

## Letter to the Editor

# Importance to release of the number of pregnant women with COVID-19 to help build the perinatal medical care system in Japan

Dear Editor,

As of the end of June 2021, the ongoing COVID-19 outbreak in Japan had four waves since it started in February 2020.<sup>1</sup> During the fourth wave, the number of infected people increased rapidly due to the strong infectivity of the N501Y variant, and the shortage of hospital beds became noticeable.

In Japan, all infected people are registered in the Health Center Real-time Information-sharing System on COVID-19 (HER-SYS) provided by the Ministry of Health, Labor and Welfare; however, it is difficult to know the accurate number of infected pregnant women because the system does not have an independent label on records of pregnant women. The accurate identification of the number of pregnant women who contracted SARS-CoV-2 is important for building a future perinatal medical care system. We collaborated with local governments to count all infected pregnant women, infected pregnant women who underwent recuperation at home, infected pregnant women who were hospitalized, and infected pregnant women who required medical intervention (administration of oxygen or systemic corticosteroids, or fluid replacement for infectious symptoms) in Sapporo City and its surrounding areas in Hokkaido from May 1 to June 15, 2021, which was the peak time of the fourth wave. Hokkaido is an area surrounded by the sea, persons' move and patients transfer between other prefectures are limited compared to Tokyo or Osaka. Sapporo City and its surrounding areas have a population of about 2.61 million, 1.39 million women, and 280 000 women between ages of 20s and 30s. The number of new infections per week per 100 000 population during the period was 77.7 in the study area. Of 6173 women or 2047 women between ages of 20s and 30s who contracted the infection during the period, 48 (0.8% and 2.3%, respectively) were pregnant. The maximum number of pregnant women infected with COVID-19 at the same time

was 19, and the maximum of 12 and seven infected pregnant women were hospitalized and received medical intervention at the same time, respectively. Pregnant women who required medical intervention were at 20 or more weeks of gestation and were dominated by those after 30 weeks of gestation (Figure 1). Pregnant women with COVID-19 have been shown to be more prone to exacerbation than non-pregnant women<sup>2</sup> and particularly so in the third trimester of pregnancy.<sup>3</sup> In this study also, pregnant women with moderate-to-severe COVID-19 were dominated by those in the third trimester of pregnancy.

Based on these data, the Hokkaido government decided to build a future medical care system for pregnant women with perinatal infection. In

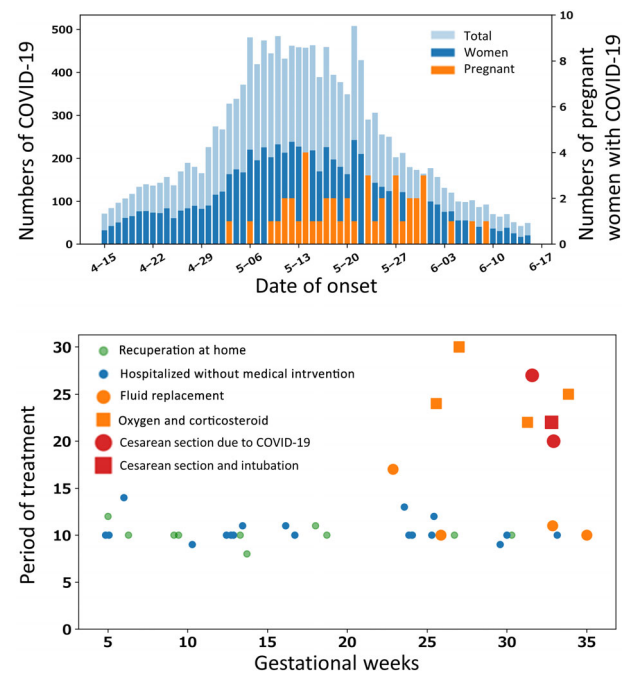


FIGURE 1 Numbers, gestational weeks, and severity of pregnant women with COVID-19


particular, it is necessary to secure hospital beds immediately available for infected pregnant women at the delivery stage; however, in areas where perinatal medical care is tight at normal times, such an immediate response system puts excessive pressure on perinatal medical care. The construction of a system to keep track of the accurate number of infected pregnant women is essential to provide adequate and sustainable perinatal medical care during the COVID-19 pandemic.

### Conflict of Interest

None declared.

### Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Masato Takaoka, Takeshi Umazume  and  
Hidemichi Watari  
*Department of Obstetrics and Gynecology, Hokkaido  
University Graduate School of Medicine, Sapporo, Japan*

### Correspondence

Takeshi Umazume, Department of Obstetrics and  
Gynecology, Hokkaido University Graduate School of  
Medicine, N15W7, Kita-ku, Sapporo 060-8638, Japan.  
Email: umatake@gmail.com

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