# A Qualitative Study To Myths And Reality About Covid-19 Vaccination Among People In Western Rajasthan.

Hanuman Ram Bishnoi<sup>1a</sup>, Rishi Dutt Avasthi<sup>1b</sup>, Suresh kumar Sharma<sup>2</sup>
1. Tutor, College of Nursing AIIMS, Jodhpur
2. Professor cum principal, College of Nursing, AIIMS, Jodhpur

#### **ABSTRACT**

## **Background:**

Covid-19 vaccines is a recurring gift to root out of the covid -19 pandemic. Unfortunately, there was lot of mythsofvaccines authenticity and their development. The awareness and reality of vaccination have played a significant role in enhanced willingness of receiver towards vaccination. Objective: To explore myths and reality about corona vaccination among general public in western Rajasthan. Method: Explorative qualitative study was carried out through focus group discussion (FGD) from February to April 2021. Data was assembled by 04 sessions of FGD with 35 respondents. Data was collected through focused group interviews in four sessions. The data was analysed by thematic analysis with Colizzi's framework, ATLAS.ti 9 software. **Results:** The Mean age ± SDof respondents was 45.42±14.07. As per gender concern 17 were male and 18 were female respondent. The study major finding based on thematic analysis with 03 major theme and 10 sub themes contributing to awareness of covid -19 vaccine. As a vaccine concern, they had encountered regarding Covid-19 post vaccination safety concern and advantages. Regarding vaccine belief and hesitancy resulting in cultural perspective, fear and negative stories and misconception. Vaccine awareness could be attributed to three prominent factors: willingness to receive vaccination, change in perception and behaviour, confidence in government and medical efficiency. Conclusions: Covid-19 vaccine myths, and hesitancy needs to be understood in the context of misinformation, fear and safety concern and reality facts. Awareness of vaccine provide a counter these myths, hesitancy and misinformation.

**Keywords:** - Covid-19, Myths, Reality, Misconception, Hesitancy, Awareness, Vaccine, India.

#### INTRODUCTION

The current Covid -19 coronavirus pandemic disease is most concern international crises and the medical researchers worked synergistically to develop a safe and effective COVID-19 vaccine.<sup>1</sup>

Even covaxin and covidshield vaccine got approved on 3<sup>rd</sup> January 2021 in India. But the phenomenon of vaccines trails and approval is not fully understood. After emergency approval of these vaccines, Indian population got confused with some myths, and misconception about its potency, side effect and long-term effect on body.<sup>2</sup> Although, there were some hesitancies due to religious, cultural and behavioural factors among Indian population.<sup>3</sup>

In India rolled out within 2 months vaccination program, the capacity of vaccination has fluctuated, its rising from 22 lakhs on first day (January 16 2021) to 13 lakhs shots in February 16, whereas 19 lakhs shots in march 16. To achieve the target of vaccination of 2 doses, need 36.5 lakhs shots per day till July 2021. <sup>4</sup>

In different regions of India, unaccredited printed media, social media, anti-vaccination activists were campaigning and spreading misinformation against theneeds, effectiveness, existenceand compulsion of COVID-19 vaccine. There was a need to eradicated the myths, fear and misunderstanding, whereas clear the doubt of vaccination about its trail and emergency approval, so that population will accept vaccination.<sup>5</sup>

#### Method

An Explorative qualitative design was carried out through FDG to understand the myths and reality about covid vaccine. The study was ethically approved by Institutional Ethical Committee (AIIMS/IEC/ 2021/3441) of AIIMS, Jodhpur.Our Study was conducted in western Rajasthan Jodhpur. the sample was selected byFGD with 04 sessions (35participants)from different communities and different areas of Jodhpur. In this study, our key sampling focus being diversity of religious, gender, age and occupation. Eight to nine participants were gathered for each session of focus group interview. Snowball sampling was used to recruit further participants.

This focus group interview was taking place between and 12 April to 17 April 2021. The interviews ranged in duration from 30 to 45 minutes, all participants gave written, informed consent through Signed consent form. All interviews were conducted in Hindi and digitally audio recorded. Total 04 open ended questions were introduced, derived for identified as important to explore myths and reality of covid vaccine.

# **Rigor and trustworthiness:**

The audio recording data was transcribed in Hindi by first author and counter-transferring by second author to maintain authenticity of verbatims. Then transcribed Hindi data was translated in English by language expert and confirmability done with audio recording.

Then thematic analysis, theme and sub theme also validated by second author, to maintain trustworthiness.

#### Result

We undertook the analysis using the principles of thematic analysis. Four interview transcripts were prepared on their representativeness. Out of total 35 participants 04 participants got infected with corona virus. Furthermore 03 respondents had covid positive member in their family. The Mean age  $\pm$  SDof respondents was 45.42 $\pm$ 14.07. As per gender concern 17 were male and 18 were female respondent. Furthermore, most of respondents (30) were belong to Hindu religion and remain were Muslims (5).

## Thematic analysis

This done through Colaizzi's framework with ATLAS.ti 9 software for the data analysis.

**A. Themes:** Vaccine belief and hesitancy

## A-1. Sub-themes: Fear

"People are afraid that something else will happen if they get vaccinated. The place where I am living people over there says that, by getting vaccinated, some other problem will be there or they will die. Because of all these fears they are not getting vaccinated."

"People are afraid that if they take vaccine then the fever will come and headache will there."

"It is being intimidated on social media that after a few days of vaccine you will have fever, headache and muscle pain will be there."

#### **A-2. Sub-themes:** Negative stories and Misconception.

"The major misconception is going on is that many people are saying that it has many sideeffects and some are having some issue regarding this. Some intelligent people are saying that after four weeks of vaccination its immune response starts working and People are not having have knowledge about."

"Because of vaccination, the disease will spread more and people will die. Something will happen instead of something."

"People have a lot of misconceptions about vaccination. A lot of people say that people die from vaccination."

"People say vaccine is nothing. There is no coronavirus it just government's politics." "In the social media group it is coming that if someone is getting vaccinated, So the message is being spread that his/her health is getting worse."

## **A-3. Sub-themes:** Cultural perspectives.

"Muslims says that we are getting vaccinated to reduce our community, so we will not put this vaccine, our God is there and God, we will keep us."

## A-4. Sub-themes: Care apart vaccination

"Hand washing, take care of cleanliness, following social distancing and wear a mask are some the necessary steps in precautions."

"If you can't get vaccine, then you will have to take extra precautions like taking care of social distancing, frequent hand washing, putting on masks, doing everything carefully.

Rather than doing all this thing it is better that you get vaccinated."

"We should get tested, apply mask and follow social distancing."

"Take care while eating and drinking, and do not eat outside food, eat only homemade food, while drinking water, heat your water. Wash your hand before eating food and even after coming from outside."

#### **B.** Themes: Vaccination concerns.

#### **B-1. Sub-themes:** Advantages.

"The benefit is that, confusion in the mind related to vaccine will be erased secondly, if the whole world is taking, then it will be beneficial."

"The first benefit is that even if we get infected, our life will be saved, this is the first reason for vaccination."

"The advantage is immunity will increase."

"Yes, if there is any other deadly disease, then it will be helping also."

## **B-2. Sub-themes:** Post vaccination Safety Concerns.

"Yes, we have to be cautious."

"Yes, there will be protection and it does not mean that if we got vaccinated then we can go in dirty places."

"And if you have worn a fire kit, then it not means that you have to jump into the fire."

"There will be no corona it is not possible. Because so far, no such medicine have been made. This is the precaution we needed for ourselves. Get ourselves vaccinated is caution for "

us.

## **C. Themes:** Awareness about COVID – 19 vaccination

**C-1. Sub-themes:** Willingness to receive vaccination.

"There is nothing to be afraid of what the government is doing. I would say that it is necessary to take vaccine, whoever is above 45, it is mandatory to have it so as to keep the strength of the body."

"Advantage is there, that why we are taking the vaccine."

"Advantage is there that is why government has made this vaccine, so that all the common people are getting it done so far."

"I heard myths like, someone said that fever comes, some said that allergies happen. I do not believe in this and I decided that I have to take vaccine without listening of others."

## **C-2. Sub-themes:**Perception.

"It had come to our mind that, if the government has started vaccination, then it will be right only and there will be some benefit to the people from it. That is why all people are being told to be aware so that more and more people should get vaccinated."

"I believe that there are advantages. It will provide protection from corona and save us; vaccine is doing good work. Everyone should get vaccinated. I came here with this confidence only that I will not be affected by corona in future."

**C-3. Sub-themes:**Confidence in government, the medical environment and behaviour.

"While taking vaccine it will benefit only, for example our Prime Minister has also got vaccinated, so it is not wrong, there is benefit only."

"Today we are not having COVID and if we didn't have then why should we take vaccine this misconception going on in the minds of the people, It should not be there, the Prime Minister has taken, the Chief Minister has taken and all the frontline health workers also taken. That is why all these myths are wrong."

"Yes, what the government did It has proved the pride of our country and it is a good thing. There is only benefit from getting the vaccine, as the way the infection is spreading, it will cause safety."

"The government has taken a good decision about the vaccine. Everyone should take it so that there will be no corona patients in coming future."

## C-4. Sub-themes: Bidirectional concerns

"The benefit of vaccination is that we will not have corona anymore. This is wrong perception that we won't have corona, it is possible that we can have corona virus infection but chance of getting infection is decrease. Before vaccination there is 100% chance of getting corona but after vaccination 90% chance is reduced. For the remaining 10%, no one can say anything."

"If I have been vaccinated, so I will not get affected by corona, this is a big misunderstanding or myth, the chance of getting infection is reduced and our immunity power is increased. But you have to be careful, if you have vaccinated also, you can't come anywhere or touch anything with hands."

"Health worsens; vaccine should not be taken while some people say that vaccine should be taken. The vaccine is very effective and does not cause death of human being due to Corona virus. Currently, people are trapped in both of these misconceptions."

#### **DISCUSSION**

This study aimed to explore the myths and reality about corona vaccination among general public. We found that sample population encountered a range of myths, hesitancy and misconception about corona vaccination.

The study major finding based on thematic analysis with 03 major theme and 10 sub themes contributing to explore myths and reality regarding covid vaccination.

## **A. Themes:** Vaccine belief and hesitancy

Sub theme fear, that evident byFGD respondents ravelled their fear of death and negative side- effect such as fever, headache and muscle pain after vaccination. Which leads to unacceptance or avoidance of vaccination. Under negative stories and misconception subtheme, respondents felt that, there were several negative stories and misconception on social media regarding death and health was getting worsen due to vaccination.

In view of cultural perspective subtheme, FGD respondent under line that, Muslims community have mythsthat,covid vaccination reduces their community. Whereas, in care apart vaccination sub theme most of respondent told that, hand washing, social distancing, wearing mask were essential measures, if people apart from vaccination.

#### **B.** Themes: Vaccination concerns.

As per sub theme advantage, Respondent concern about vaccination would be only beneficial. if whole world immunized. Even vaccine is lifesaving, increase immunity and save from other deadly disease. Furthermore, under Post vaccination Safety Concerns, respondentfelt that, after getting vaccination also, people must take safety precaution from corona.

#### C. Themes: Awareness about COVID – 19 vaccination

According to willingness to receive vaccination subtheme, respondents felt that, vaccine is necessary to everyone to enhance body strength against corona. Although they heard about myths of corona vaccine. But they don't afraid from corona myths, even they are ready to get government developed vaccination.

Subtheme perception evident by views of respondent had positive perception towards government initiative and its benefits. But they felt that, awareness of vaccination enhances confidence and adaptability of covid vaccine.

The subtheme confidence in government, the medical environment and behaviour indicated that, if Indian PM, CM and health workers had vaccinated and given surety for covid vaccine. It brings down the misconception and this was the pride movement to country to developed made in India vaccine for people safety.

FGD Respondents talked under bidirectional subtheme concern of misconception, such as, people think that, after vaccination they can or cannot get corona infection. Even some respondent aware about corona infection after getting vaccination also, but chances are less for severe infectionand duration of disease.

Our findings reflect previous reports that wide range of misinformation encountered regarding covid vaccination, resulting in mistrust and confusion. Vaccine hesitancy could be associated to prominent factors of Safety concern, negative stories <sup>6</sup>. The top major reasons for vaccine hesitancy reported were risk/benefit of vaccines and media environment. The main issues were fear of side effects and distrust on vaccine<sup>7</sup>. Our study theme vaccine belief

and hesitancy also similar as evident by subtheme negative stories and misconception related side effect of vaccine, death after taking vaccine and no effect of vaccine against covid.

The concerns contributing to vaccine hesitancy were misinformation regarding the vaccine, lack of perceived safety, fear of having side-effects, fear of faulty/fake vaccine, government conspiracies<sup>8</sup>. Similarly in our thematic analysis we found subtheme fear under theme of vaccine belief and hesitancy. In focus group discussion people were afraid with side effect, fear of death, fever, headache and body pain. That's lead to unacceptance or avoidance of vaccination.

SAGE Working Group on developed "Three Cs" model, on vaccine Hesitancy's. it is influenced by *complacency, convenience and confidence*<sup>9</sup>. Our study findings support this model, with subtheme confidence in government, the medical environment. Confidence of general population enhanced due to PM, CM and health workers had vaccinated and made in India vaccine is a matter of pride.

The public willingness and acceptance of the vaccine mostly dependent upon the information and awareness regarding the COVID-19 vaccine<sup>10.</sup> Our study aligns with previous research that revelled willingness to receive of vaccination under theme of awareness about covid vaccine. Respondent verbatims indicated that awareness of vaccination increases the willingness and acceptance of vaccine.

#### **CONCLUSION:**

Corona vaccine misconception and myths leads to fear and safety concern among general population. Medical and health stakeholder should increase the covid vaccine awareness, that's leads to change in perception in populations mind related to vaccine and expand his willingness to receive vaccination. Furthermore, it generates the people confidence in government and change the prospective towards medical inventions.

#### **References:**

- 1. I. Ullah, K.S. Khan, M.J. Tahir, A. Ahmed, H. Harapan. Myths and conspiracy theories on vaccines and COVID-19: Potential effect on global vaccine refusals, Vacunas, 2021. March 11. VACUN-181:5
- 2. Sallam, M. COVID-19 Vaccine Hesitancy Worldwide: A Concise Systematic Review of Vaccine Acceptance Rates. Vaccines 2021, 9, 160. https://doi.org/10.3390/vaccines9020160
- 3. Debunking Myths related to covid-19 vaccine. India today news. 2021 Jan-29 [Cited: 2021, Feb. 04]. Available at: https://www.indiatoday.in/information/story/debunking-myths-related-to-covid-19-vaccines-1763959-2021-01-29
- 4. Covid-19 hesitancy: Govt. must take clue form global. The First Print 2021 April 14. Available at :https://www.firstpost.com/india/covid-19-vaccine-hesitancy-govt-must-take-cue-from-global-examples-roll-out-targeted-information-campaigns-9526381.html.
- 5. Fadda, M., Albanese, E. & Suggs, L. S. When a COVID-19 vaccine is ready, will we all be ready for it? Int. J. Public Health. 2020; 65:711–712.
- Bridget Lockyer, Shahid Islam, Aamnah Rahman, Josie Dickerson, Kate Pickett, Trevor Sheldon, et.al. Understanding Covid-19 misinformation and vaccine hesitancy in context: Findings from a qualitative study involving citizens in Bradford, UK. medRevix. BMJ YALE. 2021 May 17 Avaliable at: https://www.medrxiv.org/content/10.1101/2020.12.22.20248259v1
- 7. Heidi J. Larson, Caitlin Jarrett, William S. Schulz, Mohuya Chaudhuri, Yuqing Zhou, Eve Dube, et.al. Measuring vaccine hesitancy: The development of a survey tool, Vaccine. 2015; Volume 33 (34). 4165-4175. Available at: https://doi.org/10.1016/j.vaccine.2015.04.037.

#### **Journal of Cardiovascular Disease Research**

ISSN: 0975-3583, 0976-2833 VOL 12, ISSUE 01, 2021

- 8. Karlsson LC, Soveri A, Lewandowsky S, Karlsson L, Karlsson H, Nolvi S, et al. Fearing the disease or the vaccine: the case of COVID-19. Pers Indiv Differ 2020:110590.
- 9. MacDonald, N. E. . Vaccine hesitancy: Definition, scope and determinants. *Vaccine*, 2015:33(34), 4161–4164. https://doi.org/10.1016/j.vaccine.2015.04.036.
- 10. Loomba S, de Figueiredo A, Piatek SJ, de Graaf K, Larson HJ. Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA. Nat Hum Behav. 2021 Mar;5(3):337-348. doi: 10.1038/s41562-021-01056-1. Epub 2021 Feb 5. Erratum in: Nat Hum Behav. 2021 Mar 8;: PMID: 33547453.