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LETTER

The effects of SARS-CoV-2 on menstruation



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The findings presented in the article by Li and co-workers (Li *et al.*, 2021) are interesting as they report how SARS-CoV-2 affected sex hormones and the menstrual cycles of women admitted to hospital. However, as admission implies increased severity of disease and is more likely to occur in those with co-morbidities (Gesese *et al.*, 2021), only 5.8% of women who test positive for SARS-CoV-2 are hospitalised (Elflein, 2020). We therefore question the external validity of their findings as they are not

representative of how infection might affect the majority of women who are treated at home or in the community. The effect of the virus on such women is therefore largely unknown and is in need of investigation.

Li *et al.* acknowledge that menstrual changes '... were more likely to appear in patients with multisystem dysfunction', but anecdotal evidence has shown that the pandemic itself has caused transient menstrual irregularities in women (The Guardian newspaper, 2021),

regardless of health status. It is possible that the authors failed to consider confounding factors; for example, it is known that stressful events (e.g. hospital admission) can cause transient menstrual irregularities (Gilbrech, 2020). This in itself would have affected women in both case and control groups. We suggest further research needs to be undertaken to investigate any causal link between SARS-CoV-2 and menstrual cycle changes; currently the findings are mere correlations.

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