



The Impacts of Isolation Measures Against SARS-CoV-2 Infection on Sexual Health

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The recently discovered SARS-CoV-2, the cause of COVID-19, has raised significant challenges to society as a whole. The recommended social isolation measures that have been adopted worldwide to control this pandemic are of a magnitude never before seen in modern history. Such measures have wide reaching consequences, many of which are not yet known.

While physical distancing and social isolation may directly impact both the physical and psychological health of individuals, a cohort effect on public health must be considered. One such area where we may see significant ancillary ramifications of COVID-19 pertains to sexual health. Social isolation and the closure of leisure venues may significantly reduce the opportunity for casual sexual encounters. We may well see, in the forthcoming months, a significant reduction in the incidence of sexually transmissible infections (STIs). Many countries have seen marked increases in their incidence of syphilis, chlamydia and gonorrhea in the last few years. For instance, it is estimated that in the United States between 2014 and 2018 syphilis, chlamydia, and gonorrhea have increased in incidence by 71%, 19%, and 63%, respectively [1]. In contrast, HIV incidence has been decreasing worldwide [2], in part due to the UNAIDS 90–90–90 strategy [3].

An unanticipated and unforeseeable crisis such as COVID-19, and the extraordinary measures taken to fight it may have substantial effects on the rising trends in STIs and declining trends in HIV. So far, at the largest Tertiary

Teaching Hospital in Portugal, we are yet to see a reduction in the number of patients with venereal complaints who present to our Dermatology and Venereology Emergency Consultation. However, we must stress that rigorous social isolation measures have only been taken one week prior to the date of writing, which means it's too early to draw any conclusions. Nevertheless, smartphone apps dedicated to dating and sexual meetings continue to run at full pace during this time of reclusion, which may limit the efficacy of imposed measures in controlling the SARS-CoV-2 pandemic, and may impact the reduction in STI incidence during this period. The measures taken to contain and mitigate the spread of SARS-CoV-2 may also have an impact on the professional activity of sex workers. Apart from the economical impact on these workers, fewer casual intercourse occasions in this context may further alter the individual risk for HIV infection as well as for other STIs.

Further thought must be given to the changing social dynamics that influence the ways in which people connect and experience their sexuality. As sexual health is a fundamental determinant for the wellbeing of human beings, it is not plausible to assume that sexual contacts will cease for the duration of the SARS-CoV-2 pandemic. However, sexual experiences are a complex interplay of physical, visual, auditory and psychological stimuli, that doesn't require physical contact in every instance. Indeed, for a generation that is used to communicating with each other through social media, we must also analyze the impact of this pandemic on the way people experience sexuality. It may be the case that people will turn to sexting, face-time, and other such practices as sexual outlets during conditions of limited direct physical contact. While this phenomenon is not intrinsically detrimental, we must be aware of the higher risks for crimes related to exploitation, unauthorized diffusion of personal information and images as well as their significant impact on mental health [4, 5]. Furthermore, should this situation be maintained for a prolonged period of time, we must ask whether these new practices shape the way people sexually

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interact in the future. That is, will the social measures taken in response to SARS-CoV-2 change social interactions in such a way that behavioral practices that may reduce or possibly increase risks for STI persist or subside?

A final point that cannot be overlooked is the way we provide care for people living with HIV as well as patients presenting with STIs during these challenging times. In our center, most appointments have been cancelled to reduce exposure of patients to high risk environments, as well as to allow health personnel to be mobilized to COVID-19 patient care. Nevertheless, our HIV and other STI patients still require monitoring and medical care. We have found that our Dermatology and Venereology Emergency Consultation, diverted away from the internal circuits for other Emergency Department complaints constitutes a useful and risk-reducing service for acute venereal complaints. As for our patients with HIV, we are finding that the patient–doctor relationships that naturally develop over the time with chronic conditions allows for most routine appointments to be conducted over the phone, and when necessary, in-person observation can be arranged in the most appropriate setting to reduce the risk of SARS-CoV-2 infection.

The SARS-CoV-2 pandemic may be more far reaching than the immediate public health concerns. It remains to be seen if changes in STI incidence will be a silver lining to this tragedy, or if the changes in the way people live their

sexuality will prove to be maladaptive and risk promoting. We suggest that a holistic approach be adopted while dealing with this pandemic, to assure the fullest extent of health.

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