

# COVID-19 Affect and Dimensions of Health of Mother during Pregnancy

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## ABSTRACT

Covid-19 is very serious condition for all, but it is very affective to mother and baby also during pregnancy time. the symptoms are same for all such as cough, fever, redness of eye, running nose, body ache and breathing difficulty but in mother may be chance to develop preterm labour, abortion and IUGR. Till now total confirmed case are 72,39,389, in which recovered cases are 63,01,927, active cases are 8,26,876 and death patients rate is 1,10,586. During pregnancy time dimensions of health (Physical, Mental, Spiritual etc) of mother is affected. Because of not availability of medical, personal, transport and economical support mother is sometimes depressed and affected.

**KEYWORDS:** Pregnant women, Covid-19, Affect, Dimension of health (Physical, Mental, Spiritual, Economical)

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Covid-19 condition is defined as a patient with acute respiratory illness such as fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath, AND a history of transmission of COVID-19 disease during the 14 days prior to symptom onset.

A mother with severe acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

There is no available evidence suggests that pregnant women are at no higher risk of develop coronavirus symptoms rather than other people. The large majority of pregnant women experience only mild or moderate symptom.

The first research report was published on 11 May 2020, included information related to the evaluation of 427 antenatal mother admitted to hospital with covid-19 symptoms and her babies during the pandemic, in which mostly antenatal mother in the study required only ward general treatment and were discharged home well, out of ten only one women required intensive care, and sadly 5 women with coronavirus died, although it is currently unclear if coronavirus was the cause of their death. The study evaluate that the majority of women who did become severely ill were in their last trimester of pregnancy.

The one another study also found that pregnant women from Black, Asian and minority ethnic backgrounds were more likely than other women to be admitted to hospital for coronavirus. Pregnant women over the age of 35, those who were overweight or obese, and those who had pre-existing medical problems, such as high blood pressure and diabetes, were also at higher risk of developing severe illness and requiring admission to hospital.

A current study on the impact of COVID-19 on 132 low and middle developing countries indicates that a highest decline of 10 % coverage of pregnancy care and new born health care would have serious implications that could result in additional 28,000 maternal deaths and 168,000 newborn deaths.

## Affect in pregnancy-

Maternity services are very essential and the government is supporting units to coordinate staff in maternity services, to ensure safe and beneficial care is provided to mother.

Due to pandemic condition most of the Maternity units are increasingly providing consultations on the phone or by video link or by call when is needed to mother, so it can prevent the unnecessary travelling to mother. However, some visits in person with a midwife or doctor are essential and it is important for the wellbeing of mother and baby that you attend these to have routine checks. and mother will be required to follow guidance about face coverings, social distancing and hand hygiene during visits to healthcare settings.

In India (17 April 2020 Delhi) because of Covid -19 or lockdown women delivered a baby in police vehicle, because no vehicle are available for transportation. Women's family members tries for vehicle but at last they found a lady constable and they help out of mother. Before reaching the hospital, baby was delivered. So there mother and baby suffered a lot because of pandemic condition.

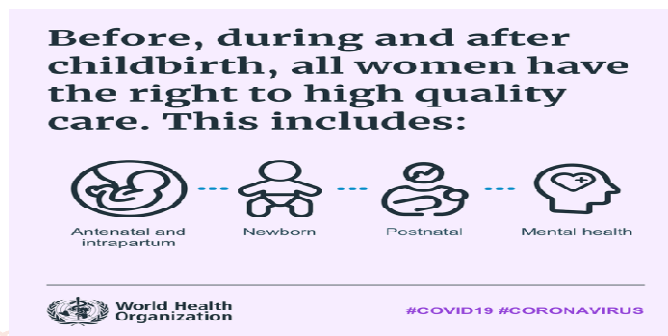
Firstly, pregnant women being more susceptible to viral infection and other infections also due to immune and physiological changes during pregnancy, emphasis, therefore, must be work on optimization of home visits by midwifery or ASHA and ANM workers and emphasizing in tele midwifery care if possible and counseling to detect the complication during pregnancy and advice for referral system and follow up.

Because of covid-19, maternal clinic is available but staff or midwifery is not available to mother for antenatal care and advices as we all know. so that unavailability of antenatal visits or consultants which makes or impact on maternal physically as well as mentally. Some women very anxious about her delivery in pandemic situation and care of baby after delivery. This is also a very big reason for development of anxiety and depression to mother during and after pregnancy.

According to the March of Dimes, Mother immune system isn't as quick to respond to illness when mother is pregnant. if Anyone who had a weak immune system is more susceptible to getting the infection with viruses or respiratory illnesses like the flu. At current situation, we still don't have any evidence with certainty if the virus that causes COVID-19 can be transmitted from mother to baby during pregnancy, in early evidence suggests the three is low, risk for transmission of infection from mother to baby.

Increasing trimester, a growing baby places pressure on the upper respiratory system, heart and circulatory system of mother. Illness of mother with Covid-19 could make this situation worse and cause breathing difficulties. Because of severe symptoms may chances to develop miscarriage or pre-term labor. But till now there is no evidence of an increased risk of abortion if a pregnant women infected by covid-19.

which 520 of whom were pregnant and 380 of whom had given birth in the last year and asked about their depression and anxiety symptoms before and during the pandemic. So after survey found that before the pandemic began, only 29% of those women had moderate to high anxiety symptoms, and 15 per cent experienced depressive symptoms. And During the pandemic, these numbers of percentage have increased with 72% experiencing anxiety and 41 % fight with depression, Since the pandemic have affected daily routines activity of mother as well as other also and access to gyms, the researcher also asked women whether their exercise habits have changed.



Due to covid-19, economical status of all family's is disturbed. required things are not fulfilled of family and mother also because of lockdown condition. the mother and other family members are not able to go outside to do job so that is affect the mother daily life and need based requirement during pregnancy. so one is most important condition that is affect the mother's health.

**Most common symptoms as per WHO:**

The most common symptoms are temperature more than 103, Dry cough and Weakness.

**Less common symptoms:**

Less common symptoms arebody ache, Sore throat, Diarrhoea, Redness of eyes, Headache, Loss of taste (Hypogucicia), Loss of smell (Anosmia), Skin rashes and Cynosis

**Serious symptoms:**

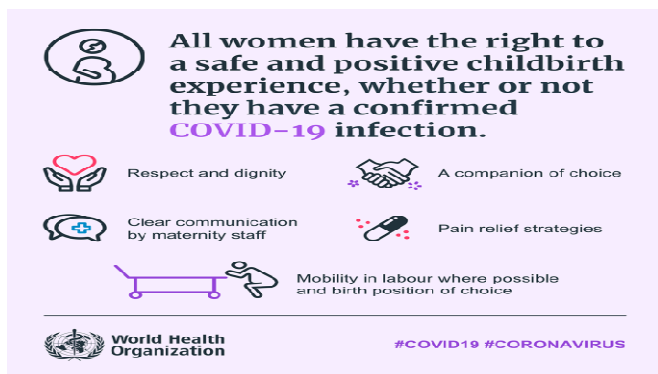
Serious symptoms are difficulty breathing or shortness of breath, Chest pain and Dysarthria.

**Diagnosis for covid-19-**

Advice to mother for visit the hospital as per required, and if having symptoms of covid-19 then go for nasal swab and endotracheal swab.

**Treatment of covid-19 affected mother-**

The COVID-19 Treatment Guidelines researcher continues to investigate the current clinical data to provide up-to-date treatment recommendations to medical staff who are providing care to patients who are suffering from COVID-19. A comprehensive conclusion of clinical data for drugs that are being investigated can be found in the Antiviral Therapy, Immune-Based Therapy and Adjunctive Therapy.



The psychological impact due to corona is also very harmful to mother and baby. One study surveyed 900 women in

Figure 1. Recommendations for Pharmacologic Management of Patients with COVID-19 Based on Disease Severity

DISEASE SEVERITY	PANEL'S RECOMMENDATIONS <small>(Recommendations are listed in order of preference in each category below; however, all actions are considered acceptable.)</small>
Not Hospitalized or Hospitalized but Does Not Require Supplemental Oxygen	No specific antiviral or immunomodulatory therapy recommended. The Panel recommends against the use of dexamethasone (AI). See the Remdesivir section for a discussion of the data on using this drug in hospitalized patients with moderate COVID-19.*
Hospitalized and Requires Supplemental Oxygen (but Does Not Require Oxygen Delivery Through a High-Flow Device, Noninvasive Ventilation, Invasive Mechanical Ventilation, or ECMO)	Remdesivir 200 mg IV for one day, followed by remdesivir 100 mg IV once daily for 4 days or until hospital discharge, whichever comes first (AII) <sup>†</sup> or Dexamethasone <sup>®</sup> (dose and duration as above) plus dexamethasone* 6 mg IV or PO for up to 10 days or until hospital discharge, whichever comes first (BII) <sup>†</sup> If remdesivir cannot be used, dexamethasone* may be used instead (BII).
Hospitalized and Requires Oxygen Delivery Through a High-Flow Device or Noninvasive Ventilation	Dexamethasone <sup>®</sup> plus remdesivir at the doses and durations discussed above (AII) or Dexamethasone <sup>®</sup> at the dose and duration discussed above (AI).
Hospitalized and Requires Invasive Mechanical Ventilation or ECMO	Dexamethasone <sup>®</sup> at the dose and duration discussed above (AI) or Dexamethasone <sup>®</sup> plus remdesivir for patients who have recently been intubated at the doses and durations discussed above (BII).

Rating of Recommendations: A = Strong, B = Moderate, C = Optional. Rating of Evidence: I = One or more randomized trials with clinical outcomes and/or validated laboratory endpoints; II = One or more well-designed, nonrandomized trials or observational cohort studies; III = Expert opinion.

\* The Panel recognizes that there may be situations in which a clinician judges that remdesivir is an appropriate treatment for a hospitalized patient with moderate COVID-19 (e.g., a patient who is at a particularly high risk for clinical deterioration). However, the Panel finds the data insufficient to recommend either for or against using remdesivir as routine treatment for all hospitalized patients with moderate COVID-19.

† Treatment duration may be extended to up to 10 days if there is no substantial clinical improvement by Day 5.

\*\* The Panel recognizes there is a theoretical rationale for initiating remdesivir plus dexamethasone in patients with rapidly progressing COVID-19. For patients who are receiving remdesivir but progress to require high-flow devices, noninvasive ventilation, invasive mechanical ventilation, or ECMO, remdesivir should be continued until the treatment course is completed.

\*\*\* Dexamethasone is not available, equivalent doses of other corticosteroids, such as prednisone, methylprednisolone, or hydrocortisone, may be used. See corticosteroids for more information.

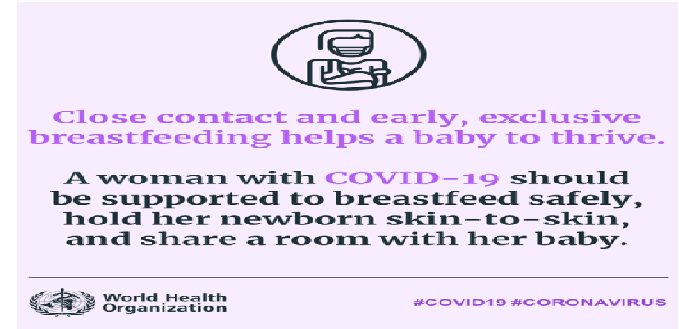
†† The combination of dexamethasone and remdesivir has not been studied in clinical trials; see text for the rationale for using this combination.

Key: ECMO = extracorporeal membrane oxygenation; IV = intravenously; PO = orally.

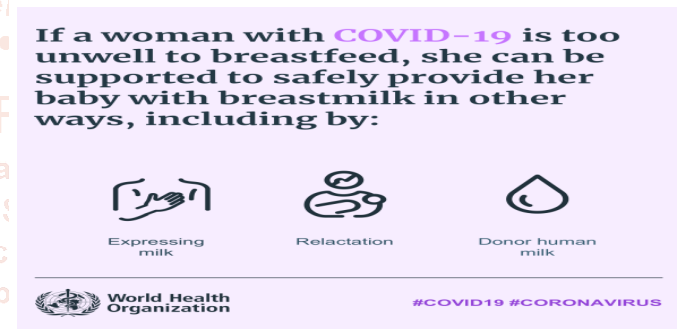
**During postnatal period-**

After delivery it will be very effective, when mother and baby are staying together, even mother is affected with covid-19. Rooming in will help in bonding between mother and baby and also help in required breastfeed.

Current research evaluate that risk of baby getting covid-19 does not change based on whether the baby stay with mother or in a separate room. So the mother can live with mother.



If the mother and baby staying together the baby's crib should be kept at least 6 feet away from mother.

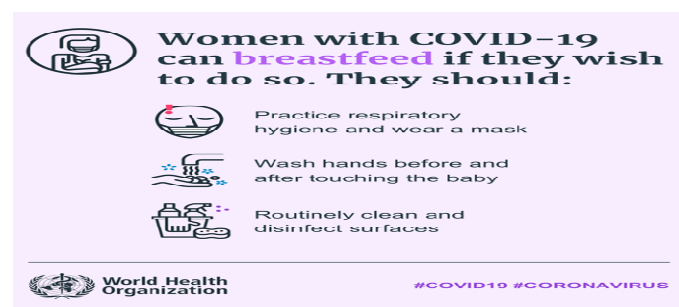


If the mother is very sick staying in separate room it will chance to get infect to the baby also. If the mother is living separated to her baby so mother can plan to breastfeed through breast pump or manual express of milk.

Mother can also take help from other person who are not sick for bottle feeding to the baby.

After the delivery mother can discuss with health care team member related to baby and mother care in pandemic condition such as-

- Use of preventive measures- gloves, mask
- Wear mask during breast feed to baby
- Hand wash as per required
- Use of antiseptic solution to clean clothes of baby
- Clean the floor, toys, cradle and things related to baby and mother to prevent the risk of covid-19



**Treatment for mother who are not hospitalized-**

- The mother who are not having much symptoms advice to give oxygen therapy
- There are insufficient researches finding for the researcher to recommend either for or against the use of remdesivir for the treatment of COVID-19.
- The researcher recommends against the use of dexamethasone (AI) or other corticosteroids for the treatment of COVID-19 .it may cause harm to patients.

**Treatment for mothers who are affected with covid-19 but not required o2 therapy-**

- Give the Remdesivir 200 mg IV for 1 day to the patient, followed by Remdesivir 100 mg IV for 4 days or until hospital discharge, or
- can give a combination of remdesivir plus dexamethasone 6 mg IV or orally for up to 10 days or until hospital discharge (BII); or
- If remdesivir cannot be used, dexamethasone may be used instead.

**PREVENTION**

**During antenatal period-**

- Follow the guidance provide by WHO on staying alert and safe.
- Staying safe outside the home including appropriate use of face mask.
- Maintain mobilization and hydrated to reduce the risk of blood disorders in pregnancy.
- Stay active with lightly regular exercise.
- Maintain healthy balanced diet, and folic acid and vitamin D supplementation and included vit c in pandemic time to help support a healthy pregnancy and maintain the immunity also.
- Attend all of your pregnancy scans and antenatal appointments in virtual mode if not possible direct contact to physician.
- Contact your maternity team if you have concerns about the wellbeing of yourself or your unborn baby



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