

Minimising duplicate reports in estimating COVID-19 impact. (Mini-commentary on BJOG-20-0883.R1)

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The emergence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) disease (COVID-19) in China at the end of 2019 brought with it uncertainty as to whether it would bring an increase in maternal, fetal and neonatal morbidity and mortality. This uncertainty drove fear; understandable given the high case fatality rate associated with previous severe respiratory illness causing coronaviruses.

Given the novel nature of SARS-CoV-2, clinicians and women and their families rely primarily on limited information from case reports and case series to inform their decisions about pregnancy management. Early evidence from these sources demonstrated a tendency toward preterm delivery mainly as a consequence of elective interventions (Della Gatta et al. *Am J Obstet Gynecol*, 2020, Vol.223, p36-41), which are likely to have been exacerbated by the uncertainty of COVID-19 on pregnancy and neonatal outcomes.

The reliance on research reports, case series and case reports continues. However, such reports are at higher risk of bias, including publication bias. Concerns have also been expressed about the potential of reporting of same people with COVID-19 across different reports (Bauchner et al. *JAMA*, 2020, Vol.323, p1256). Such reporting leads to inaccurate estimates of the impact of the disease on outcomes, which is aggravated when an evidence base is relatively small, evolving and critical to informing good care decisions.

In this issue, Thornton et al. report a review of case reports and case series of the risk of the neonate becoming infected with SARS-COV-2 by mode of birth, type of infant feeding and mother-infant interaction (BJOG 2020 xxxx). Their findings lead them to conclude that vaginal delivery, breast and are safe in the context of COVID-19 disease. But, what interests me equally in this paper is their approach to reducing the risk of duplicate reports in estimating disease impact.

First, their data sources included a daily PubMed search supplemented by alerts from experts on social media; daily searches of three electronic databases including the Maternity and Infant Care Database and citation tracking. Second, geo-coding of data to unique distinct locations. Here, in response to reviewer feedback, which the authors refreshingly acknowledge, the team invited a native speaker of Chinese familiar with health institutes in Wuhan to provide contextual information to maximise the likelihood of correct site identification (which did result in some geo-coding revisions). Third, they attempted to identify sites unnamed in reports using author affiliations, which ultimately did not provide the assurances they needed to be confident in retaining some reports.

The accuracy of inferences drawn from research reports, case series and case reports is enhanced when authors report clearly if and when any patients are reported in other reports and when processes to minimise erroneous repeated inclusion of the same patients. Thornton et al.'s paper is informative clinically but is equally interesting in its flexing of methods to iteratively address an evolving evidence base and minimise uncertainty. Such approaches may lack the sophistication of techniques applied to larger evidence bases yet are critical to informing decisions early in an evolving evidence base. Further development of the processes may inform future pandemic readiness.

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