

Coronaviruses

Title:Prolonged COVID-19's Double Impact: Stress and Male Fertility

Volume: 5

Author(s): Mohammed Ahmed Alkireidmi, Mohammed Kaleem, Salma Naqvi, Fahad A. Alabassi, Mohammad Amjad Kamal and Firoz Anwar*

Affiliation:

- Department of Biochemistry, King Abdul-Aziz University, Jeddah, Kingdom of Saudi Arabia

Keywords: [Long term COVID-19](#), [psychological stress](#), [male infertility](#).

Abstract: Till now, 642 million COVID-19 cases have been confirmed, claiming around 6.62 million lives. The impact of SARS-CoV-2 on the male reproductive system, both short and long-term, remains a mystery. This study aims to scrutinize how SARS-CoV-2 affects sexual function, considering potential mediators such as psychological stress. Results reveal that the infection intensifies metabolic stress, directly or indirectly impacting male fertility and causing psychological distress with heightened ROS generation. The exclusive presence of Angiotensin-converting enzyme 2 (ACE2) in type II pneumocytes, serving as the virus receptor, suggests lungs as the primary target. In conclusion, SARS-CoV-2 infection potentially diminishes male fertility, primarily due to psychological stress, raising concerns about COVID-19-induced male infertility amid other factors. Despite limited therapeutic options for COVID-19 and ongoing vaccine efforts, the persistent threat of diverse strains poses a long-term risk to global population health.

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