



HESITANCY REGARDING COVID-19 VACCINATION AMONG BREASTFEEDING WOMEN - A CROSS-SECTIONAL STUDY AT TERTIARY CARE HOSPITAL, RANCHI, JHARKHAND

Dr. Kiran Trivedi, Dr. Shikha Anand, Dr. Prami Atta,
Dept. of Obstetric and Gynaecology, Rims Ranchi

Introduction

- Many countries around the world have been hit badly by the second and third wave of SARS-COV-2 infection, India being no exception to it
- The number of pregnant and postpartum women with severe covid 19 infection increased during the second wave and most of these women had required admission to the intensive care unit¹
- COVID-19 infection during pregnancy may result in rapid deterioration of health of pregnant women and could also affect the fetus
- In may 2021 government of India approved vaccination in lactating women one month later vaccination got approved for pregnant women
- Even after government approval of vaccine, hesitancy has been shown by this section of society toward vaccination
- The World Health Organization defines vaccine hesitancy as a “delay in acceptance or refusal of safe vaccines despite availability of vaccine services”².
- It is caused by complex, context-specific factors that vary across time, place, and different vaccines, and is influenced by issues such as complacency, convenience, confidence, and sociodemographic contexts.³
- Vaccine hesitancy may also be related to misinformation and conspiracy theories which are often spread online, including through social media.
- The vaccines which are approved in India are Covishield, Covaxin and Sputnik-v. All three vaccines have passed necessary safety test and pass the WHO's standard of efficacy.

Aims of study

- To estimate the number of breastfeeding women attending the maternity ward of RIMS who are hesitant to take Covid 19 vaccines.

Objective

- To estimate the hesitancy rate of covid-19 vaccination among breastfeeding women
- To determine the drivers of vaccine hesitancy among breastfeeding women

Material and Method

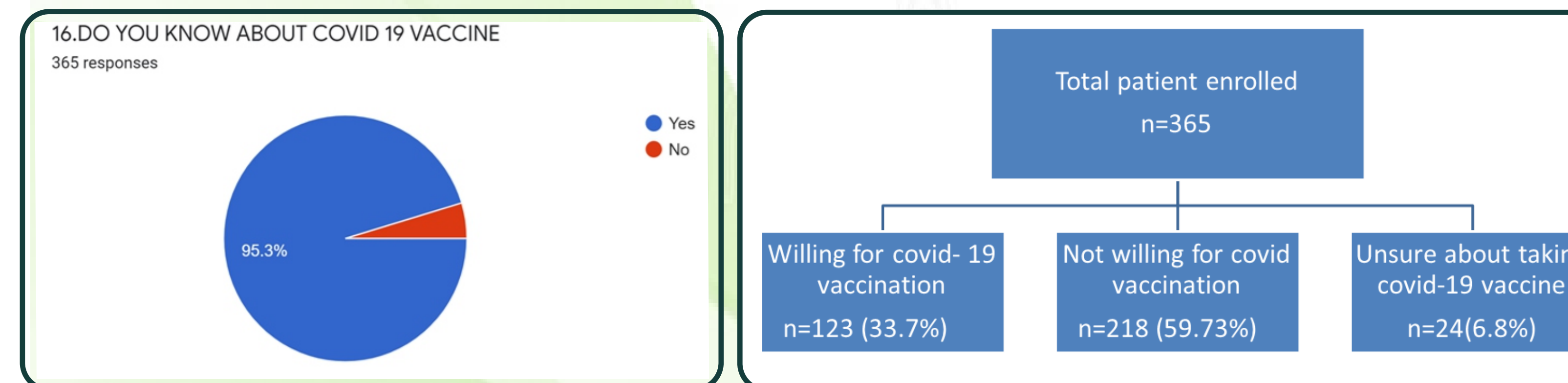
- Study design**-Cross-sectional study
- Place of study**—postpartum ward of Obst and gynae department, RIMS, Ranchi
- Study duration**-1st July 2021 to 31st august 2021
- Study population**- Breastfeeding women admitted to the postpartum ward of obstetrics and gynecology department, RIMS, Ranchi
- Inclusion criteria- Breastfeeding women in the postpartum ward of RIMS willing to participate in study
- Exclusion criteria- 1.Breastfeeding women who were Covid-19 positive in the past three month
2.Breastfeeding women who were already vaccinated

Methodology

- Data were collected using a face-to-face questionnaire in the google form.
- Pretested semi-structured questionnaire was used for collecting data which included basic information like socio-demographic profile, vaccine awareness, and drivers of hesitancy.
- The data was compiled and was generated using MS excel which was further analysed in SPSS VERSION 22.
- Groups were compared with Spearman's rho test for correlation between sociodemographic variables and COVID-19 vaccine acceptance.
- A type-1 error below 0.05 was considered statistically significant.

Observations

- Total patients interviewed 365
- Awareness about vaccine



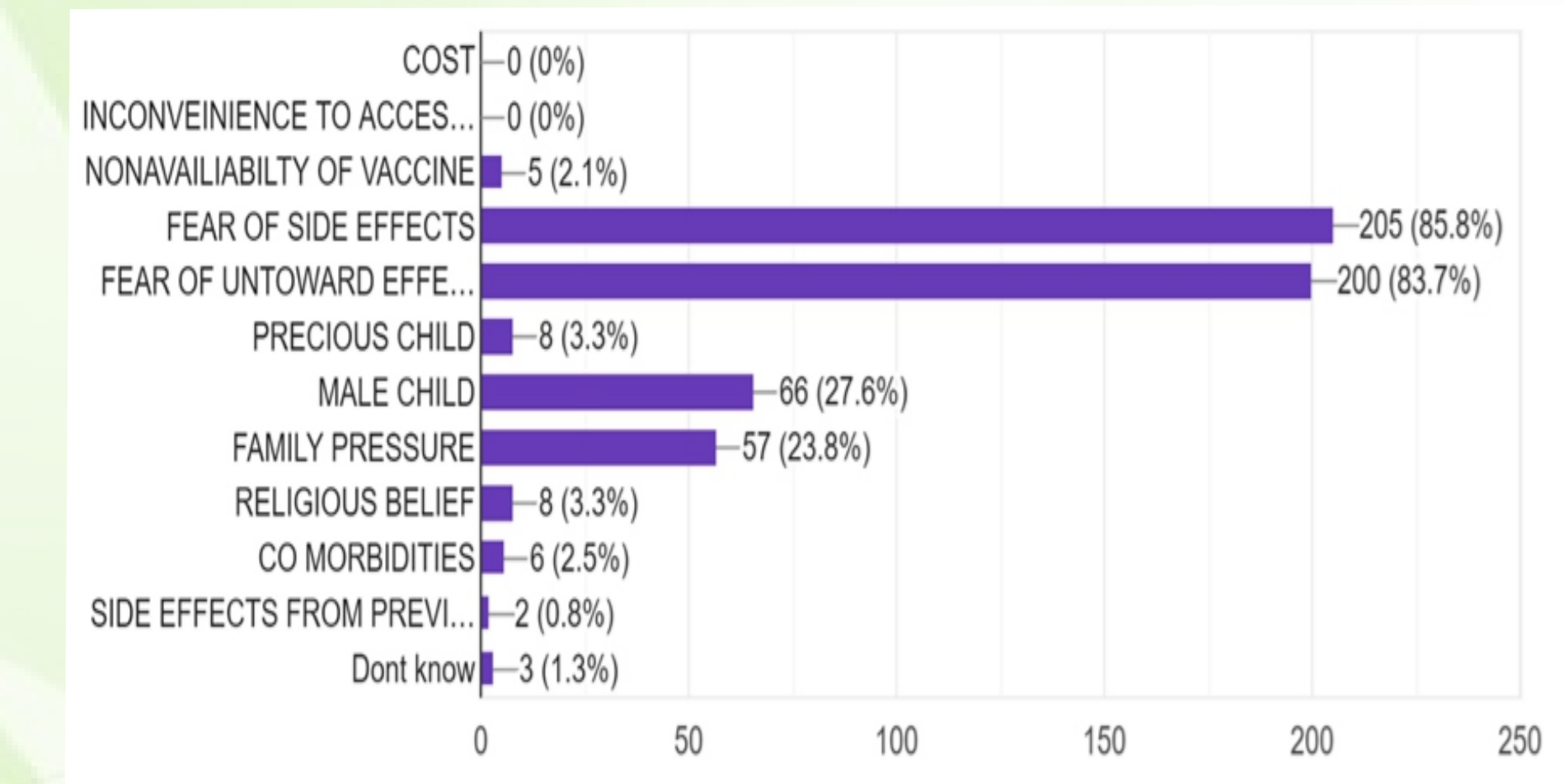
Demographic profile

- The patients were of the age group 18-25years n=208(56.98%),26-35year n=149(40.8%) and 36-45 year n=8(2.1%)
- Majority of women interviewed were of rural background n=226, urban women were n=139
- Place of residence had shown as a significant driver of vaccine nonacceptance, with rural women were less willing to vaccination
- Out of 226 rural women 144(63.7%) refused to be vaccinated, only 62(27.4%) women showed willingness for vaccination and 20 women were unsure and this was statistically significant when compared to urban women in which 61(43.88%) women were willing and 74(53.23%) were not willing to get vaccinated and 4 urban women were unsure.

- Religion and education did not seem to be a statistically significant drivers for vaccine hesitancy.
- Women living in a nuclear family are more hesitant about vaccination than those in a joint family (67.2% vs 49%, (p<0.006)) respectively.

Characteristics	Parameters	Willing to be vaccinated N (%)	Not willing to be vaccinated N (%)	Unsure N (%)	Chi-square statistics*	P-value*
Age groups (in years)	18-25	69	124	15	0.57039 Fischer test- OR:2.385051 7.4102	0.4501 0.2608
	26-35	50	91	8		
	36-45	4	3	1		
Residence type	Rural	62	144	20	1.0833	0.298
	Urban	61	74	4		
Tribal status	Non-Tribal	66	131	18	2.2292	0.1354
	Tribal	57	87	6		
Religion	Hindu	70	100	13	7.4102	0.006
	Non- Hindu	53	118	11		
Education	Literate	97	187	17		
	Illiterate	26	31	7		
Occupation	Agriculture	1	9	0		
	Business	2	1	0		
	Housewife	103	197	24		
	Labour	10	8	0		
	Service	7	3	0		
Family type	Joint	61	74	16	7.4102	0.006
	Nuclear	62	144	8		

- Fear of side effects and fear of untoward effects on newborns were the main reason for refusal



Summary

- Among 365 breastfeeding women, only 123 (33.70) agreed to receive the Covid-19 vaccine. 218 women were hesitant to take the vaccine while 24 breastfeeding women were unsure about the vaccination
- Of the various factors enquired from the breastfeeding women, number of family members, number of children, education status, and religion had no statistical significance with vaccine hesitancy
- Rural women were more hesitant than Urban women to take the Covid-19 vaccine.
- Women in both the groups, willing as well as hesitant were equally aware about Covid-19 vaccination

Conclusion

- With help of the present study, low acceptance rate of Covid-19 vaccination, among a sample of breastfeeding women in the maternity ward of tertiary care hospital of Jharkhand can be seen
- Concern about vaccine safety was the major reason for hesitancy.
- By identifying the divers of vaccine hesitancy, vaccination strategies can be planned and executed that will increase uptake during the current pandemic.
- To prevent fourth wave we need to focus on this group of people who were delayed allowed for vaccination and now the acceptance rate in these group is seems to be less

References

- Kadiwar S, Smith JJ, Ledot S, Johnson M, Bianchi P, Singh N, Montanaro C, Gatzoulis M, Shah N, Ukor EF. Were pregnant women more affected by COVID-19 in the second wave of the pandemic?. The Lancet. 2021 Apr 24;397(10284):1539-40.
- World Health Organisation, corona virus, overviewhttps://www.who.int/health-topics/coronavirus#tab=tab_1.3.MacDonald NE, SAGE Working Group on Vaccine Hesitancy. Vaccine hesitancy: Definition, scope and determinants. Vaccine 2015;33:4161doi:10.1016/j.vaccine.2015.04.036 pmid:25896383 Cross Ref Pub Med Google Scholar
- Larson HJ, Jarrett C, Eckersberger E, Smith DM, Paterson P. Under standing vaccine hesitancy around vaccines and vaccination from a global perspective: a systematic review of published literature, 2007-2012. Vaccine2014;32:21509. doi:10.1016/j.vaccine.2014.01.081 pmid: 24598724