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## **Promoting Positive Birth Experiences: Supporting Pregnant and Lactating Women During the COVID-19 Crisis**

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### **Abstract**

The World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern, in January 2020. While international organizations and governments strive to strengthen the world's emergency response mechanism to combat the pandemic, the public in general faces anxiety and fear. One of the most vulnerable groups is pregnant and lactating women. The pandemic has given rise to many apprehensions about the state of their health and well-being as well as that of their unborn or newly born child. A live Facebook session was conducted by a group of experts from a private university in Karachi, Pakistan, to proactively address the concerns of pregnant and lactating mothers during this challenging time. Worries raised by pregnant and lactating mothers during the live session helped in understanding the anxieties of this group amidst the COVID-19.

This paper presents some recommendations in response to the apprehensions shared by pregnant and lactating mothers, that could help in promoting a positive birth experience. These recommendations include a) alternative methods of professional caregiving and support, b)

engaging and strengthening midwifery services, c) safety of pregnant and lactating frontline health care workers, and d) supporting mental health and wellbeing. The proposed measures, if adopted by the government and the healthcare industry, could potentially, promote the safety and wellbeing of pregnant and lactating mothers during the pandemic.

**Keywords:** *COVID-19, pregnant and lactating women, mental health*

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## **Introduction**

December 2019 exposed the world to a new disaster, soon to become known as the COVID-19 pandemic. The World Health Organization (WHO) declared the outbreak as a public health emergency of international concern, in January 2020.<sup>1</sup> By May 2020, COVID-19 had globally affected almost 215 countries.<sup>2</sup> Countries worldwide, plus the WHO, the United States Center of Disease Control and Prevention (CDC), along with other organizations have been working to strengthen the world's emergency response mechanism to control the spread of the coronavirus, and promote the well-being of the public. While these international organizations and governments continue striving to combat the pandemic, people are seemingly trapped by anxiety and fear, with varying levels of coping with the uncertainties and the challenges of lockdown and social distancing.

The COVID-19 pandemic has overburdened hospitals and healthcare professionals and revealed the systemic weakness in the economic, education, and healthcare systems across the world. The healthcare landscape and, consequently, the health-seeking behaviour of many individuals have been severely impacted. One of the most vulnerable groups globally is pregnant and lactating women. Since research and information are continuously evolving, pregnant women are exposed to a wide range of information, some of which is irrelevant and misleading. The information overload has impacted their decision-making and, in some cases, caused confusion and panic.

According to the CDC and WHO, pregnant women do not seem to have an additional risk of getting infected with the coronavirus than the general public.<sup>3,4,5</sup> However, according to recent evidence pregnant women, if exposed to a virus from the same family of coronaviruses (SARS-

CoV-2), are at a higher risk of developing serious illnesses, due to the altered body immune system during pregnancy.<sup>3</sup> The risk of ending up with serious illness increases in the third trimester, as compared to early pregnancy.<sup>4</sup> Moreover, pregnant women who are older, overweight, and have pre-existing medical conditions, such as hypertension and diabetes, seem to have an increased risk of developing severe COVID-19.<sup>6</sup>

In addition, SARS during pregnancy is known to have caused adverse pregnancy outcomes, including miscarriage, prematurity, fetal growth restriction, and maternal death.<sup>7</sup> Currently, there is limited evidence to suggest that the virus is teratogenic<sup>4</sup>; however, emerging evidence suggests that the virus can be vertically transmitted, but this is very rare.<sup>5</sup> Research has found that the placentas of mothers who were COVID-19 positive showed signs of injury, abnormal blood flow to the unborn baby, and blood clotting.<sup>8</sup> Another study reported that two infants, who were born to COVID-19 positive mothers, were found to have SARSCOV-2 IgM in their serum at birth suggesting a neonatal immune response to in utero infection.<sup>4</sup>

COVID-19 is a new disease and there are speculations about its vascular effects, owing to its symptoms, which are atypical of respiratory infections.<sup>9,10</sup> The manifestation of the disease in humans of different ages is also inconclusive; hence, researchers are still struggling to understand its effects on pregnant and lactating women. Moreover, the pandemic and its uncertain outcomes have not only raised concerns among pregnant and lactating women regarding prevention and care, but also with respect to psychological fear and anxiety. Women and families are concerned about the state of their health and well-being and that of their unborn or newly born children.

Various methods have been adopted by different organizations and health care institutions to connect with vulnerable groups to create awareness regarding the COVID-19 disease, its prevention and care, using mass communication platforms and the social media. One such intervention was an attempt to communicate with a group of pregnant and lactating women. A group of experts from various professional services, including senior obstetricians, a midwife, a lactation consultant, and a parent educator from a private university in Karachi, Pakistan, conducted a live Facebook session to respond to the concerns of pregnant and lactating mothers. Pregnant women raised questions about the care and well-being of their unborn babies, their families and themselves. The panel of experts addressed individual queries in accordance with the

guidelines about pregnant and lactating women, from CDC, Royal College of Obstetricians and Gynaecologists (RCOG), and WHO.

Over 60,000 unique views and approximately 400 social sharing and active engagements suggest a larger response. It was an effective way to gauge the level of concern among pregnant and lactating women, and it was apparently supportive for women to interact with and receive information from professionals. Women expressed fears, apprehensions, and doubts about visiting hospitals for routine checkups, viewing it as a risk for contracting and transferring the virus to the unborn child or family members. Women were also concerned about the safety of giving birth at hospitals that have COVID-19 patients admitted for care. Pregnant women working in frontline services asked the professionals about their own safety, as well as that of their babies and other family members. Lactating mothers expressed concerns about unknowingly transferring the virus to their infant while the panel of professionals from the various departments of healthcare addressed all their queries.

### **Proposed Strategies to support Pregnant and Lactating Women during COVID-19**

Because COVID-19 may be present for an unknown period of time, it is essential to proactively address the needs of pregnant and lactating mothers. The following strategies could prove helpful in addressing the concerns of many women and their families..

#### ***Using available technology***

There is a great need for the healthcare industry to initiate alternative models of care for pregnant and nursing women. During the government-mandated lockdowns, to mitigate the spread of COVID-19, the risk of exposure kept many women away from clinics and hospitals for routine antenatal and postnatal checkups. Lack of antenatal care can lead to added worry for many pregnant mothers, and could result in complications to mothers and/or unborn children. According to WHO, regular checkups with the health care providers (HCPs) during pregnancy assist in promoting the well-being of the mothers and the babies.<sup>11</sup>

To address this issue, tele-health services including providing teleconsultations for antenatal and postnatal women may prove to be an effective alternative method for providing professional care, giving mothers some peace of mind from having routine checkups, and getting

their queries answered. Teleconsultations could decrease women's worries and apprehensions. Caregivers could schedule in-person visits upon careful evaluation of each woman's need for "hands-on" care, thus ensuring adherence to WHO's recommendations for antenatal care, while taking account of the limitations imposed by COVID-19. Teleconsultation could easily be scheduled for low-risk mothers in the first and second trimesters of pregnancy, with periodic face to face visits. In addition, other services, including online antenatal classes, lactation support, and postnatal and pediatric consultations, could be provided using the telehealth approach.

However, this recommendation has limitations since it is accessible only to economically advantaged women living in urban areas who have access to the technology and internet services that permit visual and audio contact. For under privileged women living in areas where there is no access to technology, and for women who do not have the necessary skills and resources, alternative models of care needs to be established. One solution is strengthening midwifery-led care to provide recommended antenatal care and access to information during this pandemic.

### ***Providing midwifery services***

The most effective strategy to reduce the risk of COVID-19 transmission is to limit exposure to SARS-CoV-2. However, staying at home and maintaining social isolation becomes difficult for pregnant women, when they have to comply with the current national guidelines<sup>12</sup> that advocate regular antenatal visits of women.<sup>4</sup> A study conducted in Itlay highlighted that, despite following social distancing measures in hospitals, the spread of infection rate worsens when healthcare is centralized.<sup>13</sup> As a result, to prevent exposure to corona virus, many women tend to stay at home, and to skip routine antenatal visits, immunizations, and facility births, leading to adverse perinatal outcomes during the pandemic.<sup>14</sup> Therefore, it is extremely important to implement an alternative model of care, targeting the community rather than only the healthcare facilities.<sup>12</sup>

Midwife-led, home-based antenatal/postnatal care and lactation support services could provide a safe and effective solution to ensure skilled care for women during the pandemic and even in normal circumstances. The International Confederation of Midwives (ICM) recognizes midwives as professionals of choice for women with low-risk pregnancies.<sup>15</sup> During the pandemic midwifery services, including antenatal, postnatal care, and lactation support to women in their homes, will enhance the mothers' safety by reducing the number of visits to hospitals, and thus,

their potential exposure to the coronavirus. In this way strengthening home-based midwifery services would protect women from unnecessary exposure to the coronavirus in the hospital environment.<sup>12</sup>

Midwife-led care, can benefit both the urban and rural population even after the COVID pandemic. In the urban setting it can provide a platform to initiate/establish midwife led services and showcase the midwifery profession; women will become familiar with the role of a midwife and the scope of a midwife's practice. Many private hospitals run home health care departments to provide general nursing care to patients at home. Midwifery services could be integrated within the existing home health care service structure. Once integrated the health care facilities should provide a choice to low risk women to opt for home based antenatal and postnatal services by expert midwives. Pakistan's national guidelines for the promotion of sexual and reproductive health during COVID-19 also support service delivery at the household level for avoiding unnecessary exposure.<sup>4</sup>

In the rural setting, the existing structure of service delivery, which includes midwives and lady health visitors needs to be strengthened. It is important to increase capacities of these frontline health care workers to provide competent midwifery services to women at home, while following the standards and practice guidelines, particularly during the pandemic. Moreover, the safety of the HCPs should be of prime importance during the crisis. They need to be well trained about proper infection prevention and control to minimise the risk of infection to themselves and the community.<sup>12</sup> Midwives must be well equipped with personal protective equipment to ensure their own and the women's safety.<sup>16</sup> In addition, the government must consider establishing a network between frontline HCPs in the community and the hospitals to facilitate timely referral in case of complications.<sup>12</sup>

### ***Safety of pregnant and lactating frontline health care workers***

Frontline workers who are pregnant or have an infant to care for face safety concerns at their workplaces. Female nurses, doctors, and professionals have expressed concern about their personal safety and that of their unborn or infant babies because they care for many patients on a daily basis, not knowing whether any of them are infected and pose a risk of contagion. Pregnant women are at a higher risk of contracting infectious diseases, particularly respiratory pathogens and severe

pneumonia, because of the suppressed immune system and the physiological adaptive changes during pregnancy.<sup>17</sup> Some infections can be life-threatening for them and their unborn children. Similarly, breastfeeding mothers may be susceptible to infections and be a source of contagion for their infants.

The impact of COVID-19 on pregnant and breastfeeding mothers is not fully known or understood, thus lack of knowledge could increase fear among pregnant HCPs. Therefore, it is necessary for organizations to protect the HCP. If a pregnant HCP is working in a hospital setting, in a high-risk area, where there is a greater likelihood of exposure to COVID positive patients, then policies should be in place to permit re-assignment or re-allocation of work in a low-risk environment. The RCOG states that hospital administrations should provide pregnant HCPs, of any gestation, the option of whether or not to work in direct patient care during this pandemic.<sup>18</sup> Based on the available guidelines, policies need to be formulated in hospitals and health care facilities to ensure the safety of pregnant HCPs.

### ***Supporting mental health and well-being***

Maternal mental health in pregnancy and while breastfeeding a newborn have been directly associated with the health and well-being of the child.<sup>19,20,21</sup> In normal circumstances, pregnancy is considered a normal physiological and developmental process and ought to be a rewarding and exciting experience for women and families. However, women may experience increased stress during public emergencies, like COVID-19, that may result in preterm birth, low birth weight, and other high-risk conditions.<sup>12</sup>

During the current pandemic, many women are concerned about their newborns, while those who are pregnant are worried about the management of labour and birth. Moreover, they may experience many changes in their antenatal visit schedules, and may face difficult decisions related to the place of delivery and the modified protocols for labour and delivery, and newborn care management. Emerging facts related to the pandemic, extended closures and lockdowns, and changes in healthcare facilities are contributing to pregnancy stress and altering the otherwise pleasant experience. Therefore, in these times, there is a greater need to focus on the mental health and well-being of pregnant and lactating women.



The following strategies could be initiated at the government and institutional level to promote positive physical and mental well-being of pregnant and lactating mothers.

1. Provide tele-counselling support for women from psychologists, therapists, or counsellors and encourage women to talk about their fears and the challenges in coping with the stress of the pandemic. Amidst the pandemic, it is critical to help mothers self-regulate their emotions to avoid panic due to fear and apprehension.
2. Invest in the capacity building of community health workers (CHWs) in rural settings and increase their understanding of the social determinants that contribute to poor health. The effects of the pandemic on marginalized groups is magnified by lack of resources and services that address their needs. CHWs can facilitate access to the health care system, and provide psychosocial support.<sup>22,23</sup> They should be trained to prevent, detect, and respond to the crisis<sup>23</sup> and help preserve the mental wellbeing of women by counseling them about positive coping strategies during the pandemic. Also, they should be trained to identify high risk women with poor coping skills, and establish timely referrals to a psychologist or counsellor.
3. Encourage health agencies to initiate an SMS advisories to educate women on the importance of prevention strategies for maintaining good mental health. Frequent positive messages could help many women in disadvantaged circumstances get help and support.
4. Provide advice and education for pregnant and lactating mothers through local radio and television broadcasts that may more easily reach women and families in low-middle income countries (LMICs), including those in impoverished areas.
5. Establish local support groups and online forums for pregnant and lactating women to enable them to discuss their issues and receive information and suggestions regarding their health, pregnancy, and lactation particularly during the pandemic. Women could share positive practices and debunk myths with facts and success stories. There should be one mental health expert moderating the group, who could respond to the concerns, encourage peer support, and help spread and sustain positivity among pregnant and lactating mothers. In remote settings, this group could be moderated by a community health worker, who could be connected with a mental health expert.
6. Increase free access to online resources for pregnant and lactating mothers on mindfulness activities, including tutorials, videos, guided imagery , games, quizzes, and music.

7. Initiate antenatal and childbirth teleclasses, including wellness modules on mental health and other health practices, such as (a) practising personal hygiene and social distancing; (b) ensuring a good sleep-wake cycle to keep the body and mind active and healthy; and (c) advising nutritious food intake and nutritional supplements as advised by the midwife, gynaecologist or obstetrician.
8. Arrange women's appointments for prenatal or postnatal visits, laboratory tests, ultrasounds, etc. to minimize the number of times women enter a health care facility.
9. Create educational programmes through joint efforts of government and private institutions for women across the country, by utilizing available technological and human resources in urban and remote areas. These programmes must aim to debunk the myths and false information related to the overall health of women during pregnancy and lactation and those associated with the pandemic. Women should be encouraged to acquire information from credible sources, in the form of videos and pamphlets, which can help them to remain calm, and to focus on their health and that of their unborn or newborn child. These educational programmes must encourage pregnant or lactating women to adopt social and recreational activities that promote self-care and help avert anxiety and depression during pregnancy and beyond.
10. Encourage women to continue seeking medical and professional consultation for any condition, queries or problem. Women should also be provided information about safety measures in place in birthing clinics and facilities. A sense of empowerment in making decisions about the place of delivery and birthing experience could help women overcome anxiety and depression and help them focus on their health and well-being.
11. The existing network of Community Health Workers (CHWs) should be strengthened and supported to reach women in remote areas to deliver the educational modules developed by the government to increase awareness about COVID-19. CHWs are in a position to support mental health by countering misinformation, fear, and stigma associated with the virus with accurate information about its prevention and transmission during pregnancy and lactation.<sup>22</sup>

## Conclusion

Mental health and wellbeing are as important during pregnancy as physical and dietary care. It is essential for pregnant women and nursing mothers to take care of themselves as this is directly related to the health of their children. Hospitals and organizations can help promote improved mental health by providing free mental health clinics. Having a centralized opportunity to talk to a mental health counsellor might support women to experience positive pregnancy outcomes. Women in resource-stricken areas could be given support by a network of healthcare workers who could educate them about steps to enhance their health and mental well-being. While countries are striving to deal with the coronavirus crisis, it is crucial to respond to the fears and anxieties of pregnant and lactating mothers by implementing telehealth, promoting midwife-led home-based antenatal and postnatal care, strengthening skills of CHWs in remote and impoverished areas, and establishing protection mechanisms for frontline health workers. These cumulative efforts can promote positive pregnancy and childbirth experiences despite the stress of a pandemic.

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