Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Coronavirus disease 2019 infection among asymptomatic and symptomatic pregnant women: two weeks of confirmed presentations to an affiliated pair of New York City hospitals

TO THE EDITORS: We read with great interest "COVID-19 infection among asymptomatic and symptomatic pregnant women: two weeks of confirmed presentations to an affiliated pair of New York City hospitals."[1] We applaud the authors on the publication of the largest, most thorough case series of pregnant women affected by coronavirus disease 2019 (COVID-19) in the United States and genuinely thank them for their front-line observations that contribute to all of us being safer.

As the authors note, pregnancy physiology increases vulnerability to respiratory infections. Thus, it is intriguing that early publications suggest gravid patients may not be at an increased risk for complications from COVID-19.[1,2] The conclusion of Breslin et al[1] that disease severity in pregnant women mirrors that in nonpregnant adults is largely based on a comparison with data published in China by Wu and McGoogan.[3] This conclusion may be falsely reassuring, based on important differences in the comparator populations.

First, testing criteria varied between the China and New York cohorts. Wu and McGoogan reported outcomes for patients who underwent testing for COVID-19 symptoms, of whom fewer than 1% were asymptomatic. The New York City (NYC) cohort included 25% of cases tested as part of a universal screening policy. In fact, 4 women who had a positive result had no signs or symptoms of COVID-19 and were categorized as having a "mild disease." The inclusion of asymptomatic women may artificially inflate the mild disease proportion, skewing the NYC population to appear less severe.

Second, demographic characteristics differed between the 2 studies. The median age of patients in NYC was 29 years, whereas patients in China were older, with 90% being older than 29 years and 3% being older than 80 years. Outcomes from COVID-19 vary significantly by age, with patients aged 20 to 39 years displaying a mortality rate of 0.2% vs 14% for those older than 80 years.[4] To conclude that disease severity distribution is similar between these 2 cohorts is falsely reassuring because reproductive-age women, based on age alone, should not have outcomes as severe as the older population reported by Wu and McGoogan. In an age-specific comparison, critical illness occurred in only 2% of patients aged 15 to 40 years,[5] which is half the rate of intensive care unit admissions (4.7%) reported in the NYC cohort.

It will be important for future studies to include comparator groups with similar demographics and indications for testing. We are grateful for the important work by Breslin et al[1] and hope that COVID-19 differs from the previous pandemics characterized by a disproportionate toll on pregnant women. However, it is too early to conclude with optimism that pregnancy is not a risk factor for more severe disease. ■

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This paper is part of a supplement that represents a collection of COVID-related articles selected for publication by the editors of AJOG MFM without additional financial support.

The authors report no conflict of interest.

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 https://doi.org/10.1016/j.ajogmf.2020.100162