

PHYSICAL AND MENTAL EFFECT OF COVID 19 ON PREGNANCY

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Abstract: A female who is pregnant, recently delivered a baby or breast-feeding is probably concerned about the impact of coronavirus disease 2019 (COVID-19) on herself and the baby. When pregnancy itself is such a worrisome experience for the mother with physiological and psychological changes, again burdening with COVID 19 infection is dreadful for both mother and fetus. Already the immune system of the mother is compromised due to pregnancy which make her prone to more infection. While the chances of having a stillbirth are low, there is some emerging evidence that the risk may be higher if mother have COVID-19 at the time of birth. Pregnant people with COVID-19 might also be at increased risk for other poor outcomes, such as preterm birth (delivering the baby earlier than 37 weeks).

Key Words: COVID-19, Psychological, Immune, Still birth.

1. INTRODUCTION:

Pregnancy is an experience which every woman wants to have once in her lifetime. As Pregnancy is a period of elevated risk for both physical Health and mental health difficulties, which are likely exacerbated by the COVID-19 pandemic. Pregnancy is a rewarding yet challenging period of life, which demands physical, psychological and social adjustment to a new role. Pregnant women and neonates are often categorised as being at high risk during the coronavirus disease-2019 (COVID-19) pandemic. Numerous studies have demonstrated that the characteristics of COVID-19 disease in pregnant women and non-pregnant women are very similar. However, pregnant women with COVID-19 in the third trimester are more likely than their non-pregnant counterparts to require intensive care, though this may reflect a lower threshold for intervention in pregnant women rather than more serious disease. Compared with pregnant women without COVID-19, pregnant women with symptomatic COVID-19 requiring admission to hospital have worse maternal outcomes, including death, although the absolute risk remains very low.

2. PHYSIOLOGICAL IMPACT :

Literature data on the impact of COVID-19 infection on pregnancy outcome and its long-time influence on the neonate and infant are still rather scarce. However, it has been said that it significantly increases the risk of preterm birth (approximately three-fold), mostly due to iatrogenic reasons. It was also shown that COVID-19 during pregnancy is associated with higher rates of caesarean sections. Generally, psychological distress is believed to play an important role in the occurrence of adverse pregnancy outcomes, preterm delivery included. Although advanced age and comorbidities are the greatest risk factors of developing serious medical conditions and even death due to coronavirus-induced bilateral pneumonia, some physiological changes in pregnancy also increase susceptibility to infections and encourage rapid progression to respiratory failure. Moreover, T-helper 2 (Th2) system dominance, which is typical in pregnancy, leaves the mother-to-be vulnerable to viral infections in general. On the other hand, observational studies show that the clinical appearance of SARS-CoV-2 infection and the likelihood of contracting it is similar in pregnant and non-pregnant women age- and health-status matched. Literature data also indicate that most pregnant individuals with COVID-19 present no characteristic symptoms at all, and such manifestations as fever, myalgia or cough are less likely to occur than in non-pregnant controls. When symptoms in pregnancy do occur, they mostly resemble mild to moderate flu [8]. Interestingly, a paper from France suggested that contracting COVID-19 infection in the second half of pregnancy increases the risk of admission to ICU- by 5 times in comparison to patients less than 20-weeks pregnant [16]. Although the data concerning the psychological effect of the coronavirus pandemic on pregnant women are limited, most studies suggest that it has a moderate to even severe impact

3. RISKS DURING PREGNANCY :

The overall risk of COVID-19 to pregnant women is low. However, pregnancy increases the risk for severe illness and death with COVID-19. Pregnant women who have COVID-19 appear more likely to develop respiratory complications requiring intensive care than women who aren't pregnant, according to the Centers for Disease Control

and Prevention (CDC). Pregnant women are also more likely to be placed on a ventilator. In addition, pregnant women who are Black or Hispanic appear to be disproportionately affected by infection with the COVID-19 virus. Pregnant women who have underlying medical conditions, such as diabetes, also might be at even higher risk of severe illness due to COVID-19. Some research suggests that pregnant women with COVID-19 are also more likely to have a premature birth and cesarean delivery, and their babies are more likely to be admitted to a neonatal unit.

4. IMPACT ON PRENATAL CARE :

Community efforts to control the spread of the COVID-19 virus affect a mother's access to routine prenatal care. The mother should talk to the health care provider about precautions that have to be taken to protect herself during appointments or whether virtual prenatal care is an option for her. During this pandemic there are any tools that might be helpful to have at home, such as a blood pressure monitor. To make the most of any virtual visits, the mother can prepare a list of questions ahead of time and take detailed notes. She can also consider researching for options for online childbirth classes. But if a mother had certain high-risk conditions during pregnancy, virtual visits might not be an option. To protect the health of mother and baby, some facilities might limit the number of people the mother can have in the room during labor and delivery. Visits after delivery might be affected too. Also, during hospitalisation the mother and her support person might be screened for symptoms every day.

If a mother had COVID-19 or are waiting for test results due to symptoms, it's recommended during hospitalization after childbirth that she should wear a cloth face mask and have clean hands when caring for the newborn. Keeping the newborn's crib by the bed while she is in the hospital is OK, but it's also recommended that she should maintain a reasonable distance from the baby when possible. When these steps are taken, the risk of a newborn becoming infected with the COVID-19 virus is low. However, if the mother is severely ill with COVID-19, she might need to be temporarily separated from the newborn.

5. POSTPARTUM GUIDANCE

It's recommended that postpartum care after childbirth be an ongoing process. Mother can go for virtual visit options for checking in after delivery, as well as need for visit to the clinic or hospital. During this stressful time, she might have more anxiety about her health and the health of your family. She has to pay attention to her mental health. Reach out to family and friends for support while taking precautions to reduce the risk of infection with the COVID-19 virus. If the mother experiences severe mood swings, loss of appetite, overwhelming fatigue and lack of joy in life shortly after childbirth, she might have postpartum depression. She should contact her health care provider if she feels depressed, especially if her symptoms don't fade on their own, when having trouble caring for her baby or completing daily tasks, or she has thoughts of harming herself and the baby.

6. BREAST-FEEDING CONSIDERATIONS :

Research suggests that breast milk isn't likely to spread the COVID-19 virus to babies. The bigger concern is whether an infected mother can transmit the virus to the baby through respiratory droplets during breast-feeding.

If she has COVID-19 or are waiting for test results due to symptoms, take steps to avoid spreading the virus to the baby. This includes washing hands before touching baby and, if possible, wearing a face mask during breast-feeding. If she is pumping breast milk, wash hands before touching any pump or bottle parts and follow recommendations for proper pump cleaning. If possible, have someone who is well give the baby the expressed breast milk.

7. COVID-19 VACCINES DURING PREGNANCY AND BREASTFEEDING :

If a female is pregnant or breastfeeding, she may choose to get a COVID-19 vaccine. Getting a COVID-19 vaccine during pregnancy can protect the mother from severe illness due to COVID-19. While further research is needed, early findings suggest that getting a COVID-19 vaccine during pregnancy poses no serious risks. The findings are based on data from the CDC's coronavirus vaccine safety monitoring system. Also, there is currently no evidence that any COVID-19 vaccines cause fertility problems.

It should always be remembered that the mRNA COVID-19 vaccines don't alter your DNA or cause genetic changes. According to the data coming in, the vaccine is seen to significantly reduce the severity of illness and also the mortality associated with the illness. The benefits of vaccination of pregnant women seem to outweigh its potential risks. COVID-19 vaccination for pregnant women has been approved by the Union Ministry of Health & Family Welfare (MoHFW) based on the recommendations from the National Technical Advisory Group on Immunization (NTAGI). The approval to vaccinate pregnant women is on the condition that they are clearly informed about the risks of exposure to COVID-19 infection along with risks and benefits associated with the vaccines available in the country. A pregnant woman could be vaccinated at any time of the pregnancy.

8. EFFECTS OF COVID-19 ON PREGNANCY OUTCOMES :

The country saw a huge upsurge in Covid-19 cases during the second wave and along with it, there was a sudden surge in the absolute number of cases in pregnant women as well. During this period, it was found that more than twenty percent of pregnant women who tested positive for the virus had premature deliveries and 48% had caesarean delivery. Besides, pregnant women with Covid-19 had a high rate of admission to the ICU when compared to their non-pregnant counterparts. Pregnant women with Covid-19 infection may experience rapid deterioration and damage to the fetus.

9. ROAD AHEAD :

Pregnant women are a special population and healthcare providers must be aware of the fact that in presence of Covid-19 infection, they would need special care and that women and their babies have access to this care. This is particularly important for pregnant women with co-morbidities or risk factors.

In addition, it is crucial to understand that in the presence or absence of Covid-19, a woman's right to a positive pregnancy and childbirth experience must be ensured.

10. SUMMARY:

While most women who contract COVID-19 during pregnancy will have a mild or asymptomatic disease, the remaining women will have a higher risk of ICU admission, invasive ventilation, and preterm birth.

All available therapies should be used as indicated, irrespective of pregnancy, as should the vaccines. Early admission for those with more than mild symptoms and multidisciplinary therapy are key to improving outcomes in this group of patients.

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