

A STUDY ON KNOWLEDGE, ATTITUDE, PRACTICE, AND VACCINE HESITANCY OF PREGNANT WOMEN IN VIEW OF COVID-19

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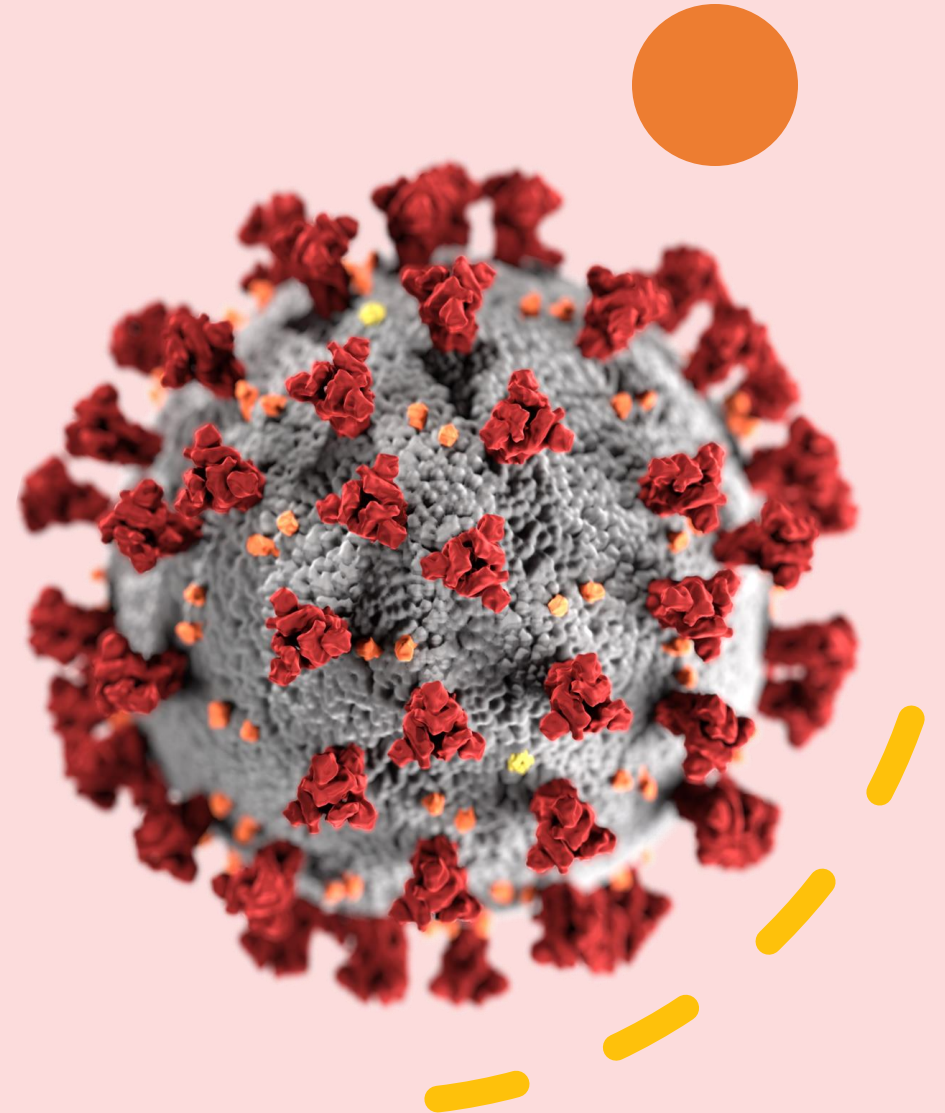
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INTRODUCTION

- Covid-19 was proclaimed a worldwide pandemic with outstanding spread worldwide by World Health Organization (WHO) on 11th March, 2020.
- Physiological changes in pregnancy have significant impact on the immune system, respiratory system and cardiovascular function. These may have positive or negative effects on Covid-19 disease progression.
- As the Covid-19 pandemic continues to intensify, it is important to understand the mentality of pregnant women towards Covid-19, for better guidance.



RESEARCH QUESTION

- **WHAT IS THE LEVEL OF KNOWLEDGE, ATTITUDE, PRACTICES AND VACCINE HESITANCY REGARDING COVID-19 IN PREGNANT WOMEN IN AN URBAN SETTING?**

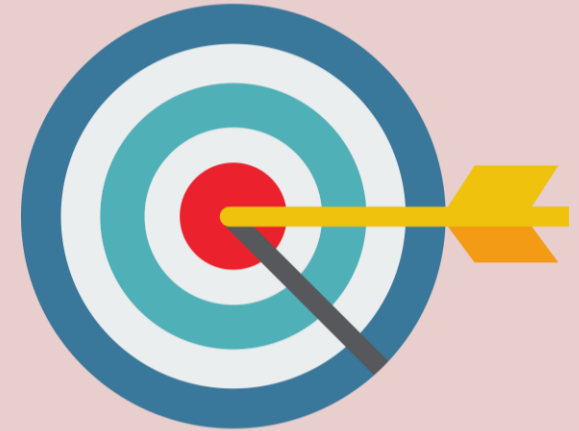


✓ RATIONALE OF STUDY-

This survey will help identify various characteristics of pregnant women who are more likely to be vulnerable towards the effects of COVID-19 and enable clinicians to reflect on the insecurities and worries of pregnant women for more focused counselling, reassurance and clarifying doubts of pregnant women towards COVID-19 during the antenatal, intra partum and post-partum period.

✓ OBJECTIVES OF STUDY-

- To gather primary, first-hand data about pregnant women's knowledge, attitude, and practices towards COVID-19 in Delhi, India.
- To study vaccine hesitancy in pregnant women in view of Covid-19



METHODOLOGY USED

- The period of study was for 8 weeks from – May 2021 to July 2021.
- The study design was Quantitative, a cross-sectional survey was conducted among pregnant women attending the outpatient department (OPD) of Fortis LaFemme Hospital, New Delhi. A sample size of 110 pregnant women was taken.
- Keeping in mind the current scenario and precautions to be taken nowadays, a google form was curated and to access the form a quick response (QR) code was generated, which could be scanned on the mobile phones of the respondent.
- Sampling technique – Purposive Sampling.

LITERATURE REVIEW

TITLE	AUTHOR(s)	YEAR	KEY FINDINGS
<i>Coronavirus disease 2019 (COVID-19) pandemic and pregnancy.</i>	Dashraath P, Wong JLJ, Lim MXK, Lim LM, Li S, Biswas A, Choolani M, Mattar C, Su LL.	2020	- Pregnant women and their fetuses represent a high-risk population during infectious disease outbreaks. - Increased susceptibility to infections in general can be attributed to the physiological and mechanical changes in pregnancy, particularly when the cardiorespiratory system is affected, and encourage rapid progression to respiratory failure in the gravida.
<i>Breastfeeding during the COVID-19 pandemic – a literature review for clinical practice</i>	Lubbe W, Botha E, Niela-Vilen H, Reimers P.	2020	- Benefits of breastfeeding outweighs the risk hence should be practiced. - Skin to skin contact of the new-born should not be discouraged.
<i>Covid-19 and pregnancy – where are we now? A review</i>	Rajewska A, Mikołajek-Bedner W, Lebdowicz-Knul J, Sokołowska M, Kwiatkowski S, Torbé A	2020	- In the third trimester, premature rupture of membranes, fetal distress, and premature labor can be caused by the Covid-19 virus. - However, there are no data on complications of SARS-CoV-2 infection before the third trimester.

RESULTS

❖ **SOCIO- DEMOGRAPHIC PROFILE -**

Among the participants, most of the women were -

- Aged between 30 to 34 years (44.5%)
- Post-graduate (57.3%) and
- Working women (55.5%)

❖ **OBSTETRIC HISTORY -**

- Conceived naturally (87.3%)
- Were in their third trimester (49.1%)
- Were primiparous (65.5%)
- No comorbidities present (95.5%)



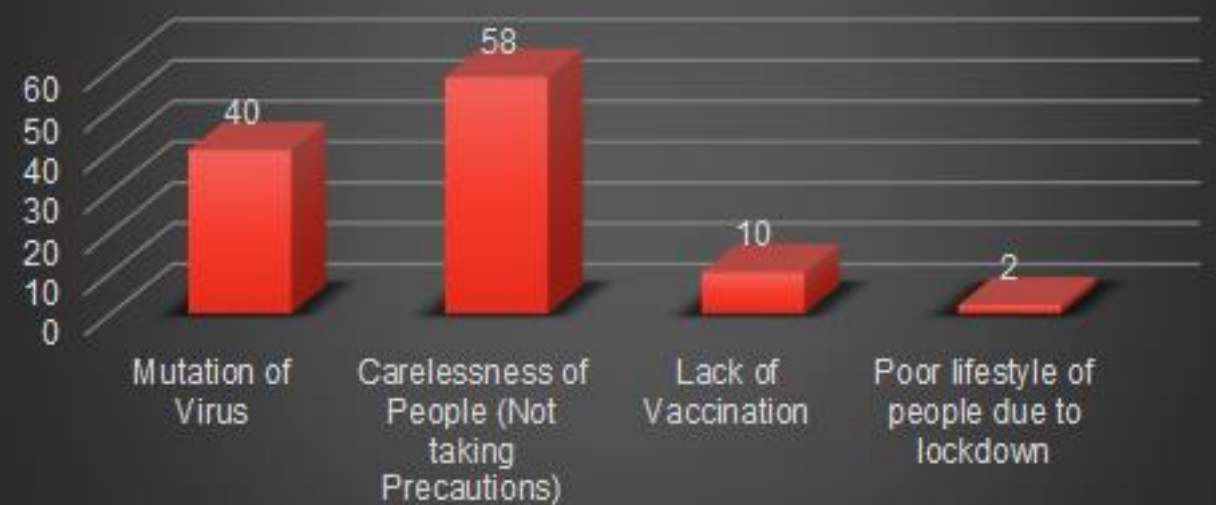
KNOWLEDGE ASSESSMENT OF PREGNANT WOMEN IN VIEW OF COVID

Source of First Information on Covid-19 Virus



- It was seen that the source of first information for covid-19 was majorly News Media opted by 69.1% expecting mothers while the least opted source was word of mouth by 5.5%.

Cause of recurring waves of Covid-19



- 52.7% of expecting women believe that the reason for recurring waves of Covid-19 is carelessness of people, while 1.8% women blame it on the poor lifestyle of the people due to lockdown.

- Majority of women 51.8% go with the notion that pregnant women have increased susceptibility to Covid-19. On the other hand, 10% of women have the opposite belief.
- Assessing knowledge on the fact whether COVID 19 infection increases the risks and complications in pregnancy it was observed that majority 51.8% agreed to it while only 3.6% were not in favour of it.

OTHER FINDINGS-

- Symptoms of second wave- Change in Oxygen saturation was the most opted symptom by 82.7% women, followed by pneumonia opted by 54.5%, conjunctivitisselected by 44.5%.
- Majority of the women i.e., 95.5% opted for direct physical contact with body of infected person as a risk factor. The least opted risk factor for Covid-19 was direct contact with bats, live animals and sea food by only 4.5% of women.

DISTRIBUTION OF PARTICIPANTS' KNOWLEDGE TOWARDS COVID-19 IN PREGNANCY.				
KNOWLEDGE	YES N (%)	NO N (%)	MAYBE N (%)	DON'T KNOW N (%)
Are pregnant women more susceptible to Covid?	57 (51.8%)	11 (10%)	27 (24.5%)	15 (13.6%)
Does COVID 19 infection increase risks and complications in pregnancy?	57 (51.8%)	4 (3.6%)	38 (34.5%)	11 (10%)

DISTRIBUTION OF PARTICIPANTS' ATTITUDE TOWARDS COVID-19

It was seen that there is lack of awareness regarding whether breastmilk is a carrier of the covid-19 virus where majority of subjects 48.2% were not sure about it, and 6.4% had the misconception that breastmilk is a carrier of the virus.

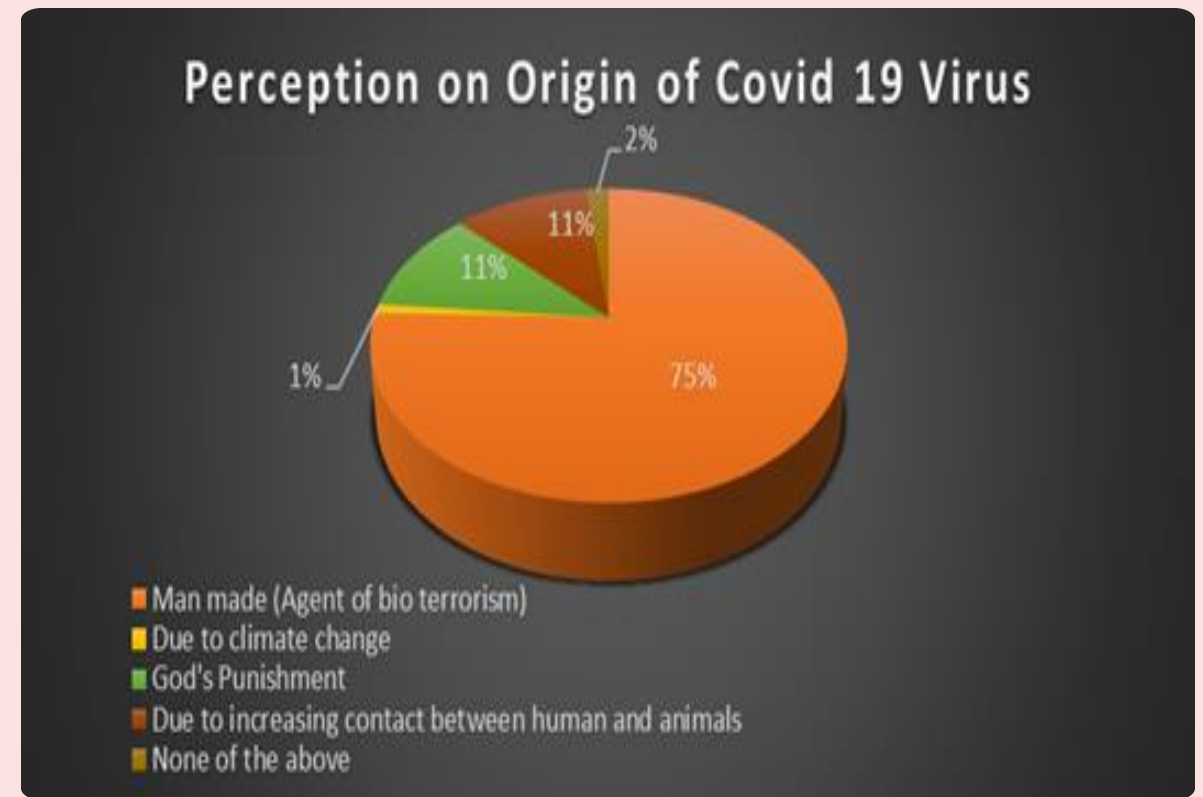
89.1% expecting mothers plan to breastfeed their infant, while 40.9% are not sure if they would still breastfeed if they contract the Covid-19 virus.

90.9% agreed to the fact that religious practices like baby shower, pujas, etc. can be avoided in the current scenario, on the other hand 9.1% women believe that religious ceremonies are essential and must be held.

ATTITUDE	YES n (%)	NO n (%)	MAYBE n (%)
Do you think COVID 19 is a serious disease?	107 (97.3)	2 (1.8)	1 (0.9)
In the past few months have you modified your working habits in the fear of getting COVID 19?	105 (95.5)	4 (3.6)	1 (0.9)
Is breastmilk a carrier of COVID 19 Virus?	7 (6.4)	50 (45.5)	53 (48.2)
Would you opt for breastfeeding under normal circumstances?	98 (89.1)	8 (7.3)	4 (3.6)
Would you opt for breast feeding if you are Covid positive?	24 (21.8)	41 (37.3)	45 (40.9)
	YES, They are essential n (%)	NO, It's necessary to take precautions. n (%)	
Do you believe religious practices like baby showers, pujas etc. should still be carried out?	10 (9.1)	100 (90.9)	

PERCEPTION ON ORIGIN OF COVID-19 VIRUS

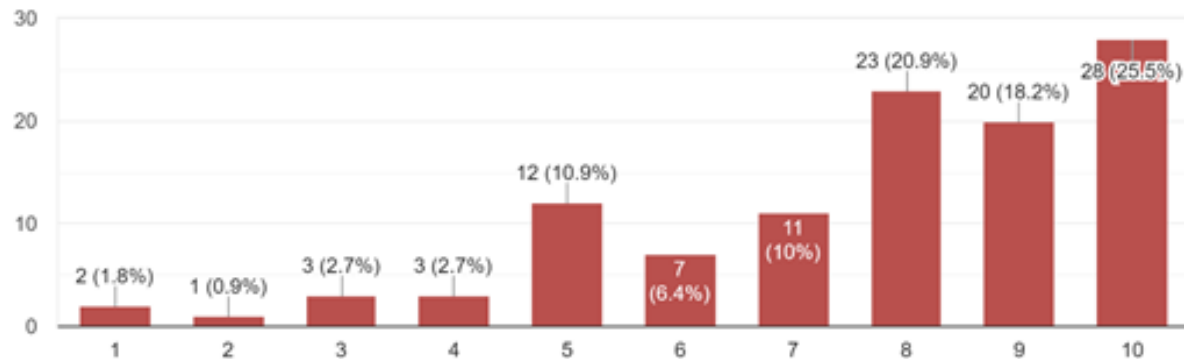
- 75% hold the belief that Covid-19 is a man-made virus with the aim of bioterrorism.
- An equal amount of 11% share the belief that it is due to increasing contact between humans and animals and that it is a punishment of God.
- About 1% trace back the origin to climate change .



RATING FOR FEAR OF CONTRACTING THE COVID-19 VIRUS

11. How would you rate your fear of getting COVID 19 on a 1 to 10 scale with 1 meaning no fear at all and 10 very much fear?

110 responses



- Majorly the population falls on the higher side of the rating scale (above 5 point).
- 25.5% show extreme fear of contracting the covid 19 virus and on the contrary only 1.8% have no fear at all.

REPRESENTATION OF PARTICIPANT'S PRACTICES IN VIEW OF COVID-19

PRACTICES	YES n (%)	NO n (%)	SOMETIMES n (%)
Do you strictly follow the curfew times and restrictions imposed by the government?	102 (92.7)	4 (3.6)	4 (3.6)
Do you allow visitors in your house nowadays?	21 (19.1)	59 (53.6)	30 (27.3)
	YES n (%)	NO n (%)	NOT SURE n (%)
Did you skip planned visits to the doctor due to fear of Covid-19?	42 (38.2)	65 (59.1)	3 (2.7)

- 92.7% women strictly adhere to the curfew times imposed by the government in the lockdown period.
- 53.6% pregnant women don't allow visitors in their house in the current time of lockdown.
- 19.1% of them are open to visitors while 27.3% allow visitors sometimes.
- The fear of covid-19 has made 38.2% pregnant women miss their clinic appointments while 59.1% still attended all their clinic appointments in covid times.

ATTITUDE OF PREGNANT WOMEN REGARDING COVID VACCINE

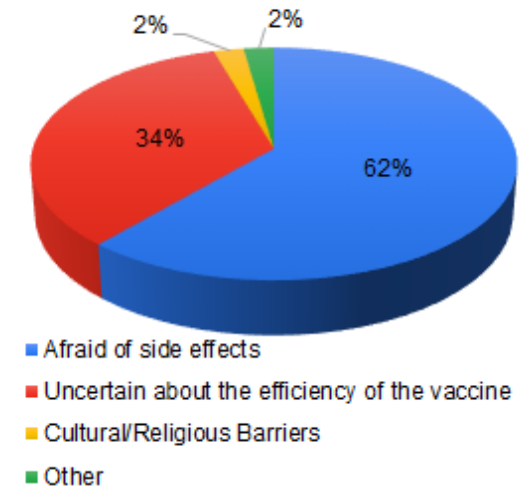
ATTITUDE REGARDING VACCINATION	YES n (%)	NO n (%)	DON'T KNOW n (%)
Do you think it is safe to get vaccinated during pregnancy?	18 (16.4)	42 (38.2)	50 (45.5)
Are you aware that countries like US, UK, Australia etc. have started vaccinating the pregnant women on a priority basis?	67 (60.9)	18 (16.4)	25 (22.7)
If and when India starts vaccination drive for the pregnant women, will you get vaccinated?	69 (62.7)	21 (19.1)	20 (18.2)
India has started vaccination drive for the lactating mothers. Are you willing to get vaccinated post childbirth?	76 (69.1)	18 (16.4)	16 (14.5)

45.5% don't know whether it is safe for pregnant women to get Covid-19 vaccination. 16.4% believe that it is safe to take the Covid vaccination during pregnancy and 38.2% oppose this notion.

62.7% expecting mothers are ready to get vaccinated during their pregnancy, on the other hand 19.1% women are not willing to get vaccinated during pregnancy and about 18.2% were unsure of the same.

Post childbirth, 69.1% were sure, to get vaccinated for Covid-19, and 16.4% of them are not willing to get vaccinated.

Reasons For Not Opting for Covid-19 Vaccine



CONCLUSION

- Majority of the sample population possesses adequate knowledge, attitude and practice towards Covid-19.
- Knowledge level in the area of susceptibility of pregnant women to the virus, breastfeeding and postnatal care is low. Emphasis on knowledge in these areas is needed.
- Majority of the pregnant women are ready to get vaccinated, but awareness needs to be created for the percentage of expecting women who are hesitant to get vaccinated for Covid-19.
- Information acquired from this study can better aid and guide the gynecologists and obstetrics practitioners to deliver suitable counselling to their patients with respect to Covid- 19.

RECOMMENDATIONS

Breastfeeding and skin to skin contact should be encouraged. To spread awareness for this, a Covid-19 management workshop can be held for pregnant women where such facts can be communicated to them, and their doubts can be resolved.

Clinicians must emphasize on the efficiency of vaccination and promote appropriate covid behavior in pregnant women.

It should be communicated to all doctors to describe the benefits of the vaccine to the patients, and also to clarify their doubts by making them aware of the new Government guidelines regarding vaccination of pregnant women.

They must be encouraged to visit official government websites like Arogya Setu for accurate information and to avoid rumors and miscommunication.

Putting up of informative posters and distribution of pamphlets in hospitals and obstetric clinics regarding pregnancy and its management in times of Covid-19.

FAQs on COVID-19 Vaccines

for Pregnant Women

Why is COVID-19 vaccine being recommended for pregnant women?

Pregnant women with COVID-19 are at an increased risk of:



Severe illness compared to non-pregnant women



Preterm birth & other adverse outcomes including higher chances of neonatal morbidity



Most pregnant women will be asymptomatic or have mild disease, but their health may deteriorate & might affect the foetal outcome



Ministry of Health and family Welfare
Government of India



FAQs on COVID-19 Vaccines

for Pregnant Women

How does COVID-19 affect the health of pregnant women?

Compared with pregnant women without COVID-19, those with symptomatic COVID-19 are at an increased risk of:



Adverse pregnancy outcomes including admission to the ICU



Iatrogenic* preterm birth



Pre-eclampsia-like symptoms



Caesarean section and death

*due to any maternal or fetal medical complication necessitating early delivery



Ministry of Health and family Welfare
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FAQs on COVID-19 Vaccines

for Pregnant Women

Are there any specific contraindications for vaccination in pregnancy?

Pregnant women should avoid vaccination in the following conditions:



Severe allergic reaction to the previous dose of COVID-19 vaccine



Allergic reaction to vaccines or injectable therapies, pharmaceutical products, food-items, etc.



Diagnosed COVID-19 to defer for 12 weeks from infection or 4 to 8 weeks from recovery



COVID-19 infection treated with anti-COVID-19 monoclonal antibodies or convalescent plasma



Ministry of Health
and Family Welfare
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FAQs on COVID-19 Vaccines

for Pregnant Women

Are there any side-effects of the COVID-19 vaccines on pregnant women or her foetus?



Vaccination protects pregnant women against COVID-19 like other individuals & are unlikely to pose a risk to the pregnant person or foetus



Like any medicine, a vaccine may have side effects including mild fever, pain at the injection site, or feel unwell for 1-3 days



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Thank you!