

Indirect Factors Affecting Fertility in the Era of COVID-19

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Dear Editor,

A portion of the patients might experience spermatogenic failure and impairment of follicular and luteal processes after SARS-CoV-2 infection. Although the exact pathophysiology is poorly understood, these effects are hypothetically mediated through an alteration in the ACE2 cascade⁽¹⁾.

In addition to the adverse effects of SARS-CoV-2 infection on gametogenesis, several other factors may also indirectly affect the fertility in men and women during COVID-19 pandemic. Patients with other causes of infertility are not willing to seek medical care due to fear and anxiety associated with the pandemic⁽²⁾. In addition, several institutions suspended elective surgeries and interventions related to infertility. Overall, this situation would result in irreversible consequences and higher rates of infertility. Therefore, researchers and health policy makers should assess factors that indirectly increase the rate of infertility in the era of COVID-19. These factors may also have a greater impact and should be addressed through multiple pathways, including: 1) ensuring safe access to health care for those who are suffering from infertility, 2) reassuring patients through media to decrease the anxiety related to the pandemic, 3) focusing on treatments that are effective and has the potential to reduce the harmful effects of the SARS-CoV-2 infection.

REFERENCES

1. Singh B, Gornet M, Sims H, Kisanga E, Knight Z, Segars J. Severe Acute Respiratory Syndrome-Corona Virus-2 (SARS-CoV-2) and its Effect on Gametogenesis and Early Pregnancy. *American journal of reproductive immunology* (New York, NY : 1989). 2020:e13351.
2. Campi R, Tellini R, Grosso AA, Amparore D, Mari A, Viola L, et al. Deferring Elective Urologic Surgery During the COVID-19 Pandemic: The Patients' Perspective. *Urology*. 2021;147:21-6.

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