



CHALLENGES TO MATERNAL HEALTH AND PERINATAL CARE AMID COVID-19: A SCOPING

Presentation of Dissertation Project

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Introduction

- ❑ The perinatal period is a phase of immense transition and development . It requires adequate care for the fetus and the newborn's healthy development.
- ❑ Coronavirus disease 2019 (COVID-19) has been particularly challenging for pregnant women and lactating mothers, thus impacting fetal and infant health.
- ❑ The biopsychosocial model is best suited to study the impact of COVID-19 on multiple physiological, psychological, and social domains of maternal health and perinatal care.

Aim of the Study:

To understand the challenges of COVID-19 on Maternal and Perinatal Care during COVID-19

Objectives of the Study:

The objectives of the study are as follows:

- ❑ To examine and describe the challenges of COVID-19 pandemic on maternal and perinatal care using a biopsychosocial framework
- ❑ To discuss effective interventions in overcoming the challenges to maternal and perinatal care
- ❑ To understand the way forward through research and development of vaccination for pregnant and lactating women

Method

- ❑ More than 60 articles associated with the impact of COVID-19 on maternal and perinatal physiological, psychological, and social health, maternal immunization status, and strategies for strengthening maternal and perinatal healthcare systems were reviewed. The review was done using the biopsychosocial framework to understand the challenges to maternal health.
- ❑ The articles were retrieved from PubMed and the official websites of the Centers for Disease Control and Prevention (CDC), the American College of Obstetricians and Gynecologists (ACOG), and Frontiers.
- ❑ Non-peer reviewed journals and articles published in languages other than English were excluded. All the papers contributing to understanding the challenges of COVID-19 on maternal and perinatal care were included.

Physiological Challenges during Perinatal Period

- ❑ Pregnancy-associated physiological changes adversely affect the mother's immunity leading to an increased likelihood of developing severe pneumonia
- ❑ Given that pregnant women may experience symptoms during pregnancy that may mimic the early symptoms of COVID-19, the possibility of having SARS-CoV-2 infection may result in additional stress and anxiety.

PHYSIOLOGICAL IMPACT

Some of the most common symptoms and illnesses occurring overtly and other biological adversities found in women in perinatal phase during COVID-19 are:

- Fever**
- Cough**
- Dyspnea**
- Fatigue**
- Increased risk of intrauterine fetal demise**
- Increased risk of Post-partum Hemorrhage**
- Patchy shadowing around the chest**
- Lowered immunity leading to increased risk of infection**
- Higher chances of getting admitted to ICU due to complications.**
- Intrauterine transmission of the COVID-19 virus**

Fig.1 – Image showing the Physiological impacts of COVID-19 on pregnant women

Source - Original

Psychological Challenges during Perinatal Period

- ❑ Pregnancy is a fragile period for the emotional and mental well-being of a woman. Studies in low-and-middle-income countries have reported that mental and psychopathological disorders are more prevalent among women during the perinatal period as compared to nonpregnant women.
- ❑ Pregnant women are susceptible to emotional instability and stress due to reasons such as job strain and pregnancy complications. These adverse conditions may increase the risk of preterm delivery, illnesses and even death in infants.
- ❑ Although telehealth and telemedicine service utilization grew during the pandemic, access to mental health services has been limited, especially in the low-and-middle-income countries or regions facing geographical and political barriers and its unacceptance due to cultural differences.

PSYCHOLOGICAL IMPACT

The most common psychological illnesses found during COVID-19 in women in the perinatal phases are:

- Depression
- Loneliness
- Distress
- Anxiety
- Obsessive-Compulsive behaviors
- Decreased Positive affect
- Post-Traumatic Stress Disorder
- Post-partum Depression
- Insomnia
- Intense fear of infection

Fig.2 – Image showing the Psychological impacts of COVID-19 on pregnant women

Source - Original

Social Challenges during Perinatal Period

- ❑ The social impacts on maternal and perinatal health include changes in the conventional way of obtaining care.
- ❑ Decision to give birth at home or under institutional care, a disheveled social environment due to isolation from the loved ones, and reduced access to basic services due to lockdown and containment measures.
- ❑ Pandemic-related factors that resulted in stress among pregnant women were concerns about food running out, conflict among household members, losing a job or fear of it and fear of losing household income, fear of the unknown, disruption in routine and social lives, and not being able to understand the seriousness of the spread of the disease.

SOCIAL IMPACT

Social issues that affected the health of women in perinatal phase during COVID-19 are:

- **Isolation from caretakers**
- **Job strain and financial stress**
- **Restricted access to care-giving institutions**
- **Conflicts at home**
- **Disrupted perinatal care**
- **Fear of food shortage**
- **Risk of infection in antenatal care settings,
leading to changed birthing plans**
- **Too much exposure to negative media coverage**
- **Mother child separation**
- **Poor political regulation**

Fig.3 – Image showing the Social impacts of COVID-19 on pregnant women

Source - Original

Interventions

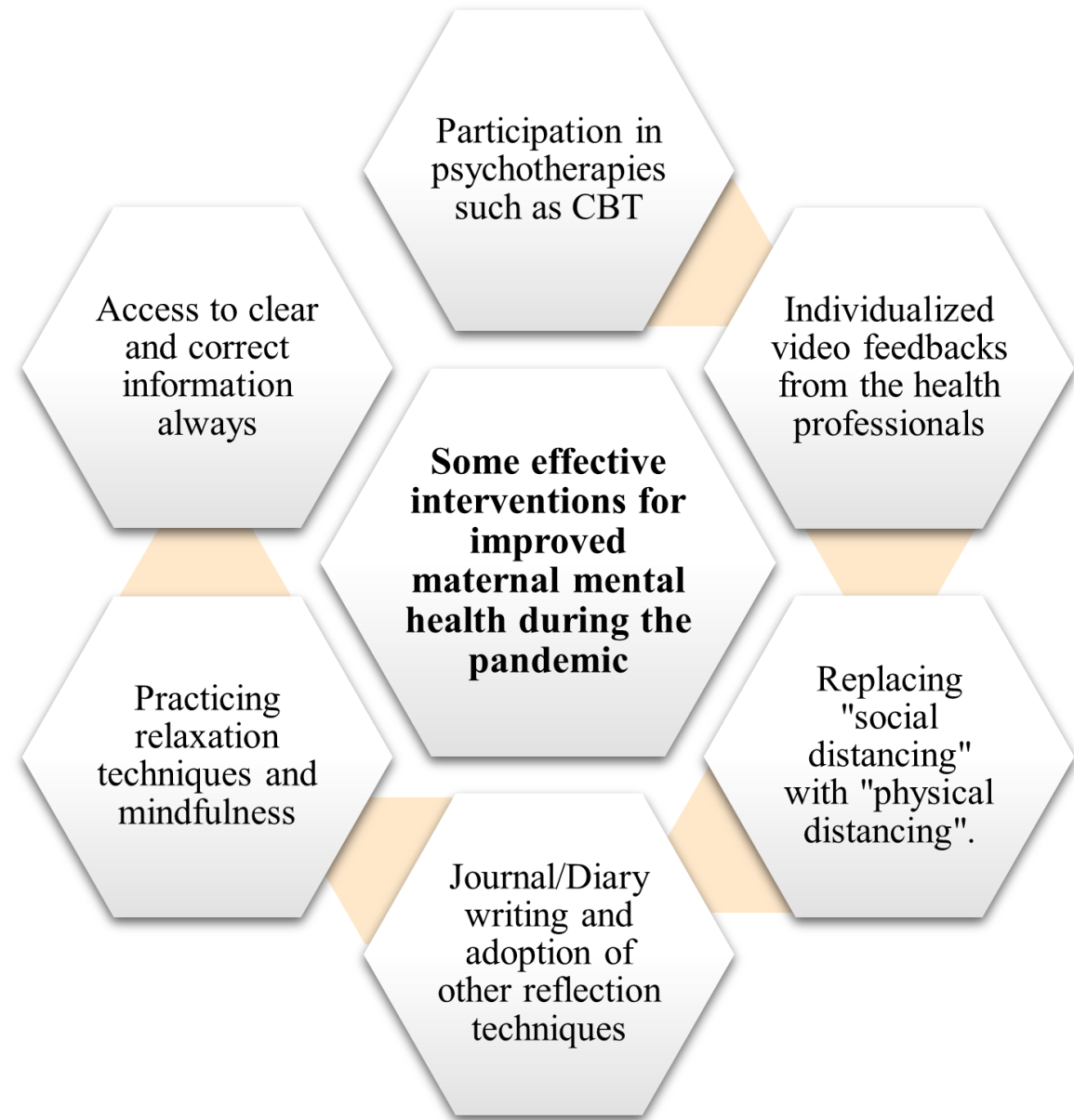


Fig. 4 – Chart showing effective interventions for improved maternal mental health during the pandemic

Source - Original

COVID-19 Vaccination of Pregnant and Lactating Women

- ❑ Pregnant people have a three-fold adjusted relative risk of needing intensive care, mechanical ventilation and an increased risk of hospitalization as compared to same-aged, non-pregnant individuals.
- ❑ Maternal immunization has great potential to provide protection against harmful diseases to not just the mother, but also to the infant through transfer of maternal antibodies across the placenta.
- ❑ Data on safety of COVID-19 vaccine for pregnant women is severely limited and the studies done on rats have not demonstrated any safety concerns. This lack of data or working on sub-optimally designed studies has left large gaps in understanding of vaccine safety and efficacy for pregnant women
- ❑ The American College of Obstetricians and Gynecologists (ACOG) recommended that COVID-19 vaccine should not be withheld from pregnant and lactating women who met the criteria as per the norms issued by Advisory Committee on Immunization practices (ACIP) for priority groups

Conclusion

The research done so far on the impact of COVID-19 on perinatal period, maternal and infant psycho-social health has immense policy implications and can be utilized to guide nations into pillaring institutions of trust and strength for the expecting mothers in crises.

The primitive step towards the same is to provide maternal immunization that is based off quality research framework through COVID-19 vaccine and inculcation of steady maternal mental health care mechanisms in the maternal-care system.

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