



Knowledge, Attitude and Practice of Precautions and Acceptance of Covid Vaccination in Pregnant Women

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ABSTRACT

Background : Covid-19 is a dreadful pandemic with substantial mortality and morbidity all over the world. Vaccination and Safety precautions are the most effective methods available to face this pandemic . A cross sectional study was conducted among pregnant women in Victoria Government hospital for women and child healthcare regarding Knowledge , Attitude and Practice of safety measures and acceptance of covid vaccination.

Aims & Objectives : This study aims to understand the knowledge , attitude and practise of safety measures and acceptance of Covid Vaccine in pregnant women.

Materials and methodology : A cross sectional study was done by distributing a questionnaire to pregnant women in Out-patient department and Wards and the results were analysed.

Results : All the participants showed high knowledge, positive attitudes and good practise behaviour. 300 pregnant woman answered the questionnaire. 192(64%) were partially vaccinated , 39(13%) were completely vaccinated , 62(20.7%) had not taken vaccination and 7(2.3%) opted 'will not take vaccine'. The reasons for hesitancy/refusal were grouped into Fear for the safety of unborn baby (68%) , Side effects in mother (28%), Difficulty in getting vaccine (0.7%) , Medical complications (3%), Don't believe in vaccine efficacy (0.3%)

Conclusion : Acceptance rate of covid vaccination in pregnant women from the study is high at 77% . Despite the high acceptance rate, it remains important to continue the efforts to address concerns and build trust regarding vaccine safety and effectiveness in hesitant individuals to further improve vaccination rate.

I. INTRODUCTION :

The Corona virus disease-19 (caused by SARS-CoV-2) has been a health issue of great concern worldwide since 2020. Globally, confirmed cases have crossed 230 million by October 2021 and caused more than 5 million mortality¹. Worldwide, this pandemic has not only affected the health system but has caused difficulties in Economic, Educational and social life of all. Though all are at equal risk for infection without safety measures and vaccination in play people with comorbidities, immunosuppressed, elderly are at increased risk for complications.

Studies^{4,5} shows Pregnant women are at an increased risk for severe illness than their non-pregnant counterparts in case they get infected². Vaccination and Safety precautions are the most effective methods available to face this pandemic.

Three vaccines were granted emergency use authorization by the Central Drugs Standard Control Organization (CDSCO) in India, they are Covaxin which is an inactivated whole virion vaccine and Covishield and Sputnik -V which are based on non-replicating viral vector platform². MoHFW* has approved vaccination of pregnant women against COVID-19 with the condition that the pregnant women may be informed about the risks of exposure to COVID-19 infection along with the risks and benefits associated with the COVID-19 vaccines available in the country².

A study was conducted in our hospital regarding knowledge, attitude and practice of safety measures and vaccination acceptance in pregnant women.

Aims & Objectives : This study is aimed to understand the knowledge, attitude and practice of safety precautions and acceptance of Covid vaccine in pregnant women.

II. MATERIALS AND METHODS :

Type of study – Cross sectional study

Place of study – Government Victoria Hospital For Women and Child Health Care, Andhra Pradesh.

Sample size – 300



A questionnaire in local language(Telugu) with questions in five sections as (A)sociodemographic data, (B)knowledge (C) Attitude (D) practise of safety measures (E) Vaccination; was distributed to pregnant women in Out-patient department and Wards and the results analysed. The questionnaire was validated by doing a Pilot survey. Questions were read out and explained to those who couldnot read or understand the questions. Results were analysed statistically.

III. RESULTS:

Age distribution is 19-37.Educational qualification of the participants ranges from Illiterate to post graduation. Media resources were the main source of information for all participants. Participants include all trimesters of pregnant womenand both primi and multigravidas.

Table -1 : Age wise distribution of participants

Age of participant	Number of participants	percentage
19 – 25	194	64%
26-30	83	27%
30-35	13	4%
35-40	10	3%

CATEGORY	RESULT
KNOWLEDGE	MEAN SCORE =7.91 SD=1.84,RANGE-3-10
ATTITUDE	MEAN SCORE =8.1 SD= 2.16, RANGE :6-10
PRACTISE	MEAN SCORE = 4.34 SD = 0.80, RANGE: 0-5

Table -2 : Safety measures to prevent Covid infection and spread.

Table -2 : Acceptance of Covid Vaccination

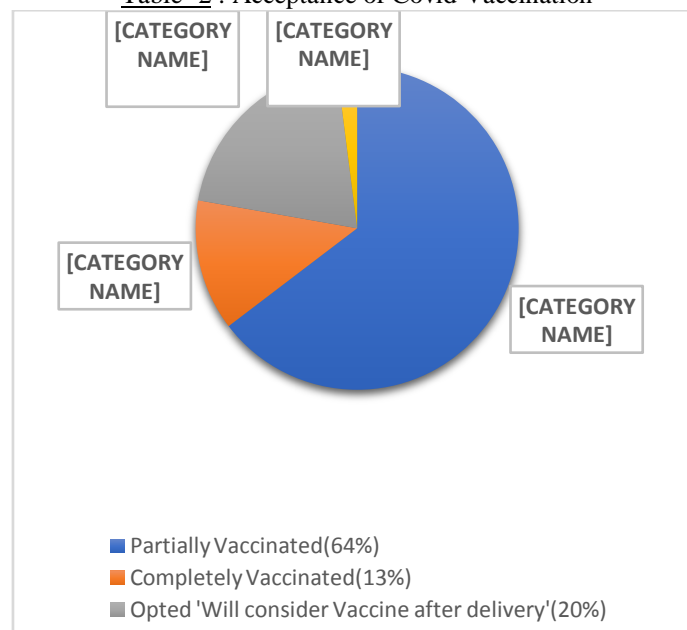




Table -3 : Gestational age wise Vaccine acceptance

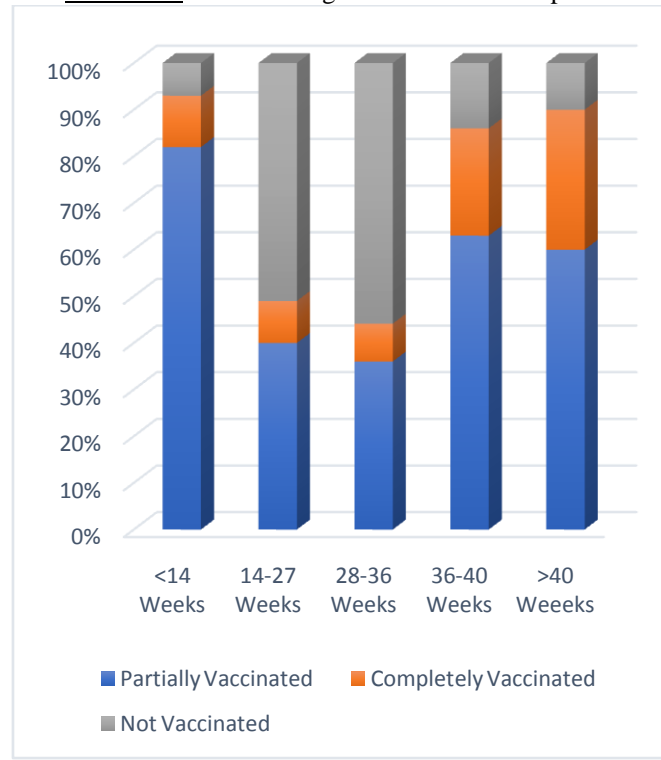


Figure 1 : Educational qualifications

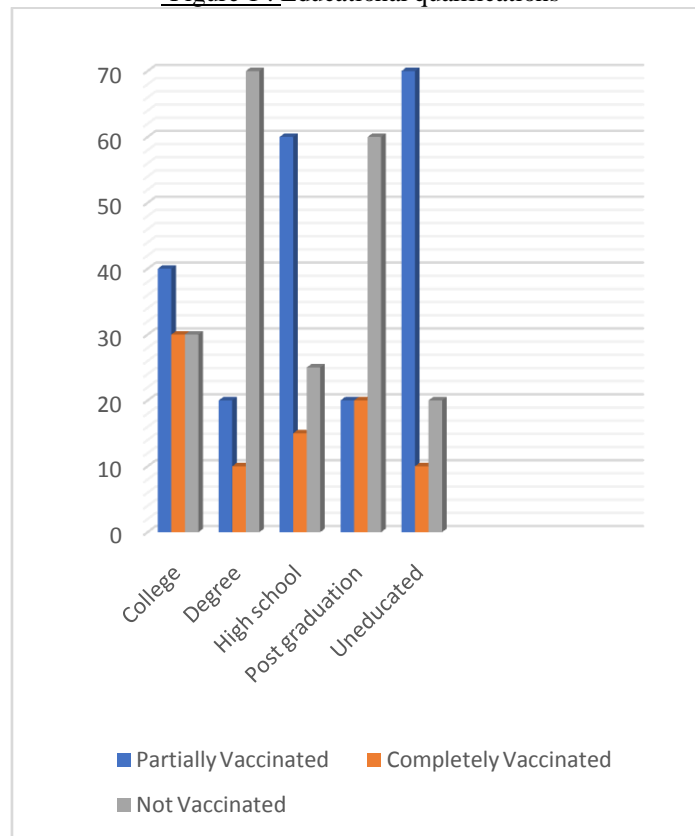




Table 4: Reason for vaccine hesitancy

REASON	PERCENTAGE OF PARTICIPANTS
Fear for the safety of the Unborn	68%
Sideeffects to the mother	28%
Other conditions like Fever, GDM, GHTN, Iron sucrose infusions, RH immunoglobulins, IUGR and others	3%
Difficulty in getting Vaccine	0.7%
Don't believe in vaccine efficacy	0.3%

IV. DISCUSSION :

Almost all the women demonstrated high knowledge, positive attitudes and good practise behaviour towards safety precautions for covid. Main source of information is Media with mean knowledge score 7.91 ± 1.8 . Attitude towards Wearing Face mask, Hand hygiene, Social distancing is positive in women of all gestational ages and educational status with mean attitude score of $8.1 \pm$ and mean practise score is 4.34 showing good practise behaviour.

Among 300 participants, 192(64%) were partially vaccinated, 39 (13%) completely vaccinated, 62(20.7%) had not taken vaccine because of different reasons but opted for 'will consider vaccination after delivery' and 7(2.3%) opted 'will not take vaccine'.

Almost all of the participants(98% of the vaccinated) got vaccinated with the help of health volunteers in government arranged vaccination centres.

Various reasons for vaccine hesitancy were given in table-4 ,the most common one is 'Fear for the unborn baby'. It is observed that the vaccination acceptance is higher with education level of secondary education and below than in women with higher educational status in contrast to the results seen in the study done by Wong, L.P., Alias, H., Danaee, M. et al ,the reason behind it was lack of evidence for long term vaccine safety . It is observed that hesitancy was more in women nearer to the term than in women remote to term gestation. Some of them who are nearer to the term

and due for second dose vaccine (42 cases -14%) did not get their second dose because of fear of complications during delivery and rescheduled their vaccination to later dates.

V. CONCLUSION :

Acceptance rate of covid vaccination in pregnant women from the study is high at 77% . Despite the high acceptance rate, it remains important to continue the efforts to address concerns and help the pregnant women to weigh risk versus benefit on individualized basis, so that a pregnant woman can take an informed decision about covid vaccination.

Further studies needed to study the long term effects of vaccine and effect of vaccination in the babies born to vaccinated mothers

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