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Universal screening identifies asymptomatic carriers of SARS-CoV-2 among pregnant women in India

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**Title:** Universal screening identifies asymptomatic carriers of SARS-CoV-2 among pregnant women in India

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**Dear Editor,**

Asymptomatic women with coronavirus disease 2019 (COVID-19) are at risk of infecting their newborns and also pose a risk to healthcare providers and other patients [1] [2] [3]. Considering this, Indian Council of Medical Research (ICMR) recommended universal testing for SARS-CoV-2 in pregnant women [4]. Maharashtra is the worst-hit state in India and universal screening strategy for pregnant women was implemented in several public hospitals during this time. Herein, we report the outcome of implementation of this strategy.

Women presenting in labour or likely to deliver in next 5 days were screened for SARS-CoV-2 as per ICMR guidelines [4]. Data from 25<sup>th</sup> April to 20<sup>th</sup> May, 2020 was collected from 15 participating hospitals of PregCovid registry network (<https://pregcovid.com/>). In all, 141/1140 pregnant women were tested positive for SARS-CoV-2 resulting in a prevalence of 12.3% (Mean 9.4, 95% CI 6.6 – 12.1) in Maharashtra, India [Figure 1A]. The prevalence of SARS-CoV-2 infection in women varied (0-40%) across the different hospitals in the state. For estimation of numbers of symptomatic and asymptomatic SARS-CoV-2 positive pregnant women, the data of 141 women was pooled with data from Topiwala National Medical College (TNMC) & BYL Nair Hospital TNMC Mumbai (n=180) which exclusively caters COVID-19 patients (n=180). Of the 321 SARS-CoV-2 positive women only 37 (range 0-17%) women were symptomatic (Fig 1B). The prevalence of symptomatic pregnant women is 11.5 % (Mean 6.8, 95% CI 2.4-11.2) while that of asymptomatic pregnant women is 88.5% (Mean 79.8, 95% CI 75.7- 83.9) [Figure 1B]. The proportion of symptomatic to asymptomatic individuals varied greatly across the different cities (not shown). Our results estimate presence of one symptomatic to every nine asymptomatic pregnant women. This is in concordance to the number proposed based on mathematical calculations and some observational data [5].

This data on undocumented or “steady state” infections in pregnant women is useful for ensuring safe obstetric and neonatal services and assessing the burden of COVID-19 in the region to plan strategies on strengthening or relaxing mass social distancing measures. We strongly recommend that the strategy of universal testing of pregnant women admitted for delivery is essential and must be implemented rigorously not just to protect the women and their newborns; but also, the healthcare workers and curb spread of the infection in the community.

### **Declaration of interests**

All authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**Disclosure statement:** All authors report no conflict of interest.

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**Appendix I.****Participants of PregCovid Registry Network as on 18.08.2020**

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**Figure Legend**

Fig 1: SARS-CoV-2 test results among pregnant women and their symptomatic status. A) Pregnant women (n=1140) were screened for SARS-CoV-2 as per the national guidelines and the proportion of positive women are given. B) Percentage of symptomatic and asymptomatic cases in women tested positive for SARS-CoV-2 (n=321). The data in B is a pool of data in Fig A and 180 additional patients from a hospital catering to only COVID-19 pregnant women.

