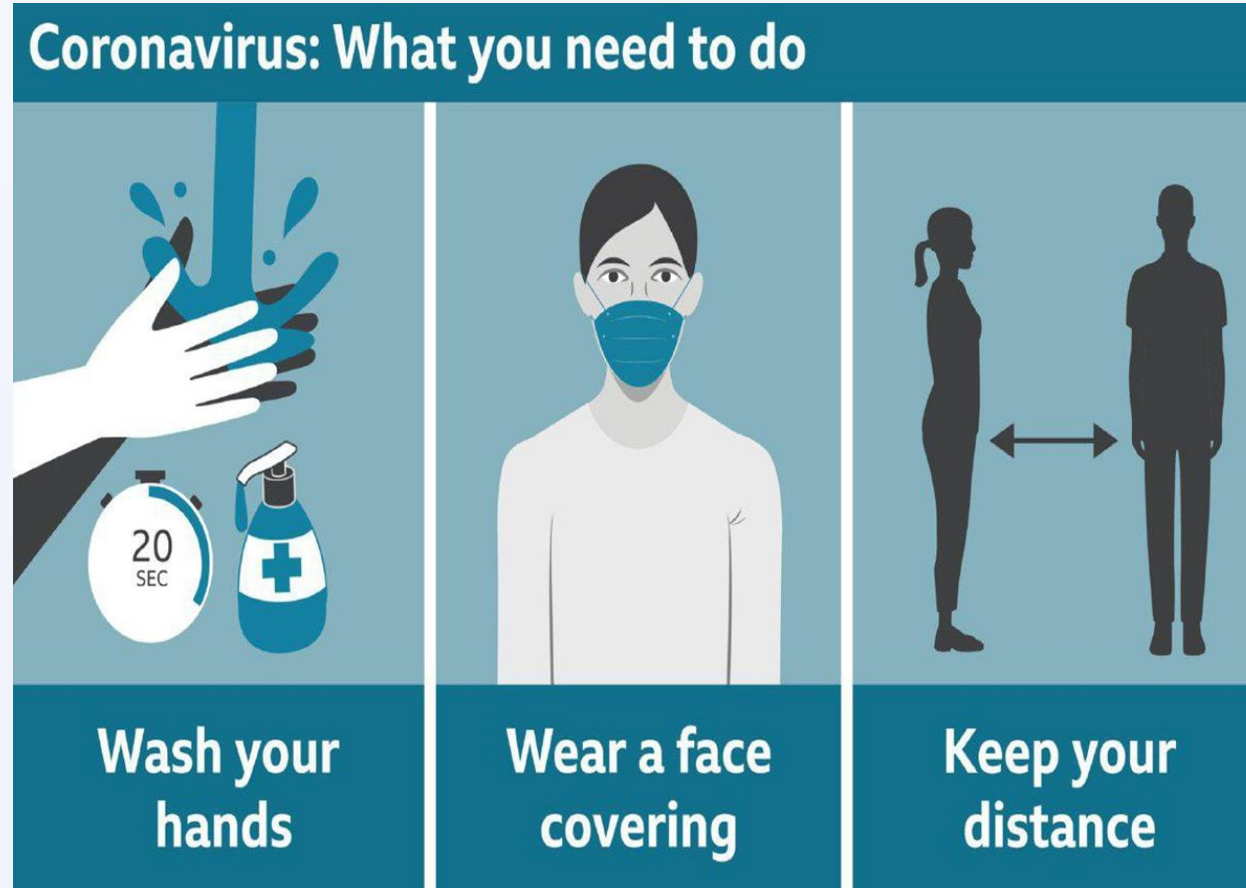
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Introduction

Sever acute respiratory syndrome coronavirus 2(SARS-COV.2) caused coronavirus disease 2019 pandemic .however more than 6 million people have been infected .which spread to more 150 countries around the word (1). Additional the WHO is recommendations to prevent and slow transmission of these virus.



but The number of cases continues to rise , however the vaccines are one of the best effective preventive tools that can decrease the spread and progression of such infectious disease. (2) -Many COVID-19 vaccines with varying effectiveness that development .

the men and women react differently to viral infections and immunizations, hence the response to the COVID-19 pandemic will be varied (3) , These differences in response results from different in immunological , hormonal. Genetics defense and strata of BMI . (4) However. In general the females on average, have a stronger innate and adaptive immunological response to viral infections than males. (4).

Previously, the DTP, influenza, MMR and yellow fever vaccination in females show higher local and systemic responses to vaccines when compares with males. (4),

Females mount higher immune response than males, which can result higher response to viral vaccine, antibodies response and higher side effect. (5)

Results and Discussion

Vaccines and viral illnesses are treated differently. Immunological, hormonal, and genetic variables could all play a role in these disparities. Women showed higher levels of SARS-CoV-2-specific IgG antibodies in the plasma of severe cases than men,

according to a study done in Wuhan, China. Women, on average, have a stronger innate and adaptive immunological response to viral infections than men (5).

ANTIGEN RECOGNITION	INNATE IMMUNE RESPONSE	LYMPHOCYTE ACTIVATION	VIRUS ELIMINATION BY ADAPTIVE IMMUNE RESPONSE	RETURN-TO HOMEOSTASIS
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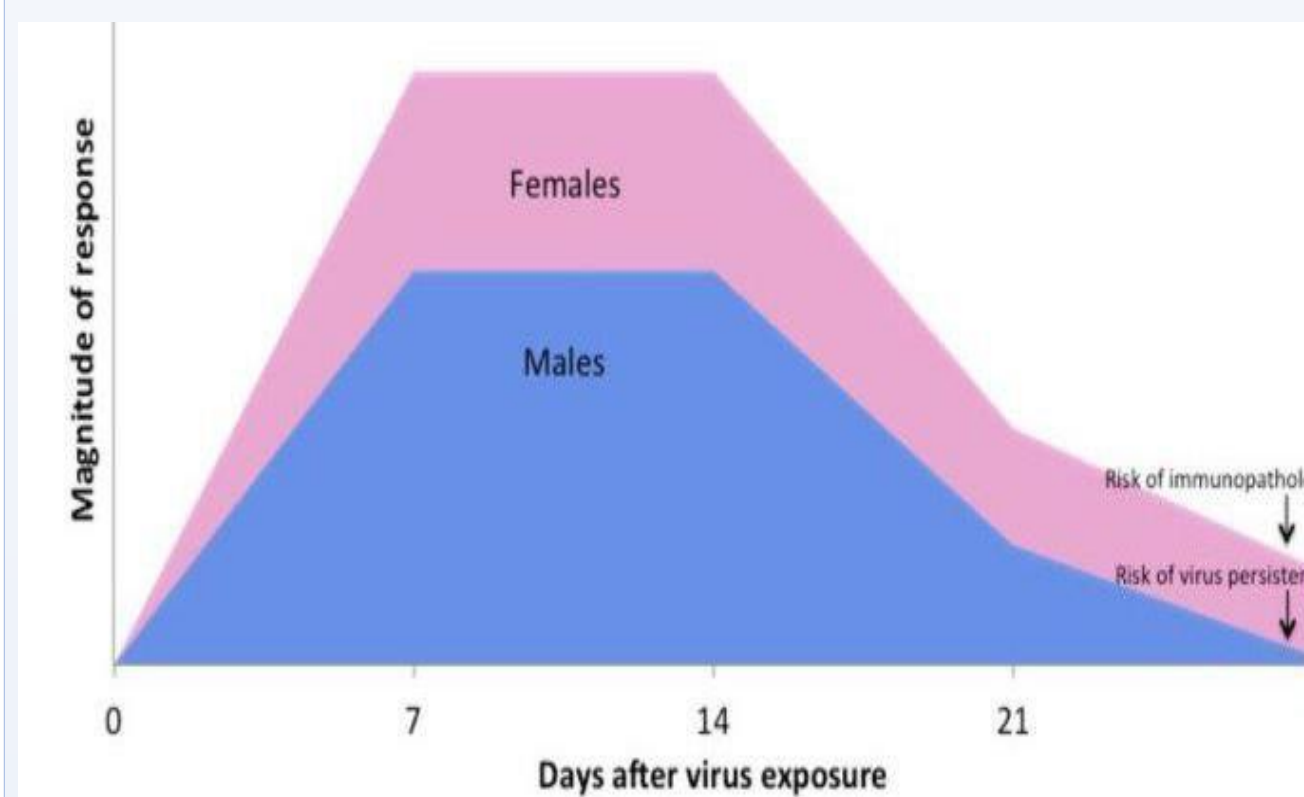


Figure 1 –ference between females and males in immunity

The second study that focus in Vaccine side-effects and SARS-CoV-2 infection after vaccination in UK that show females more likely to report adverse effects than males in two types of vaccine (5) Common side effects included headaches, fatigue, arm soreness, and dizziness

Conclusion

Women have a greater immunological response to a vaccine against COVID-19 than men, so the has more side effect, Continue researcher to expand knowledge about immunological and hormonal and genetic levels to hard look in female's vaccines and treatment to get more effective response and less side effects.

References

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