Statement of the Covid-19 FSA Response Committee (19 March 2020)

COVID-19 was declared a pandemic on 11 March 2020 by the WHO.

Background

COVID-19 is a respiratory illness caused by a novel strain of coronavirus, the Severe Acute Respiratory Syndrome (SARS)-CoV-2. This virus is considered to be genetically related to the virus that caused the 2003 SARS outbreak and the first cases of COVID-19 were reported in December 2019 in the city of Wuhan, Hubei Province, China. Common signs of COVID-19 include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. Primary transmission is believed to occur through respiratory droplets from coughing and sneezing and contagion requires close proximity (less than 6 feet distance) between individuals (1). The role of asymptomatic or pre-symptomatic viral shedding in transmission is not fully understood (2, 3). The incubation period for COVID-19 is 3 to 7 days but can be as long as 2 weeks from infection to symptoms (4).

The SARS-CoV-2 virus has spread rapidly across the globe and on 18th of March 2020, the World Health Organization reported 191,127 cases and 7807 deaths from COVID-19, worldwide (5). The Department of Health of the Australian Government reported 454 confirmed COVID-19 cases and 5 deaths as a result of the disease until the 18th of March 2020.

For up to date information on the status of COVID-19 in Australia please refer to the Federal Health website: https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert#current-status.

For up to date information on the status of COVID-19 in New Zealand please refer to the following website: https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus

More information about the virus, its transmission and epidemiology, as well as the pathophysiology and clinical management of COVID-19 can be found at the following links:

https://www.who.int/health-topics/coronavirus

https://www.cdc.gov/coronavirus/2019-nCoV/index.html

Australia and New Zealand, like so many other countries, is currently facing an epidemic of unprecedented scale which poses significant challenges on the health sector, including the provision of care to individuals who are trying to conceive or preserve their fertility. The Fertility Society of Australia (FSA), recognising the importance of providing its members and the public with appropriate and timely guidance on best practices in reproductive care, has established the COVID-

19 FSA Response Committee. This Committee is comprised of experts in the field who have been tasked to regularly review the available literature and make evidence-based recommendations. Given the rapidly evolving knowledge in the field and in line with national response to the COVID-19 crisis, these recommendations will be revised as necessary.

With these recommendations, the FSA aims to provide its members (which include clinicians, scientists, nurses and counsellors) and the public evidence-based guidance that prioritises the needs and safety of patients and all staff involved in the provision of fertility care and is in line with the Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19). This plan calls for a proportionate response on the basis of the ethical framework agreed by the Australian Health Protection Principal Committee (AHPPC). This framework outlines the values that need to be taken into account during such a response, such as equity (providing care in an equitable manner), individual liberty, privacy and confidentiality, proportionality, protection of the public, provision of care, reciprocity, stewardship and trust.

Any recommendations made have also taken into account the statement by the AHPPC on COVID-19 on the 17th of March, 2020 which states that "the health sector must continue to undertake its core functions.." and that "interventions may need to continue for more than 6 months, and must be feasible and sustainable" (6).

COVID-19 and Pregnancy

Effects on the mother

Due to the recency of the outbreak, there is little information on the impact of COVID-19 on pregnancy. Pregnant women do not appear to be at an increased risk of complications following infection with SARS-CoV-2 compared to the general population and it is expected that the large majority of pregnant women will experience only mild or moderate cold/flu like symptoms (7-13). This is in contrast to the SARS-CoV and Middle Eastern Respiratory Syndrome (MERS-CoV) viral infections which have been shown to be associated with severe complications during pregnancy (including miscarriage, intrauterine growth restriction and preterm birth) in also low number of cases (14-18). There are case reports of preterm birth in women with COVID-19, but it is unclear whether the preterm birth was always iatrogenic, or whether some were spontaneous. Iatrogenic delivery was predominantly for maternal indications related to the viral infection, although there was evidence of fetal compromise and prelabour premature rupture of membrane, in at least one report (19). As evidence accumulates, this knowledge might need to be updated and caution is warranted.

Mother-to-baby transmission and effects on the baby

Confirmed mother-to-baby transmission during pregnancy has not yet been reported. Two cases of possible mother-to-baby transmission (transmission from mother to baby antenatally via the placenta or intrapartum) have been reported (one of which in the media but not yet in a peer reviewed journal) (19, 20) but it remains unclear whether transmission was prior to or soon after birth. Expert opinion is that the fetus is unlikely to be exposed during pregnancy (21). A case series published by Chen et al tested amniotic fluid, cord blood, neonatal throat swabs and breastmilk samples from COVID-19 infected mothers and all samples tested negative for the virus (7). In a different study, three placentas of infected mothers were swabbed and tested negative for the virus (8); and in another case series by the same team, of three infants born to symptomatic mothers tested for the coronavirus, none had positive tests (22). As there is no evidence of intrauterine fetal infection with COVID-19 it is therefore currently considered unlikely that there will be congenital effects of the virus on fetal development (21).

COVID-19 and Fertility

So far, there is no clinical evidence to link infection with COVID-19 with compromised fertility in men or women. One research team from Huazhong University of Science and Technology in China recently suggested that men with COVID-19 should be evaluated for any adverse effects on their fertility after their recovery (23). This suggestion is based on the theoretical knowledge that the SARS-CoV-2 virus uses specific receptors to invade the cell which are also present in the testes. It needs to be emphasized that no cases of male infertility following an infection with COVID-19 have been reported to date, although this could change in the future.

Recommendations

The Fertility Society of Australia recommends that:

For individuals attempting to conceive or preserve their fertility

- At this point, there is no evidence to recommend contraception or cessation of attempts to conceive, either unassisted or assisted.
- Risk mitigation measures (good hygiene, social isolation or distancing) according to the plan set in place by national and state, territorial or provincial agencies should be strictly adhered to.
- Utilising telehealth and consulting your doctor, nurse or counsellor via phone or teleconferencing should be strongly considered.
- All non-essential travel should be postponed. The Australian and New Zealand Government have instituted travel restrictions which are frequently revised.
- Individuals that have returned from overseas need, currently, to self-isolate for 14 days (event if they are asymptomatic) and during this time they should not be accessing clinical spaces.
- Patients of fertility clinics undergoing active treatment, including sperm donors, oocyte donors and gestational carriers, with either a high likelihood of having COVID-19 because of symptoms (fever and/or cough, shortness of breath) or exposure (exposure within 2 meters of a confirmed COVID-19 patient and within 14 days of onset of symptoms, or a person with a positive COVID-19 test result) should contact their treating doctor or fertility clinic by phone or email for advice on how this may impact their current fertility treatment.
- These patients should consider cycle cancellation, freezing all oocytes or embryos and avoid an embryo transfer until they are shown to be disease-free.
- As this is understandably a rapidly changing situation, discuss with your doctor any concerns you might have on the impact of this pandemic on your plans to conceive or preserve your fertility.
- If your psychological health and well-being is affected during this time, seek early referral to appropriate counselling services.

For healthcare providers and staff of fertility clinics

- All healthcare providers and staff of fertility clinics need to be updated on the most recent national, state, territorial or provincial advice on COVID-19.
- Fertility clinics in Australia and New Zealand need to ensure appropriate training and education is provided to all staff and patients.
- Staff members or patients with a high likelihood of having COVID-19 because of symptoms (fever and/or cough, shortness of breath) or exposure (exposure within 2 meters of a confirmed COVID-19 patient and within 14 days of onset of symptoms, or a person with a positive COVID-19 test result) should self-isolate and not access clinical spaces until they have been confirmed to be COVID-19 negative.

- If individuals with a high likelihood of having COVID-19 are undergoing active treatment, cancellation of treatment should be strongly considered. For some of these patients, treatment might need to be completed but this should be decided after careful consideration of the risks and benefits and while ensuring the safety of all patients and all staff involved in their care.

Fertility clinics need to formulate clear strategies to mitigate the risk of COVID-19 such as:

- The use of telehealth (consultations via phone or videoconferencing) should be strongly considered where appropriate for new and returning patients.
- Where face-to-face attendances are required, recommend reducing the number of people attending the visit to the strictest minimum.
- Consider reducing the number of non-essential monitoring visits.
- Consider screening patients both via telephone before they attend any clinical space and in-person on their arrival (chaperones should also be screened).
- Reduce crowding in waiting areas by appropriate scheduling of appointments and texting patients when they are ready to be seen.
- Consider intensifying the cleaning and disinfection of common spaces in fertility clinics according to relevant national and state recommendations.
- Emergency plans should be in place for the management of potential staffing shortages, supply shortages and unintended exposure of staff members to the risk of COVID-19 infection.

For more information on COVID-19 please visit your state, territory or provincial health service website. All states, territories and provinces provide up-to-date information on the level of infection within the community and also provide detailed information on what to do should you suspect that you may be infected with COVID-19.

https://www.health.gov.au/health-topics/novel-coronavirus-2019-ncov

https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus

https://www.who.int/health-topics/coronavirus

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/

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