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Healthcare needs of pregnant women during the COVID-19 pandemic

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Abstract

In December 2019, the first cases of the COVID-19 outbreak were reported in Wuhan, China, which was transmitted worldwide [1]. As of July 3 2020, the World Health Organization (WHO) has reported that 10,719,946 cases of COVID-19 have been confirmed globally, along with 517,337 coronavirus related deaths. We aimed to highlight the important healthcare needs of pregnant women during the COVID-19 pandemic. During the coronavirus pandemic, pregnant women need more care regarding their preexisting health conditions, especially if they have COVID-19. Obstetricians and gynecologists need to collaborate with other disciplines to help contain this pandemic.

Keywords: ANC, COVID-19, healthcare needs, pregnancy

1. Introduction

The novel coronavirus (COVID-19) is caused by a new strain of coronavirus (SARS CoV 2). In December 2019, the first cases of the COVID-19 outbreak were reported in Wuhan, China, which was transmitted worldwide [1]. As of July 3 2020, the World Health Organization (WHO) has reported that 10,719,946 cases of COVID-19 have been confirmed globally, along with 517,337 coronavirus related deaths [2].

1.1 Transmission: The transmission of novel coronaviruses occurs through close contact with infected individuals or from touching contaminated surfaces. In most cases, it is human-to-human transmission. Pregnant women contract the virus in the same manner as the general population [3, 4]. Additionally, some cases of vertical transmission from mother to child have been reported [5].

1.2 Symptoms and signs of COVID-19: Most individuals develop mild to moderate symptoms such as fever, cough, shortness of breath, headache, and loss of taste, also known as anosmia [6]. Physiological changes during pregnancy affect the immune system, which in turn might lead to more severe symptoms [7], especially during the third trimester. There is some evidence that coronaviruses cause severe adverse maternal or perinatal outcomes [8, 9]. The physiological changes during pregnancy and the resulting immunocompromised status may put pregnant women at a higher risk of contracting COVID-19 than the general population [10].

In this paper, we aimed to highlight the important healthcare needs of pregnant women during the COVID-19 pandemic.

2. Pregnant women and COVID-19

Risk factors which favor hospital admission during pregnancy include being overweight or obesity; being black, Asian, or belonging to a minority ethnicity; having chronic diseases; and having a maternal age of over 35 years. Evidence suggests that vitamin D deficiency is associated with the development of acute respiratory distress syndrome (ARDS) in COVID-19 patients [11, 12].

2.1 Antenatal care during the COVID-19 pandemic: The Royal College of Obstetricians and Gynecologists (RCOG) released guidelines for pregnant women during the pandemic [13]. They advised pregnant women to continue to receive planned antenatal care unless they require self-isolation. The use of virtual consultation methods should be considered rather than face-to-face

contact. In addition, pregnant women are advised to maintain social distancing and use facemasks. Moreover, folic acid and vitamin D supplements are recommended. At each visit, the mental health of the patient should be assessed. Expectant women are encouraged to take a test if they develop symptoms of COVID-19. If a patient is found to be positive for COVID-19 and requires hospitalization, the maternity staff member in charge must be informed prior to the patient entering the hospital. Staff must wear appropriate personal protective equipment (PPE), and the patient should be examined in an isolation room. During labor, oxygen saturation should be above 94%. All pregnant women are advised to have a venous thromboembolism (VTE) assessment and must be administered prophylactic measures accordingly. Expectant women must refrain from taking aspirin and stop thromboprophylaxis if they present with thrombocytopenia (platelets <50). Seeking hematology advice is recommended [13].

2.2 Screening of COVID-19 in pregnant women: Enquiring about the onset of new symptoms such as cough, high temperature, loss of (or change in) normal sense of taste or smell (anosmia) is recommended. For mild symptoms, women are advised to remain at home and undergo a test. If the test result is positive, women are advised to self-isolate at home immediately for at least 14 days from the onset of symptoms and avoid contact with other household members. Pregnant women need to alert those with whom they have had close contact and they must consider the possibility of having contracted COVID-19 if they develop any symptoms. Remaining at home for 14 days will prevent the spread of the disease to other people in the community. Other preventive measures include washing hands regularly for 20 seconds using soap and water, using hand sanitizer, blocking the mouth when coughing and sneezing, using facemasks, avoiding visitors, and drinking enough water. Women should seek medical consultations if the symptoms worsen [14]. It is recommended that all women who are admitted to hospital for maternity care should be tested for COVID-19 using RT-PCR swabs, regardless of whether they have symptoms [15].

2.3 Women with a positive COVID-19 result: Elective maternity admissions of such women should continue as planned. Deferral of is usually not safe or appropriate. Immediate assessment is required if there are any clinical concerns, irrespective of the COVID-19 status. All women who test positive for COVID-19 should receive a minimum of low molecular weight heparin as prophylaxis for 10 days [16].

2.4 Chronic hypertension: Blood samples should be tested for urea and electrolytes (U&E) and urine for protein: creatinine ratio (urinary PCR) with the booked bloods. Women suspected to have pre-eclampsia need face-to-face medical assessment and the usual examination and tests, as well as the application of placental growth factor (PIGF) based testing measures between 20 and 34 gestational weeks [17]. Women with gestational hypertension should self-monitor blood pressure where possible. In addition, they are encouraged to have a urine dipstick test for proteinuria if indicated. Women with preexisting diabetes are at higher risk of the severe effects of COVID-19. They are advised to follow preventive and social distancing measures rigorously along with recognizing early symptoms of COVID-19. They are also advised to have regular blood glucose monitoring, urine analysis, and regular blood pressure tests, in conjunction with a healthy diet. They must be educated on how to avoid

hypoglycemia and the use of insulin. Moreover, they should be given a supplement of folic acid and low dose aspirin. They are advised to keep diabetic symptoms under control indicated by keeping hemoglobin A1c (HbA1c) less than 48mmol/mol [18].

2.5 Gestational diabetes: Women should be considered as having type 2 diabetes if their HbA1c level is 48 mmol/mol or if they have a random plasma glucose level of 11.1mmol/L. Furthermore, women should be considered as having gestational diabetes if they have borderline HbA1c of 41-47 mmol/mol or a random plasma glucose level of 9-11 mmol/L and should be treated accordingly [18].

2.6 Advice regarding infant feeding: Women should be made aware that being infected with COVID-19 is not a contraindication to breastfeeding. However, some precautions are advised to limit the viral spread to the baby, such as asking a healthy person to feed the baby, washing hands before touching the baby, washing used utensils, blocking the mouth when coughing or sneezing, and wearing a face mask (babies should not wear masks) [19].

2.7 Pregnant women and work: According to current knowledge, pregnant women working in healthcare settings with direct patient contact must only continue to work up to 28 weeks of gestation. Pregnant women are recommended to stay at home if they have health conditions such as lung disease or heart complications, or if they are more than 28 weeks pregnant [20].

3. Conclusion

During the coronavirus pandemic, pregnant women need more care regarding their preexisting health conditions, especially if they have COVID-19. Obstetricians and gynecologists need to collaborate with other disciplines to help contain this pandemic.

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5. Conflict of Interest

The authors have disclosed no potential conflicts of interest, financial or otherwise.

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