Protective actions for pregnant women during the COVID-19 pandemic

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SARS-CoV-2 was first noted in December 2019 in Wuhan, Hubei, China. The World Health Organization reported that more than 1,699,595 people had contracted COVID-19 and 106,138 people had died of SARS-CoV-2 on 12 April 2020. Men are more likely to contract COVID-19 than women. Limited evidence is available to identify whether pregnant women are susceptible to contracting COVID-19. However, in Soochow city, Jiangsu, where 10,625,700 residents live, the first patient with COVID-19 was confirmed on January 22, 2020. Between January 1 and March 31, 2020, 87 persons were confirmed as the COVID-19 infection. No new cases have been reported since February 18, 2020. All patients with COVID-19 were discharged on 10 March 2020. There was a total of 23493 pregnant women who did not contract COVID-19 and delivered their babies in hospitals, except for one pregnant woman who delivered by cesarean section in Soochow Fifth Hospital Affiliated to Soochow University, which is a designated hospital for COVID-19⁵. In this report, we present our experience of the protection of pregnant women in an epidemic area.

In Soochow, Jiangsu, all hospitals have developed detailed guidelines for protecting pregnant women since January 22, 2020. We have protective actions for pregnant women who had traveled from outside of Soochow city (algolithm1) and pregnant women suspected of COVID-19 infection (algolithm2). We take different levels of protective actions based on the status of patients. The first level of protective action are staff who wear surgical caps, surgical face masks, disposable coveralls and surgical gloves; the second level are staff who wear surgical caps, protective goggles, N95 face masks, disposable coveralls, surgical gloves, and shoe covers; and the third level of protective action are staff who wear surgical caps, face shields, N95 face masks, disposable coveralls, surgical gloves, and shoe covers. In Soochow city, everyone is obligated to apply for Health Code, which is two-dimensional barcodes based on travel history and possible signs of COVID-19, such as fever, dry cough, chest stress, and dyspnea, which were confirmed by physicians since February 22, 2020. The three codes are red code, yellow code, and green code. Red code is given to people who have traveled from a severe epidemic area or have not terminated the quarantine phase. Yellow code means people who live with someone who is in a quarantine room and has dry cough, fever and dyspnea. Green code is meant for people with no signs of COVID-19. People with red code have to be in the hospital or stay in a quarantine room for 14 days. People with yellow code should be in a quarantine room for seven days. People with red code or yellow code are suggested against being in public areas. All people are obligated to have Health Code and are involved in credit management. For those who need to stay in the hospital, all people, including patients and staff, are mandated to put on a face mask, whether symptomatic or not. At the entrance of the hospital and each ward, temperature monitoring is required for everyone, even staff. Only single rooms are provided for one patient and one visitor in the obstetrical ward. In the designated hospital, "fever clinic" is extremely effective in excluding patients suspected of COVID-19. When pregnant patients have fever, they will be consulted by physicians from the "fever clinic" as soon as possible. These patients will receive RT-PCR and immunoglobin tests for COVID-19 within two hours. All non-urgent gynecologic surgeries were suspended on January 25, 2020 and have resumed on March 23, 2020 due to uncontrolled COVID-19. In our community, we have volunteers that check the status of Health code to monitor people who have yellow or red code.

Society of Obstetrics and Gynecology, Soochow, have taken measures in response to the COVID-19 outbreak. Substantial online education on protective actions for pregnant women was implemented for each obstetrician. Apps like WeChat and hotline have been set up for pregnant women to counsel their symptoms. Patients with abnormal complaints have received attention quickly. However, we still do not have efficient management of pregnant women with COVID-19. Due to extreme precautions, pregnant women were not profoundly affected by COVID-19 in Soochow.

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Algorithm 1: Foreign pregnant women admission flowchart.

Abbreviation: CT, Computed tomography

Algorithm 2: Management flowchart of pregnant women with suspected COVID-19.

Abbreviation: CT, Computed tomography

