

AWARENESS, KNOWLEDGE & PREVENTIVE PRACTICE AMONG THE MEDICAL STUDENTS ABOUT COVID-19 VACCINATION IN PREGNANT WOMENDoke Dnyaneshwar Suryakant¹, Nagpure Sneha Ashok² and Srabani Bhattacharya^{3*}^{1,2}MBBS Student Rajiv Gandhi Medical College & CSM Hospital, Kalwa, Thane-400 605, Maharashtra, India.³Professor and Head of Physiology Department, Rajiv Gandhi Medical College & CSM Hospital, Kalwa, Thane-400 605, Maharashtra, India.***Corresponding Author: Dr. Srabani Bhattacharya**

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ABSTRACT

It is a Cross- Sectional Study. Total number of respondents were 170. This study was Conducted among medical Students who taken admission in medical Colleges of Maharashtra, India. Among the respondents, 53.50% Students were Female & 46.50% Students were male. 71.20%. were from Urban areas & 28.80% from rural areas. 68. 20% of them answered Yes regarding the question whether Covid vaccine is safe or not. 18.20% Answered "Yes" about the side-effects of COVID vaccine in developing babies. 31.20% among the respondents agreed that COVID vaccine helps to develop immunity in babies as well. Education of Pregnant women on COVID-19 preventive practices should be intensified at health facilities

KEYWORDS: Medical Students, COVID 19 Vaccine, Pregnant women.**INTRODUCTION**

The rapidly evolving pandemic over the last few months has given rise to multiple living-guidelines for the management of COVID-19 in pregnancy.^[1] The awareness Campaigns should shed the light over the new technology that utilizes the production of few of them in order to boost COVID-19 vaccine acceptance^[2] Pregnant & postpartum women may be more likely to develop a more severe Course of COVID-19 than their non-pregnant peers.^[3] COVID-19 vaccination in pregnancy & lactation robust humoral immunity Observed" COVID -

19 Vaccination is currently considered Compatible with breastfeeding.^[4]**MATERIALS AND METHODS**

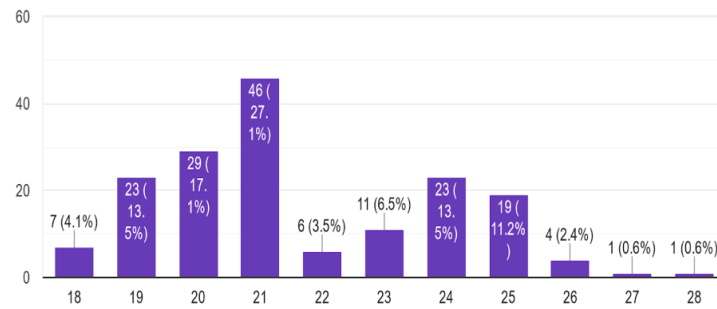
This Cross-sectional interview-based Study was conducted with a pre-tested & pre-Validated questionnaire via Google forms to the medical Students of Maharashtra, India. Their ages were 18+ Yrs onwards. Informed Consent was taken on the Google forms. The data was adapted to Microsoft Excel Spreadsheet.

RESULTS AND CALCULATION

Demographic profile	Number (total 170)	%
Age		
18	7	4.10%
19	23	13.50%
20	29	17.10%
21	46	27.10%
22	6	3.50%
23	11	6.50%
24	23	13.50%
25	19	11.20%
26	4	2.40%
27	1	0.60%
28	1	0.60%

Age in yrs

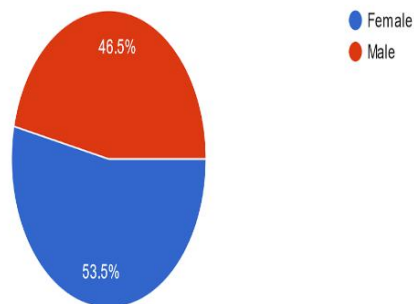
170 responses



Gender	Count	Percentage
Female	91	53.50%
Male	79	46.50%

Gender

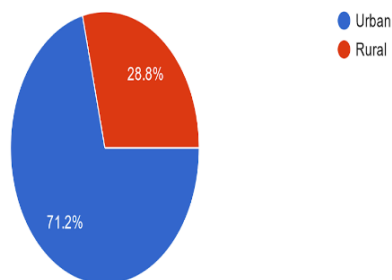
170 responses



Residence	Count	Percentage
Urban	121	71.20%
Rural	49	28.80%

Residence

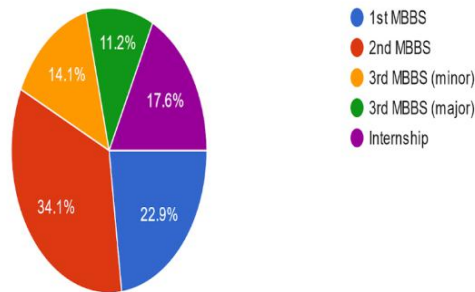
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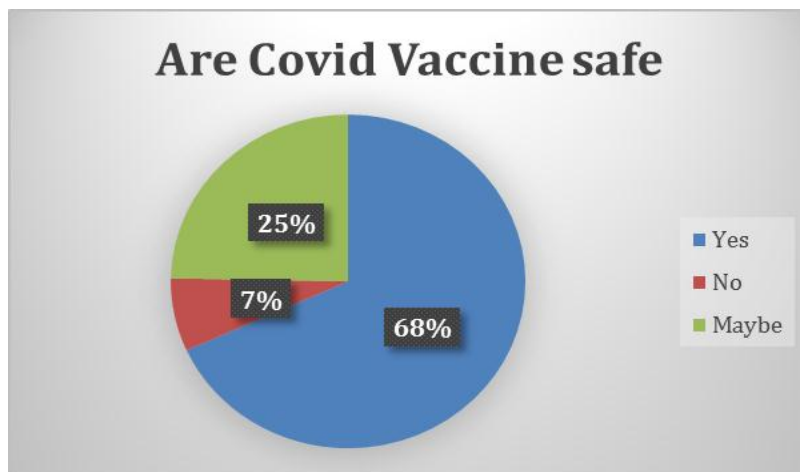
Education	Count	Percentage

First MBBS	39	22.90%
Second MBBS	58	34.10%
Third MBBS (Minor)	24	14.10%
Third MBBS (Major)	19	11.20%
Internship	30	17.60%

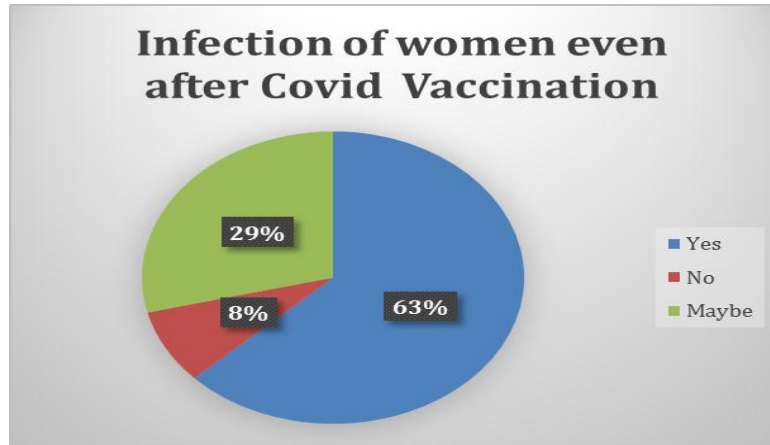
Education
170 responses



Are Covid Vaccine safe	Count	Percentage
Yes	116	68.20%
No	12	7.10%
Maybe	42	24.70%



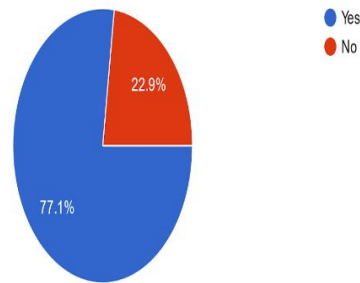
Infection of women even after Covid Vaccination	Count	Percentage
Yes	107	62.90%
No	14	8.20%
Maybe	49	28.80%



Covid vaccine available in india		
Yes	131	77.10%
No	39	22.90%

Are Covid vaccine available in India for pregnant womens

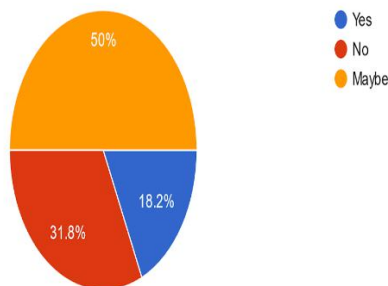
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Side effects of Covid Vaccine on developing baby		
Yes	31	18.20%
NO	54	31.80%
Maybe	85	50%

Do you think COVID vaccine can have side effects on developing baby?

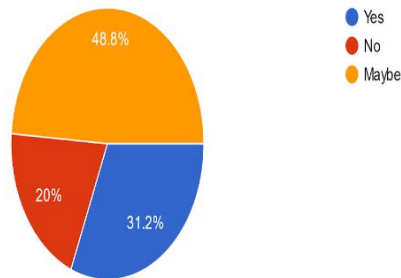
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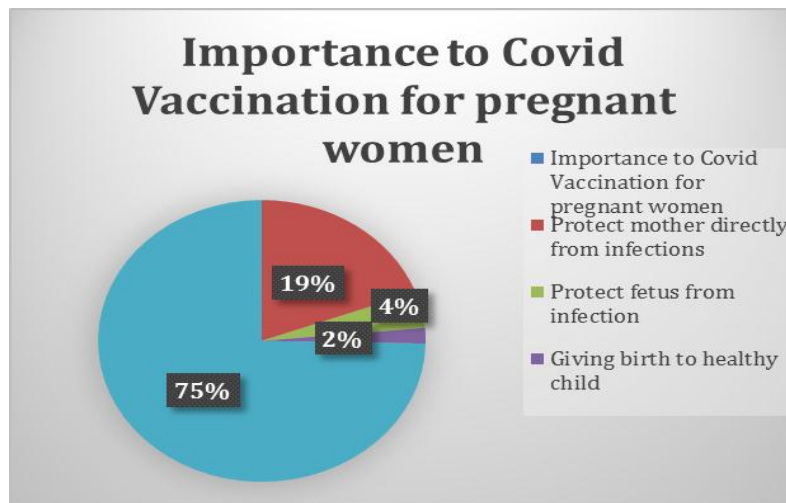
Covid Vaccine helps to develop immunity in baby as well		
Yes	53	31.20%
No	34	20%
Maybe	83	48.80%

Does COVID vaccine helps to develop immunity in fetus as well?

170 responses



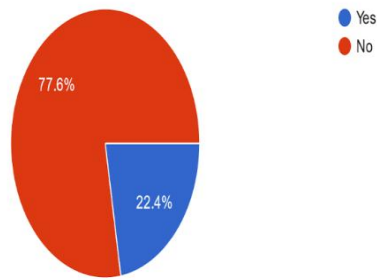
Importance to Covid Vaccination for pregnant women		
Protect mother directly from infections	33	19.40%
Protect fetus from infection	7	4.10%
Giving birth to healthy child	3	1.80%
All of above	127	74.70%



Awareness about Covid Vaccination in Indian women		
Yes	38	22.40%
No	132	77.60%

Do you think Indian women are well aware about COVID vaccination during pregnancy?

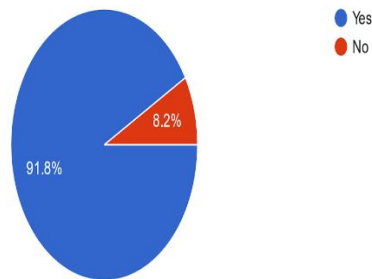
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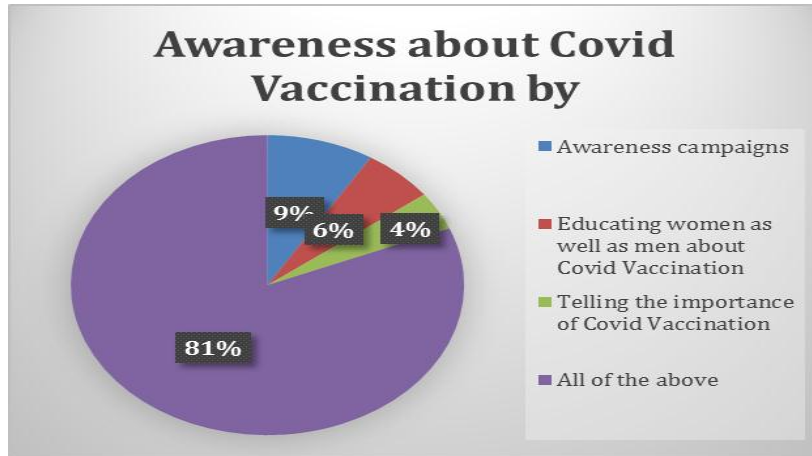
Need of awareness programs for Covid Vaccination among pregnant women		
Yes	156	91.80%
No	14	8.20%

Do you think awareness programmes for COVID vaccination of pregnant women are needed?

170 responses

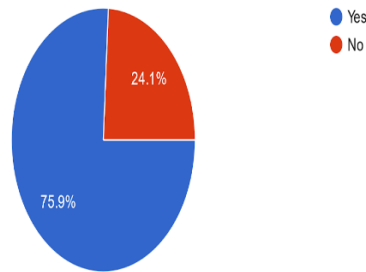


Awareness about Covid Vaccination by		
Awareness campaigns	15	8.80%
Educating women as well as men about Covid Vaccination	10	5.90%
Telling the importance of Covid Vaccination	7	4.10%
All of the above	138	81.20%



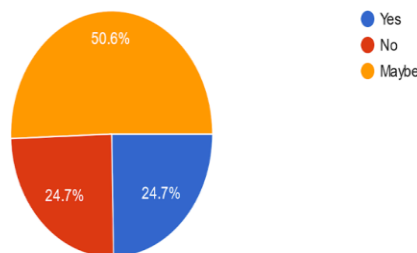
Heard rumours about Covid Vaccination		
Yes	129	75.90%
No	41	24.10%

Have you heard of any rumours regarding COVID vaccination during pregnancy
170 responses

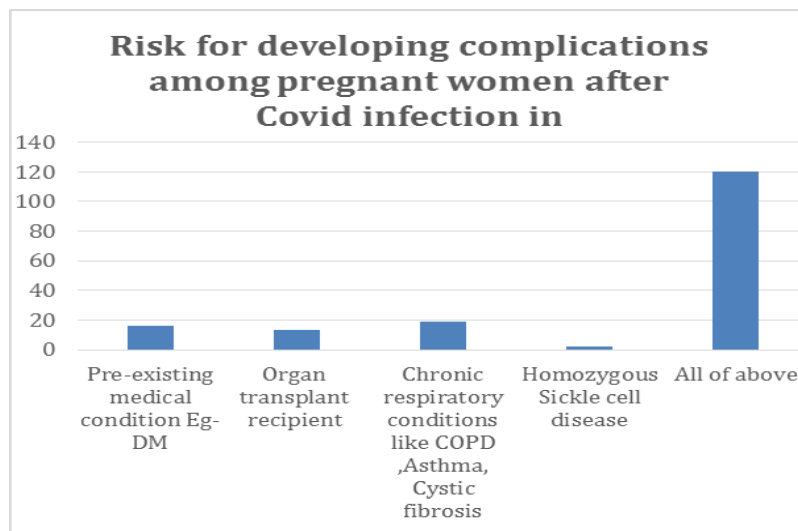


Are Vaccine safe for pregnant women with DM, BP, AIDS		
Yes	42	24.70%
No	42	24.70%
Maybe	86	50.60%

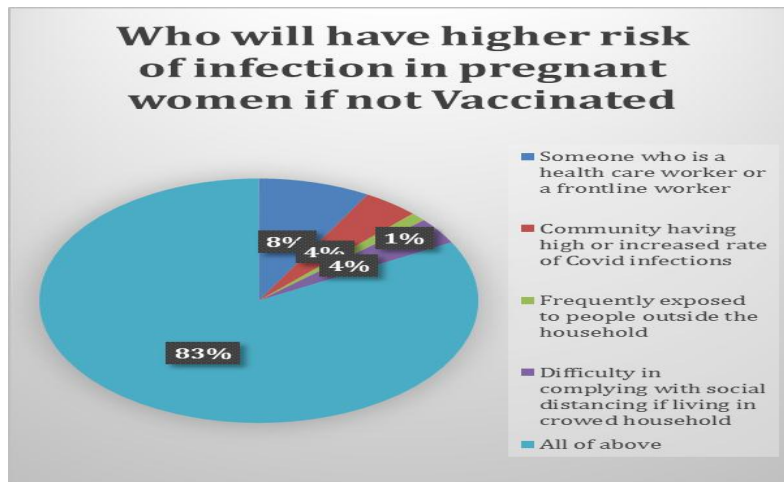
Do you think COVID vaccine are safe for pregnant women with underlying conditions like BP, DM, AIDS?
170 responses



Risk for developing complications among pregnant women after Covid infection in		
Pre-existing medical condition Eg- DM	16	9.40%
Organ transplant recipient	13	7.60%
Chronic respiratory conditions like COPD ,Asthma, Cystic fibrosis	19	11.20%
Homozygous Sickle cell disease	2	1.20%
All of above	120	70.60%



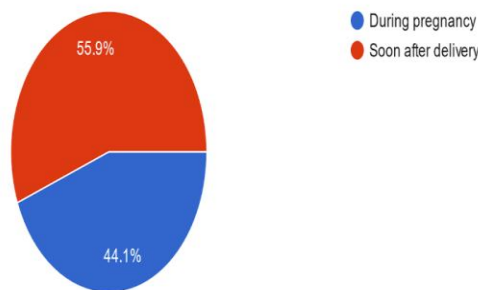
Who will have higher risk of infection in pregnant women if not Vaccinated		
Someone who is a health care worker or a frontline worker	14	8.20%
Community having high or increased rate of Covid infections	7	4.10%
Frequently exposed to people outside the household	2	1.20%
Difficulty in complying with social distancing if living in crowded household	6	3.50%
All of above	141	82.90%



Vaccination of Covid infected women		
During pregnancy	75	44.10%
Soon after delivery	95	55.90%

If a pregnant woman has already had COVID-19, when should she be vaccinated?

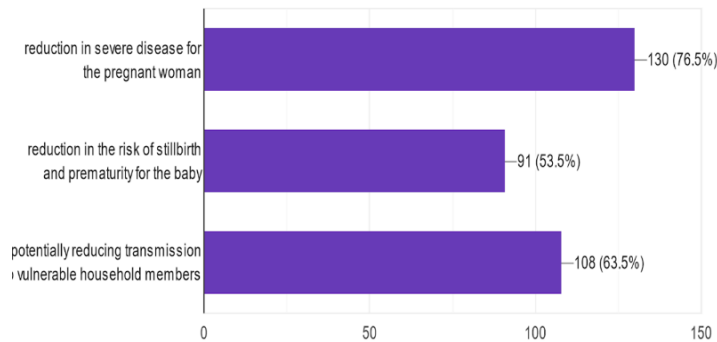
170 responses



Benefits of Covid Vaccination in pregnancy		
Reduction in severe disease for the pregnant women	130	76.50%
Reduction in risk of stilt birth and prematurity for the baby	91	53.50%
Potentially reducing transmission to vulnerable household members	108	63.50%

What are the benefits of COVID vaccination in pregnancy?

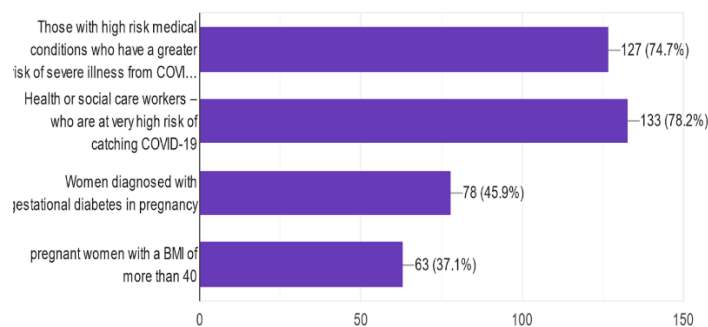
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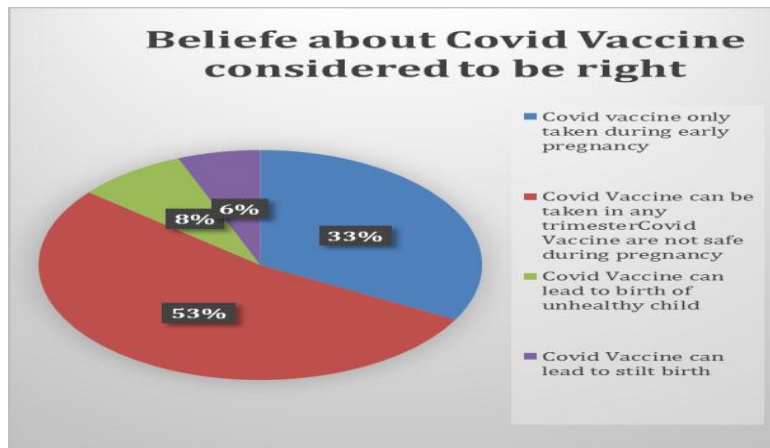
Pregnant women offered with Covid Vaccination		
Those with high risk medical condition of severe illness from Covid	127	74.20%
Health or social care workers who are at higher risk of getting infected with Covid	133	78.20%
Women diagnosed with gestational DM	78	45.90%
Pregnant women with a BMI of more than 40	63	37.10%

Which pregnant women are being offered a COVID-19 vaccine?

170 responses



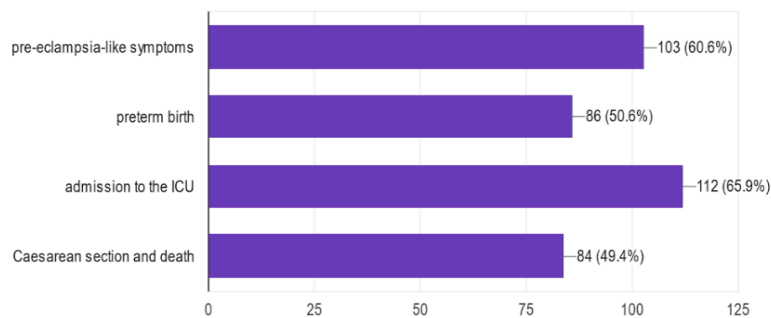
Belief about Covid Vaccine considered to be right		
Covid vaccine only taken during early pregnancy	49	28.80%
Covid Vaccine can be taken in any trimester Covid Vaccine are not safe during pregnancy	79	46.50%
Covid Vaccine can lead to birth of unhealthy child	12	7.10%
Covid Vaccine can lead to still birth	9	5.30%



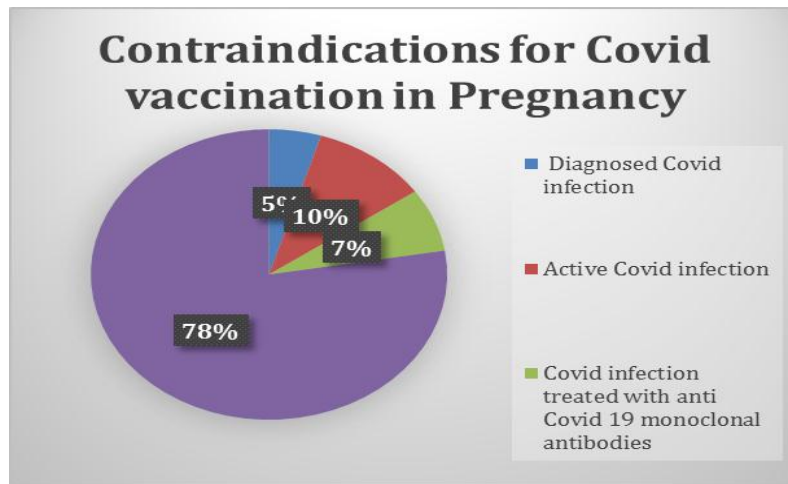
Side effects of infection on pregnant women if vaccination is not taken	Count	Percentage
Pre-eclampsia like symptoms	103	60.60%
Preterm birth	86	50.60%
Admission to ICU	112	65.90%
Caesarean section and death	84	49.40%

what are the adverse effects of symptomatic COVID-19 during pregnancy if vaccine is not taken?

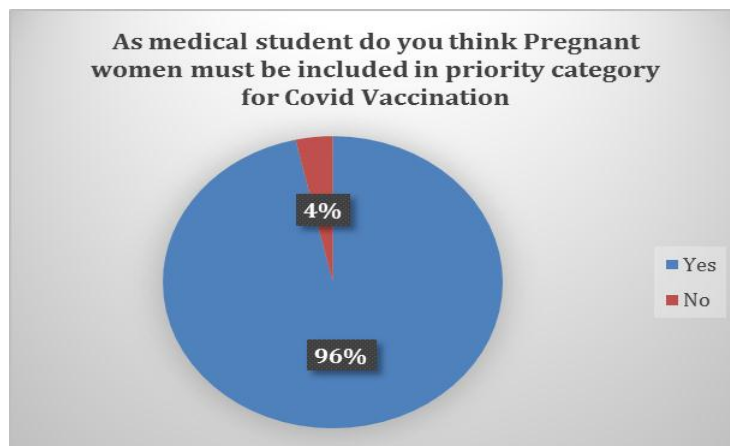
170 responses



Contraindications for Covid vaccination in Pregnancy	Count	Percentage
Diagnosed Covid infection	8	4.70%
Active Covid infection	18	10.60%
Covid infection treated with anti Covid 19 monoclonal antibodies	12	7.10%
All of above	132	77.60%



As medical student do you think Pregnant women must be included in priority category for Covid Vaccination		
Yes	164	96.50%
No	6	3.50%



In this study there were a total 170 numbers of respondents in which 53.50% were female & Male 46.50%. Urban population 71.20% & rural 28.80%. Among the medical Students 22.90% Were from First-MBBS, 34.10% from second MBBS, 14.10% from third MBBS (minor), 11.20% third MBBS (major) & 17.60% Internship Among the participants 68.20% agreed regarding the question are COVID Vaccine safe. 7.10% Answered no & 24.70% may be. Regarding the question. Side effects of COVID vaccine on developing babies can be 18.20% agreed, 31.08% answered no & may be 50%.

Motlase G & others^[5] revealed that knowledge of maternal immunization there is a general positive attitude. NM Agrawal^[6] et al reported that the vaccine is strongly recommended for preserving & Keeping the workforce healthy.

In the present study 74.71% of the respondents agreed with the importance of COVID vaccine in pregnant women.

Victoria male^[7] revealed that-multiple Strands of evidence show that vaccination does not harm fertility. Tom TS et al^[8] reported that Continued monitoring is needed to further assess maternal pregnancy, neonatal Childhood outcomes associated with maternal CoVID-19 Vaccination. NS Nizamietal^[9] recommended that we should not put off getting Vaccinated, we should proceed as soon as possible. Kit Gotel Rothon^[10] reported in the Study that the students having adequate awareness about COVID-19. In the present study 91.8%. Respondents agreed that there is a need for an awareness program for COVID vaccination among pregnant women. 70.60% of respondents agreed that risk for developing Complications among pregnant women ANW Elisabeth et al^[11] after COVID-19 infection. reported that most pregnant women will experience mild/asymptomatic diseases with no lasting Consequences.

For this study regarding the side effects of infection on pregnant Women if vaccine is not taken 60.60% answered for pre-eclampsia like Symptoms, 50.60%

preterm birth, 65.90% admission to ICU & 49.34% C-section & death. Sawei et al^[12] reported that infection in pregnancy was associated with risks of pre eclampsia, Still birth, preterm & Other adverse maternal & neonatal outcomes.

CONCLUSION

We can Considering vaccination in pregnancy evidence regarding maternal & fetal benefit & potential maternal & fetal harm and effect on pregnancy outcomes, Should be weighed Carefully.

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