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## Correspondence

Impact of the coronavirus (COVID-19) outbreak on obstetric and gynaecological surgery - A letter to the editor on "Impact of the coronavirus (COVID-19) pandemic on surgical practice - Part 2 (surgical prioritisation)"



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Dear Editor,

We read with great interest the article by Al-Jabir et al. regarding the impact of the coronavirus (COVID-19) pandemic on surgical practice. The review article delineated and assessed adaptations to working practices for each surgical specialty, with overarching considerations which encompass the different specialties [1].

We note, however, that there is a lack of information regarding the impact of COVID-19 on obstetric and gynaecological (OBGYN) surgery. In this letter, we hope to briefly address some important impacts and changes for OBGYN practice, which may provide more insights for other surgical specialties.

OBGYN is considered a surgical specialty in its own right, which employs many surgical techniques and considerations which cross other surgical specialties. Some of these techniques have been mentioned in the article by Al-Jabir et al., notably that of laparoscopic surgery [1]. Similarly, on April 16, 2020, the European Society of Gastrointestinal Endoscopy (ESGE) have formulated some updated guidelines for gynaecological laparoscopic surgery [2]. These include steps to minimise carbon dioxide (CO2) release including attaching a CO2 filter, minimising introduction and removal of instruments to ports as much as possible, minimising use of ultrasound and diathermy as much as possible, and deflating the abdomen before specimen retrieval and removal of ports to minimise sudden gas dispersion [2]. These considerations have also been echoed in an opinion article by Mallick et al. [3].

The ESGE has also made separate recommendations for hysteroscopic surgery. Hysteroscopic surgery is not considered to be an aerosol generating procedure (AGP), and surgical smoke produced during the surgical procedure is mainly confined to the uterus [2]. Moreover, there is limited evidence to prove the presence of COVID-19 particles in genital fluid [2]. The ESGE has therefore recommended that standard droplet precaution PPE should be used, and that regional anaesthesia or conscious sedation should be preferred over general anaesthesia whenever possible [2]. Moreover, use of non-smoke-generating instruments should be preferred whenever possible [2]. Similar recommendations could be considered in other surgical specialties where

minimally-invasive operations are frequently carried out.

Similar to other surgical specialties, considerations for prioritisation of OBGYN surgery have been made. General guidance created by the University of Florida has categorized different OBGYN operations in order of severity, from Category I to V [4]. This system has delineated specific criteria to aid prioritisation and decision-making, including trigger(s) to cancel or delay the procedure, the COVID-19 morbidity and mortality risk of patients, urgency level and impact on bed capacity [4]. For example, many urogynaecological surgeries are elective in nature and generally performed on older populations, which are at higher risk of morbidity and mortality from COVID-19 infection. Therefore, these procedures mainly comprises Category I [4]. Conversely, emergent operations for ovarian torsion and ectopic pregnancies naturally should never be delayed, and therefore comprise examples of Category V procedures.

Moreover, obstetric surgery is unique in that fetal considerations, in addition to those of the mother, have to be kept in mind. More research needs to be done to study the impact of COVID-19 on maternal and fetal health, and on the impact of caesarean deliveries on COVID-19-positive and –negative mothers. For example, a study by Zhang et al. [5] has concluded that timely caesarean deliveries performed on COVID-19-positive mothers will aid in treatment and resolution of maternal viral pneumonia, with no increased risk of premature birth or neonatal asphyxia. Moreover, their study has demonstrated that there was no significant difference in intraoperative blood loss between COVID-19-positive and –negative mothers.

In all, the above are but a few examples to highlight important impacts of COVID-19 on OBGYN practice. OBGYN surgical operations will continue to be a perennial fixture in the backdrop of the COVID-19 pandemic. In practical terms, strong guidelines and recommendations need to be formed to aid the OBGYN surgeon in prioritisation of cases and decisive management. Moreover, more research needs to be done to understand the true impact of COVID-19 on OBGYN surgical practice. In addition, there is much potential for interdisciplinary learning and improvement between the surgical specialties, including OBGYN.

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All authors contributed equally in the preparation of the manuscript.

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## **Declaration of competing interest**

No conflicts of interest to declare.

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