

EDITORIAL

Challenges for Assisted Reproductive Technology (ART) Services in Malaysia during COVID-19 Pandemic

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INTRODUCTION

The novel coronavirus disease (COVID-19) has become a major concern to most societies around the globe since the first reported case in Wuhan, China (1). The wave of pandemic reached Malaysian shores on the 24th of February 2020 marking the beginning of the challenges we are facing today (2). The implementation of Movement Control Order (MCO), which started from 18th March 2020, had caught the general public by surprise. It has affected almost every aspect of social, economic, education and health related activities. COVID-19 challenges all of the medical fraternity including reproductive medicine. Furthermore, the recommendation from the Ministry of Health was to withhold all non-essential medical services, and those related to reproductive medicine falls under this category. This imposed an enormous challenge to both parties; the reproductive medicine care providers and those seeking fertility treatment.

CHALLENGES FACED BY HEALTH CARE PROVIDERS

Similar to most health care providers, reproductive experts were unsure on how to proceed or even if there was a necessity to withhold treatment cycles among infertility patients. Data concerning the effects of COVID-19 on pregnancy were initially limited and guidelines were far and few in between. Early during the pandemic, guidance for reproductive services internationally was provided by the American Society of Reproductive Medicine (ASRM) and European Society of Human Reproduction (ESHRE) (3-4). The gist of the initial guide was that all new reproductive treatment cycle should be withheld while all ongoing treatment cycles or those who require urgent stimulation and cryopreservation should be continued; the start of new treatment cycles including ovulation induction, intrauterine inseminations (IUIs), in vitro fertilisation (IVF)/intra-cytoplasmic sperm injection (ICSI) such as oocyte retrievals and frozen embryo transfers, as well as non-urgent gamete cryopreservation should be suspended; the cancellation of all embryo transfers whether fresh or frozen should be discussed; elective surgeries and non-urgent diagnostic procedures should be suspended, in-person interactions should be minimised and utilisation of telehealth should be

increased or optimised.

One of the main sticking points was that the initial recommendations was to cease all unnecessary services. For the Ministry of Health, this was to allow all types of resource to be channelled towards fighting the pandemic on a national scale. However, for private institutions that have their own resources, services at the beginning similarly almost grinded to a halt. This was largely due to the MCO and possibly due to the fear of patients themselves. Looking at the scenario now, the cases is continuously increasing and fluctuating worldwide. This pandemic might take a longer than expected time to halt. International bodies such as ASRM, ESHRE and International Federation of Fertility Societies (IFFS) subsequently recognised infertility care as an essential service in their statement on 29th May 2020 (5). Thus, many countries including Malaysia have reintroduced the fertility services involving IVF.

In terms of practice, modification has to be made to comply with national guidelines for social distancing and COVID-19 screening for out-patient clinic consultation and procedural cases. Recommendations by ASRM do not go beyond the standard use of aseptic technique and sterile equipment during the procedures (6). This has not added any extra burden on procedures of IUI, oocyte retrieval, IVF, ICSI and embryo transfer. Some centres had gone an extra mile to insist on a COVID test prior to undertaking a procedure. This is not only to protect the staff, but also serve a bigger purpose of avoiding to inadvertently having to shut down operations for sanitisation if there is a COVID-19 positive patient. Collateral loss including the wastage of man working hours due to enforced quarantine of exposed staff should also be considered. Besides, all health care providers need to be forewarned and accommodating to the treatment modalities according to the latest updates and information on this disease.

CHALLENGES FACED BY INFERTILE PATIENTS

The pandemic posed a dilemma for wholehearted childless couples to receive fertility treatment. Careful thoughts need to be given on either to continue or delay the ART treatment with the concern of potential risks to

themselves and fetuses should pregnancy is achieved. Furthermore, the suspension of fertility treatment also could cause psychological and mental health issues.

1) In enduring fertility treatment despite the pandemic, the couple has a probable risk of contracting the infection resulting in consequences such as severe ARDS, multi-organ involvement and even death. To date, there are limited and inconclusive data on the maternal and foetal effects of COVID-19 infection (7) as well as the long-term effects on female and male reproductive functions (8).

2) If the infertile couple decided to terminate or suspend the fertility treatment till the end of this pandemic, they would be living with uncertainty on when the COVID-19 pandemic would actually end, thus leading to childlessness. This is caused by advanced-reproductive age and lower ovarian reserve causing reduced success of ART.

3) Any decision to either continue, delay or stop receiving fertility treatment has a negative psychological impact. Unfortunately, this was obvious among women who suspended their fertility treatment, revealing a significant increase in depression and reduction in quality of life (9). This suggests that having a stable mental health is very important in the human life especially in childless women to improve their quality of life. Thus, strong social support from husband, family and people surrounding them is of paramount.

Ever since the MCO was relaxed to the conditional movement control order (CMCO) on the 5th of May 2020, there have been an increase in clinic consultation and treatment cycles, which was echoed among the leading fertility centres during a gathering of Malaysia's reproductive experts at the end of July (10). However, this was only for centres that cater largely local patients. This increase might be due to the fact that the fear of remaining childless was far greater than the fear of the effects of COVID-19 infection itself.

Hence, with the challenges in reproductive medicine services elaborated, it is substantially important for the health care providers and infertile patients to strictly comply with the standard operating procedure (SOP) as per guideline in preventing the dissemination of the disease. Besides, the news that the Pfizer COVID immunisation would be available to Malaysian in the first quarter of next year is a much welcome news for the Reproductive Service providers, patients and Malaysians at large.

REFERENCES

1. W.H.O. Novel Coronavirus – China. Geneva (Switzerland): WHO; 2020 [cited 2020 June 27]. Available from: <http://www.who.int/csr/don/12-january-2020-novel-coronavirus-china/en/>.
2. W.H.O. Coronavirus disease (COVID-19) in Malaysia. WHO Western Pacific; 2020 [cited 2020 June 27]. Available from: [http://www.who.int/malaysia/emergencies/coronavirus-disease-\(covid-19\)-in-malaysia](http://www.who.int/malaysia/emergencies/coronavirus-disease-(covid-19)-in-malaysia).
3. A.S.R.M. Patient Management and Clinical Recommendations During the Coronavirus (COVID-19) Pandemic. USA: ASRM; 2020 [cited 2020 June 27]. Available from: <http://www.asrm.org/globalassets/asrm/asrm-content/news-and-publications/covid-19/covidtaskforce.pdf>
4. E.S.H.R.E. Coronavirus Covid-19: ESHRE statement on pregnancy and conception. European Union: ESHRE; 2020 [cited 2020 June 27]. Available from: <http://www.eshre.eu/Press-Room/ESHRE-News - COVID19P2> .
5. E.S.H.R.E ASRM, I.F.F.S. Assisted reproduction and COVID-19: A joint statement of ASRM, ESHRE and IFFS. European Union: 2020 [cited 2020 June 27]. Available from: <http://www.eshre.eu/Press-Room/ESHRE-News - COVID19P2> .
6. A.S.R.M. AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE (ASRM) PATIENT MANAGEMENT AND CLINICAL RECOMMENDATIONS DURING THE CORONAVIRUS (COVID-19) PANDEMIC. UPDATE #4 (May 11, 2020 through June 8, 2020). USA: ASRM; 2020 [cited 2020 June 27]. Available from: <http://www.asrm.org/globalassets/asrm/asrm-content/news-and-publications/covid-19/covidtaskforceupdate4.pdf> .
7. Chen L, Li Q, Zheng D, Jiang H, Wei Y, Zou L, et al. Clinical characteristics of pregnant women with COVID-19 in Wuhan, China [letter]. *N Engl J Med*. Published online April 17, 2020. <https://doi.org/10.1056/NEJMc2009226>.
8. Stanley KE, Thomas E, Leaver M, Wells D. Coronavirus disease (COVID-19) and fertility: viral host entry protein expression in male and female reproductive tissues. *Fertil Steril*. 2020;114:33–43.
9. Gordon JL, Balsom AA (2020) The psychological impact of fertility treatment suspensions during the COVID-19 pandemic. *PLoS ONE* 15(9): e0239253. <https://doi.org/10.1371/journal.pone.0239253>
10. Singapore Malaysia Merck Medical Fertility Advisory Board: ReSTART & New Normal Post COVID-19. 30th July 2020.