



Asian Journal of Research in Pharmaceutical Sciences and Biotechnology

Journal home page: www.ajrpsb.com

<https://doi.org/10.36673/AJRPSB.2020.v08.i01.A05>



GENERAL CONSIDERATIONS RELATED TO THE PREGNANCY CARE IN PANDEMIC OUTBREAK

Vrushalee Dodke*¹, Trushna Tembhekar², Neha Milind Sahare³

¹Department of Prasutitantra Strirog, L.N. Ayurved College, Kolar Road, Bhopal, Madhya Pradesh, India.

²Department of Shalyatantra, Shri Sai Institute of Ayurvedic Research and Medicine, Bhopal, Madhya Pradesh, India.

³Department of Rog Nidan Vikriti Vigyan, Veena Vadini, Ayurveda College and Hospital, Bhopal, Madhya Pradesh, India

ABSTRACT

Pregnancy is considered as a risk factor for increased illness at the time of most of the pandemics. Pregnant women have to follow the public health recommendations during a pandemic because of concerns about the effects of vaccines or medications on the fetus. Many guidelines are released for the pregnant women as they are prone for contracting novel Corona virus easily. Corona virus disease is an infectious disease caused by a newly discovered corona virus. The disease is officially named as Corona virus Disease-2019 (COVID-19) belongs from a large family of viruses which causes symptoms of cold, fever and pneumonia, etc. People of all the age are vulnerable to COVID-19 but people with low immunity such as the elderly, pregnant women and patients with chronic diseases are prone to the severe symptoms caused by Corona virus. Present article describes general considerations related to the pregnancy care during pandemic outbreak.

KEYWORDS

Pregnancy, Pandemic, Disease and Virus.

Author for Correspondence:

Vrushalee Dodke,
Department of Prasutitantra Strirog,
L.N. Ayurved College, Kolar Road,
Bhopal, Madhya Pradesh, India.

Email: bhadoriyaupendra@yahoo.co.in

Available online: www.uptodateresearchpublication.com

INTRODUCTION

The infectious disease affecting many people now a day's since these diseases spreads all over the world very quickly. Outbreaks are nearly constant even in this modern age, though not every outbreak reaches pandemic level as the Coronavirus (COVID-19) has reached. Humans have created widespread opportunities around the world and this has made the spread of epidemics like malaria, influenza and smallpox, etc. Frequent travelling increases chances
January – March

of pandemic infection due to the increase contact with different people and animals.

Pregnant women and the unborn children are more prone for the emerging infections and increased risk of complications had been reported in pandemic like Zika virus infection and H1N1 influenza virus also. Pregnant women are more susceptible to COVID-19 infection due to the compromised state of immune system and physiological alteration. Maternal management and fetal safety is a major concern during spread of pandemic outbreak.

COVID-19 is transmitted quite efficiently has an exponential rate of increase. Some strong evidences also proves that it can be transmitted by people who are just mildly ill or even presymptomatic. Thus it can be considered as much more severe than the Middle East respiratory syndrome (MERS) or severe acute respiratory syndrome (SARS). Figure No.1 depicted some general guideline to prevent spread of pandemic disease.

TRANSMISSION OF COVID-19

It is mainly transmitted through droplets, touching (including self-infection caused by contaminated hands) and short distance transmission of respiratory aerosols, mainly spreading through droplets. Fevers, dry cough, difficulty in breathing or shortness of breath are major symptoms of disease.

PREGNANCY AND COVID-19

The increased risk of contracting corona virus is believed to be related to the several physiological changes that occur in pregnancy. Many hormonal and mechanical changes occur during pregnancy; also some changes occur in cardiovascular and respiratory systems like increased heart rate, stroke volume and oxygen consumption etc. Some immunologic changes also occur during pregnancy, causing a shift of cell-mediated immunity to the humoral immunity. This shift results in increasing susceptibility of pregnant woman towards certain pathogens like virus.

Pregnant women are considered high-risk for any type of respiratory infections like influenza and COVID-19 etc. Pregnant women need guidance on

how to protect themselves from becoming infected if they are quarantined with or directly providing care to ill persons. During a pandemic condition pregnant women are more likely to be exposed to clinical places where ill persons are getting treatment. Thus healthcare facilities need to develop to ensure that pregnant women receive necessary care, but with minimal exposure to ill persons or their contacts. In addition, plans for care and delivery of pregnant women with confirmed COVID-19 infection or recent exposure must ensure that these women receive appropriate care without exposing other healthy pregnant women and their infants to illness.

Some information is given by the epidemic reporting system of the National Health Commission of China laboratory regarding the epidemiologic, treatment and outcomes of pregnant women with Covid-19. They had identified 118 pregnant women with Covid-19; 84 women (71%) had positive polymerase-chain-reaction (PCR) testing for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the remaining 34 (29%) had suggestive findings on computed tomography (CT) of the chest. Cough was reported in 73% and Lymphopenia was present in 51.

Suggested Guidelines for the Pregnant Women

- Washing of hands regularly.
- Avoid touching of eyes, nose and mouth.
- Maintain distance with others.
- One should cough or sneeze into tissue or covering mouth.
- If someone feels fever, cough, cold and difficulty in breathing, should report to the doctor.
- All women have the right to safety and positive childbirth experience whether they are suffering from COVID-19 or not.
- Women with COVID-19 are too ill to breastfeed then she can be supported with breast milk in other ways like expressing milk, relactation and donor milk.
- A women with COVID-19 should be supported to breastfeed safely with following measures:

- Respiratory hygiene and uses of mask.
- Washing hands before and after touching the baby.
- Maintain cleanliness of surfaces and rooms.

Royal College of Obstetricians and Gynecologists has also released some guidelines for the pregnant women. Some evidence are suggesting the probability of vertical transmission i.e. transmission from a woman to her baby during pregnancy or birth but some studies are denying it. So we have to wait for the further declaration of the proven cases. To a pregnant woman, as a precaution, she is recommended to follow the government advice about social distancing, staying away from public places and to avoid anyone who has symptoms suggestive of COVID-19. Pregnant women can continue to attend her routine scheduled if feel well, if she develops temperature or cough then physician should report immediately.

If the pregnant woman is tested positive for coronavirus, she should contact her midwife or doctor to make them aware of her diagnosis. According to the further care required she will be admitted to the hospital. Pregnant women who are self-isolating are advised not to attend maternity units unless in need of urgent pregnancy or medical care.

As a precautionary approach, pregnant women with suspected or confirmed COVID-19 infection when they go into labour are being advised to go to obstetric unit for birth, where the baby can be monitored using continuous electronic fetal monitoring and oxygen levels can be monitored hourly. Home deliveries should be strictly avoided. The continuous fetal monitoring is to check how the baby is coping with labour. As this is a new virus, there is limited evidence about caring for women with coronavirus infection when they have just given birth. A small number of babies have been diagnosed with coronavirus shortly after birth, so there is a chance that infection may have occurred in the womb, but it is not certain whether transmission was before or soon after birth. In some other countries, women with confirmed COVID-19 have been advised to separate from their baby for 14 days. If pregnant woman is a working professional then she should do work from home only as they are placed in the vulnerable group.

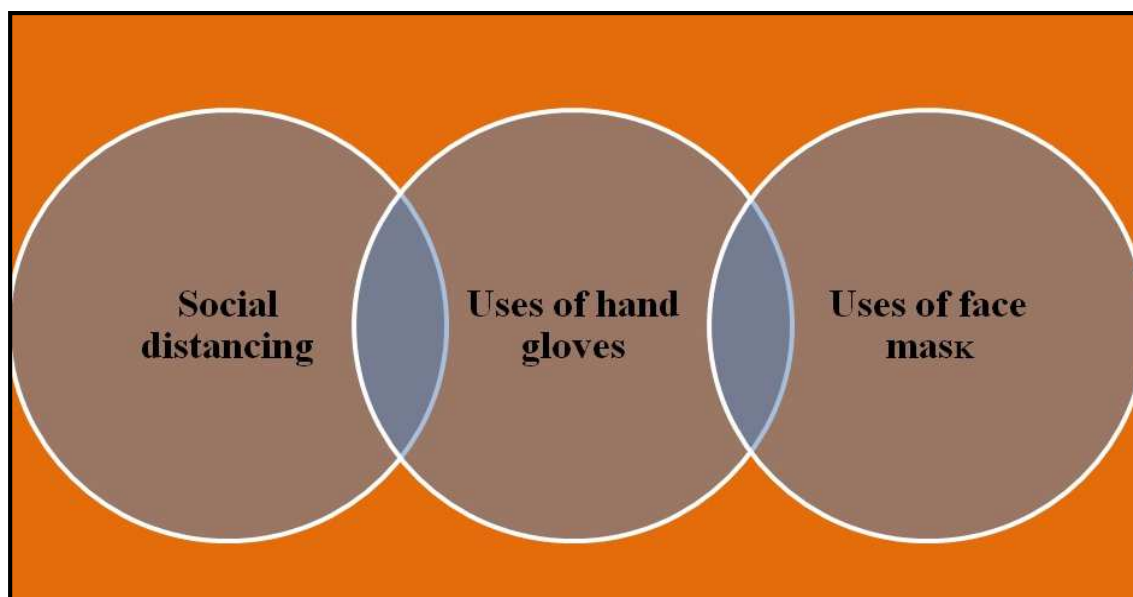


Figure No.1: General guideline to prevent spread of pandemic disease

CONCLUSION

COVID-19 is an infectious disease caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness. Due to the risk for severe disease and potential risk for the fetus, pregnant women are considered to be high-risk in the event of pandemic like COVID-19. Research into the effects of COVID-19 and its treatment on the pregnant woman and her fetus is required. From recent data reported on COVID-19, there is no evidence for vertical transmission to the fetus but there can be a probability of vertical transmission as data is very limited. Pregnant women need guidance on how to protect from infection. There should be a strategy for designating a location and staff for care of pregnant women and their newborns, separate from those used by patients with COVID-19. Doctors should divide the pregnant patients on the basis of pregnancy stage and symptom so that pregnant women who need immediate or urgent attention can receive care. The best way to prevent and slow down the transmission is by informing about the COVID-19 virus, the disease it causes and its way of spread. Research, planning, communications and intervention are some approaches which can help to maintain health and well-being of pregnant women in pandemic situation.

ACKNOWLEDGEMENT

The authors wish to express their sincere gratitude to for Department of Prasutitantra Strirog, L.N. Ayurved College, Kolar Road, Bhopal, Madhya Pradesh, India, providing necessary facilities to carry out this research work.

CONFLICT OF INTEREST

We declare that we have no conflict of interest.

BIBLIOGRAPHY

1. Nuzum J W, Pilot I, Stangl F H. Bonar B E. Pandemic influenza and pneumonia in a large civilian hospital, *JAMA*, 71(19), 1918, 1562-1565.
2. <https://s.docworkspace.com>, Guide on Anti-COVID-19 by Beijing magazine. Accessed on 04/05/2020.
3. <http://thejewishvoice.com/wp-content/uploads/2020/01>, Coronavirus - Cases-article. Accessed on 04/05/2020.
4. <https://ourworldindata.org/coronavirus-source-data>, on 04/05/2020.
5. <https://www.indiatoday.in/india/story/coronavirus-cases-in-india-covid19-states-citiesaffected>, on 04/05/2020.
6. Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and its inactivation with biocidal agents, *Journal of Hospital Infection*, 104(3), 2020, 246-251.
7. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China, *Lancet*, 6736(20), 2020, 30183-30185.

Please cite this article in press as: Vrushalee Dodke et al. General considerations related to the pregnancy care in pandemic outbreak, *Asian Journal of Research in Pharmaceutical Sciences and Biotechnology*, 8(1), 2020, 40-43.