COVID VACCINATION IN PREGNANCY & LACTATION-OUTCOME SAVE 2 LIVES IN 2 SHOTS

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ABSTRACT

This study aims to evaluate the antenatal and perinatal outcome after COVID19 vaccination in pregnancy and lactation.

Around 300 antenatal and lactating women were surveyed face to face with a questionnaire containing 25 questions for the evaluation of outcome of COVID vaccine in pregnant and lactating women.

Results of the above study has shown that there are no severe adverse outcome in antenatal and perinatal period after getting 2 shots of COVID19 vaccine.

➤ Data from basic and animal studies have not shown any teratogenicity or adverse fetal or neonatal outcome.

The very real benefits of vaccinating pregnant and lactating women seems to far outweigh any theoretical and remote risks of vaccination. COVID19 vaccines at present used in our country are safe at all stages of pregnancy and are highly immunogenic with no severe adverse outcomes.

INTRODUCTION

COVID19 was declared as a global emergency by the WHO on 20th JANUARY 2020.

➤Incidentally,the first case of COVID19 was diagnosed and declared in India on the same day.

Later on 11th MARCH,2020 WHO declared COVID19 as pandemic. In India,especially the second wave was very devastating and costed many lives.

➤In addition to non pharmacological measures like use of mask, hand washing, social distancing, COVID19 vaccines are critical for ending COVID19 pandemic.

➤ Pregnant and lactating women are at increased risk for severe illness and death from COVID19 infection compared to non pregnant women of same reproductive age group and are at increased risk for adverse pregnancy outcomes like miscarriages, preterm birth, etc.

➤ Pregnant women are eligible for COVID19 vaccination. The principle of vaccination is that humoral (antibody production) and/or cellular immunity is generated to counter future infection.

Experts are of the view that benefits of vaccination to pregnant and lactating women outweigh its potential risks.

▶ Pregnant women who develop COVID19 infection are more likely to require intensive care than their non pregnant counterparts.

➤In the context of current situation, of COVID 19 pandemic, experts have suggested that COVID19 vaccine should be offered to all the pregnant and lactating women if no contraindications exist.

➤This study aims to evaluate the antenatal and perinatal outcome after COVID19 vaccination in pregnancy and lactation.

METHODS

A study was done with 300 mothers for evaluation of outcome of COVID vaccination in pregnant and lactating women.

The study participants were pregnant and lactating women of 18 to 45 years age group.

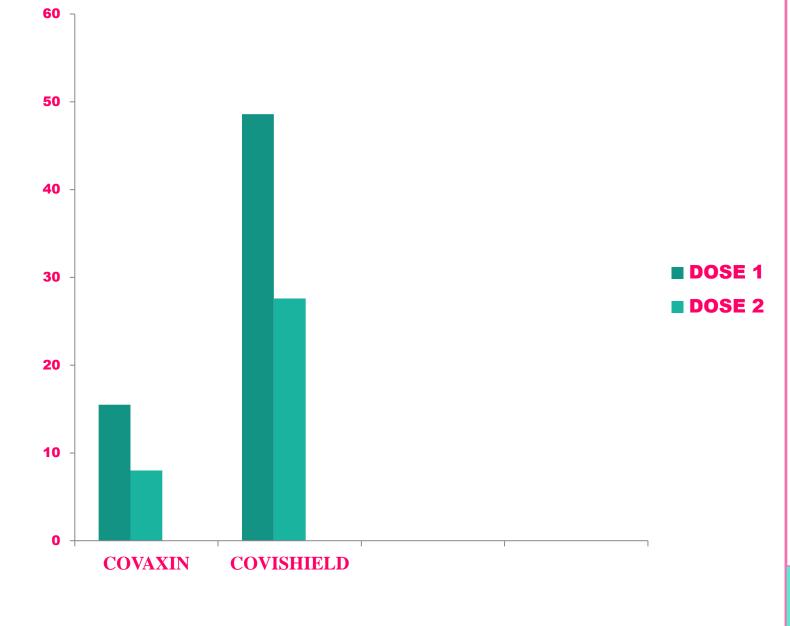
The data collection tool was a structured questionnaire containing socio demographic characteristics, obstetric and neonatal characteristics.

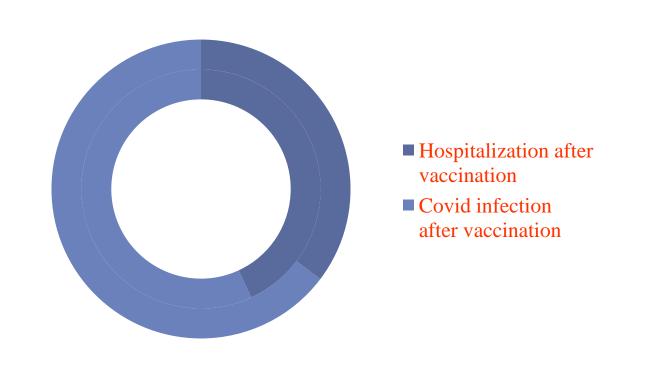
The data collection method was through a face-to-face interview. The respondents were communicated during antenatal visits.

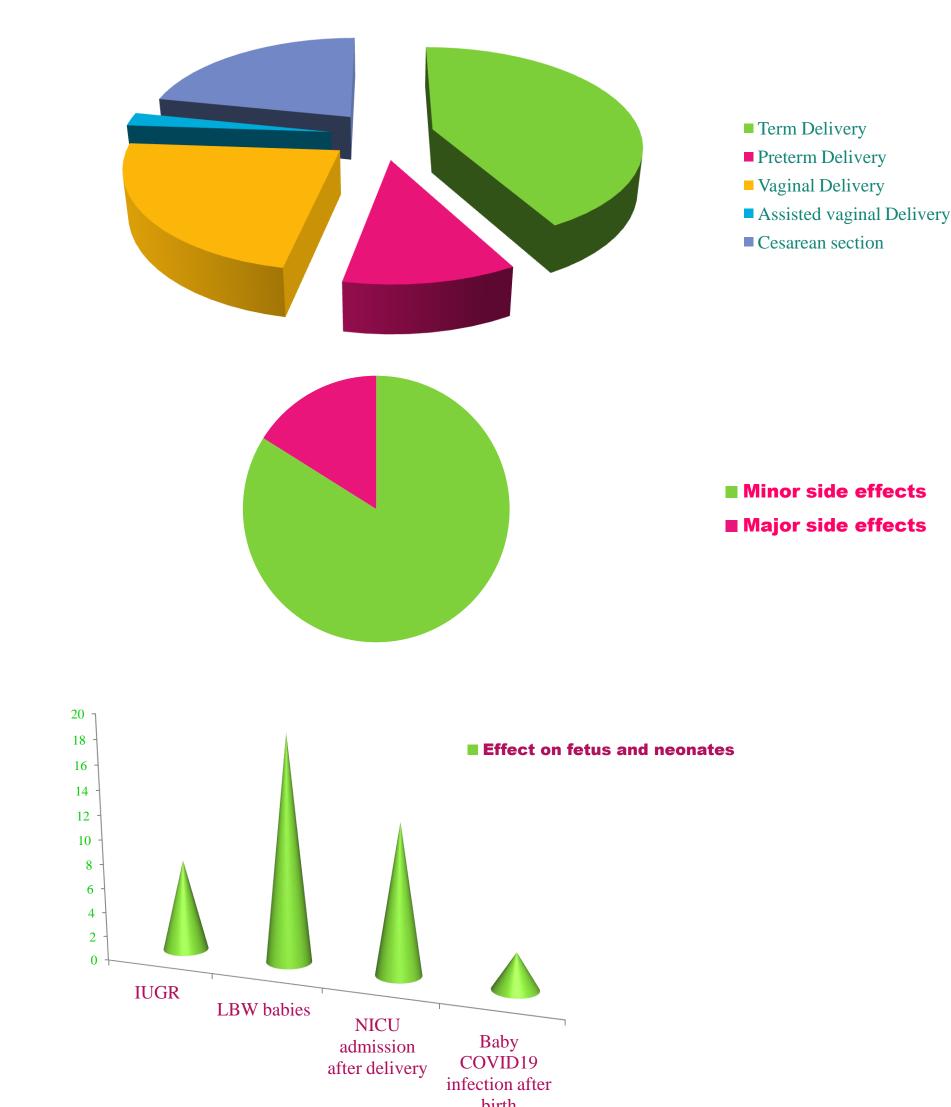
A total number of 300 mothers participated in the study with a response rate of 98%. The parity status were 173 (57.6%) mothers had one, 94 (31.3%) mothers had two and 33 (11%) mothers had three or more birth orders.

RESULTS

The results of the survey are enumerated as diagrammatic charts as follows:







DISCUSSION

The study at USA on vaccination in pregnancy and lactating women showed a robust immune response in pregnant and lactating women, additionally protective antibodies were also isolated in umbilical cord, blood and breast milk implying protection to the fetus and new born. Almost all vaccines have some unwanted side effects.

➤ They are usually minor, temporary and non lethal.

These effects are looked upon as evidence that an immune response is being generated to the vaccine which is the ultimate goal.

The main concern are regarding the adverse pregnancy outcomes such as miscarriages, LBW, Preterm deliveries, still birth and Congenital anomalies.

From the above study we have noted that women who have delivered after receiving COVID vaccine in pregnancy do not show any of the above mentioned adverse events.

COVID vaccine has a risk of Thromboembolic phenomenon. Though rare, this is of consideration in pregnancy and in puerperium, because these states are also thrombogenic.

Timing of vaccination in pregnancy and lactation did not affect the rate or profile of adverse effects. The results of the study showed that COVID vaccination in pregnancy and lactation are not associated with unfavourable obstetric and neonatal outcome.

In addition to that, CDC has published data recently indicating that there are no significant differences in adverse reactions to the vaccines in pregnant versus non pregnant women of reproductive age group. International bodies have a positive stand on COVID vaccination in pregnancy and lactation. It is believed that risk of getting COVID infection in pregnancy and its resulting morbidity is much more than the theoretical risks from vaccine.

➤ The RCOG taking the advisory from Joint committee on vaccination and immunization, has stated that pregnant women should be offered vaccine with the same criteria as the general population.

The ACOG states that, pregnancy testing should not be mandated before vaccine administration and neither should be deferred from women who are in pre conceptional period.

CONCLUSION

As there is no specific treatment for COVID19 infection, Herd immunity by vaccination becomes the most effective eradication method.

Data from basic science and animal studies have not shown any teratogenicity or adverse fetal or neonatal outcome.

The very real benefits of vaccinating pregnant and lactating women seems to far outweigh any theoretical and remote risks of vaccination.

The benefits of COVID19 vaccination are promising and it is recommended by health authorities for administration in pregnant and lactating women.

➤ In fact there is a passage of protective antibodies to the child which may be a beneficial effect. COVID19 vaccines being used in our country (COVAXIN/COVISHIELD) are safe at all stages of pregnancy and seems to be highly immunogenic with no severe adverse outcomes.

➤It is recommended that, obstetricians and gynaecologists should counsel and motivate pregnant and lactating women for COVID vaccine administration.

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