

LETTER

Does COVID-19 influence sexual behaviors?

Dear Editor,

The Corona Virus Disease 19 (COVID-19) outbreaks affected Italy since the last days of February 2020. Increasing pressure on hospital facilities forced the Italian Government to establish a lockdown on the entire country, in order to flatten the transmission curve through severe social distancing measures. These interventions drastically changed many social behaviors, including sexual habits. The changes are still visible even after the end of lockdown and are influenced by both post-lockdown psychological factors and the health authorities' guidelines regarding the multiple ways of transmission of SARS-CoV-2. Besides the main mode of transmission via droplets, new studies suggest a possible sexual route of infection, having observed a high expression of ACE2 receptor in the Leydig cells, thus potentially leading to testicular damage.¹ Asymptomatic patients could spread SARS-CoV-2 also during sexual intercourses.²

Our free service for the prevention and treatment of sexually transmitted diseases (STDs) recorded an average of about 70 daily outpatient visits in April 2019 compared to about 30 during the COVID-19 outbreak. Furthermore, now patients mainly request STD screening (blood tests for HIV, HBV, HCV, and Syphilis), an important change compared to the previous months, when patients came for visits essentially due to the presence of any symptoms. If this data is confirmed in the next weeks, this dynamic will point toward a decrease of new cases of STDs, involving both the heterosexual and the homosexual population. Various factors could explain this phenomenon.

First: social distancing measures still play a key role in limiting social contact and therefore unprotected sexual intercourses with multiple partners.

Second: some early studies regarding the psychological impact of lockdown measures highlighted the great amount of stress experienced during this particular period, such as anxiety, fear, lack of interest, and frustration.^{3,4} This stress condition may still persist today, leading to a significant deterioration in female sexual function during the COVID-19 pandemic.⁵ In addition, researchers have demonstrated a significant decline in the percentage of women intending to become pregnant, probably due to the possible vertical SARS-CoV-2 transmission,⁶ to the difficulties accessing the health system during the pandemic and to the economic concerns. And even if data concerning decreased desire in the male population are still lacking, it is very likely that the influence of COVID-19 might induce the same results observed in the female population.

Third: we believe that the above-mentioned potential sexual way of transmission of SARS-CoV-2 could have a strong impact on the propensity to have new sexual partners and risky sexual behaviors.

This could affect both the heterosexual and the homosexual population, reducing some of the classic, most perceived, and STD risk factors.

The increasing number of STDs screening requests and the growing number of questions about SARS-CoV-2 related sexual transmission may reflect the will of our patients to ensure the absence of current infections in a historical period where viral transmitted illnesses came to the fore not only in a scientific setting, but above all in the public eye. This issue could be addressed through a system of Telemedicine: a new resource for counseling, screening, and prevention activities, which has already been used in other Dermatology Services.⁷ Furthermore, this aspect could change the habits of this kind of patients, providing the possibility of reducing the prevalence of subclinical sexually transmitted diseases.

In conclusion, further studies are needed to address this specific aspect of overall health and to try to recalibrate STDs prevention and treatment services during the pandemic. Dedicated multidisciplinary questionnaires regarding sexual behaviors should be implemented, as it has already happened in some high-rate HIV/AIDS countries,⁸ as well as COVID-19 serology among asymptomatic STDs patients.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Valeria Gaspari, Beatrice Raone, Federico Bardazzi, and Anna Lanzoni contributed to the letter conception and design. The first draft of the manuscript was written by Valeria Gaspari, Gionathan Orioni, and Filippo Viviani.

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