

#### SHORT COMMUNICATION

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# A Perspective On COVID-19 Vaccine Hesitancy in India

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## **ABSTRACT**

India started vaccination drives in January of 2021. One of the biggest challenges faced by the government was the hesitancy to get vaccinated. Vaccine hesitancy causes the vaccination process to be delayed, affecting the process of building herd immunity and allowing the virus to evolve. Certain anthropological factors are responsible for vaccine hesitancy in a community. These factors are broadly categorised as personal beliefs, the role of media, and religion. An in-depth analysis of available literature, including the grey literature indicated that these factors influence an individual's decision-making. Vaccine hesitancy was largely affected by rumours surrounding it. Contradictory information regarding the vaccines created uncertainty about the consequences of getting vaccinated. A holistic approach is necessary to tackle vaccine hesitancy. The interventions from the government need to consider these social and cultural factors to address vaccine hesitancy in the future. Due to the diverse sample size, there is a need for various actors and stakeholders to come together and implement demographic-specific measures to address vaccine hesitancy in India.

**Keywords:** Belief, Conspiracy theories, Covid-19, Faith, Religion, Vaccine hesitancy.

#### INTRODUCTION

Vaccines are cost-effective health interventions used for the prevention of various life-threatening diseases. The process of inoculation with a vaccine to achieve immunity towards disease is called vaccination. Vaccination has been met with a lot of scepticism since the beginning of time and despite the scientific evidence of its efficacy, hesitancy to get vaccinated prevails among individuals and communities.

Vaccine hesitancy is described as the reluctance toward getting vaccinated, and it poses a serious challenge in achieving herd immunity and protection from disease. The virus has the property to mutate through "virus drift" and "virus shift" and evolve into newer variants, affecting its virulence, and altering the morbidity and mortality caused by the virus.<sup>2</sup> Nevertheless, historically, vaccines such as DPT, MMR, and polio, have also met with resistance and have been linked to precipitating neurological conditions, autism, HIV, AIDS, and sterility by conspiracy theorists.<sup>3</sup>

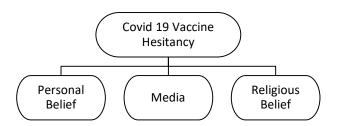


Figure 1: Author's creation

Similarly, COVID-19 vaccine hesitancy is one of the key challenges faced by public health in the current scenario. The pandemic has had a substantial impact on the world's economy, healthcare systems, trade, travel, and social aspects of life. It has been responsible for 410 million cases and has claimed five million lives and counting, costing the world almost 11.7 trillion USD.<sup>4</sup> The burden is substantial in Low-Middle Income Countries (LMICs.) Despite the perturbing situation and coronavirus vaccination being the only thing close to a cure, many people are still hesitant

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about getting themselves vaccinated. Several factors influence vaccine hesitation. Anthropologists have been studying behaviour and its subsequent consequences on health to understand the choices that an individual makes. Among them are certain sociocultural and political factors that impact the health of an individual or community as a whole. (Figure 1)

An analysis of various media reports helped us understand the major reasons individuals opt-out of getting vaccinated. The rapid development and urgent release of vaccines have led people to question their reliability and effectiveness.<sup>5</sup> The primary reason for vaccine hesitancy in LMICs is the concern for safety, severe side effects, and other complexities.<sup>6</sup> Some people are willing, but only after the majority gets vaccinated as they are unsure of its effectiveness. The chances of infection and reinfection or unrelated deaths after vaccination is also a deterrent in vaccine uptake.7 Individual's belief that coronavirus causes deaths only in the older population or them following COVID-19 appropriate behaviours, makes them immune to the disease was also a factor contributing to low vaccine uptake. Whereas some don't accept COVID-19 as an issue, therefore, immunisation is out of the question. Higher vaccine hesitancy was observed among women in rural areas. They are more prone to fall prey to rumours as they are less informed due to patriarchal values. The history of structural racism amongst the minority groups provokes vaccine hesitancy among them. These deeply discriminated groups either believe they are immune to coronavirus or on the other hand inoculation is a device to further oppress them. About 10% of the vaccine hesitancy was also attributed to fear of needles.8

Religion and faith of an individual or community also play a pivotal role. Studies indicate hesitancy towards vaccines is often observed among people who hold strong spiritual beliefs. Evans J.H says, "With religious communities, conflict about science is not over knowledge." Alternatives like holy water, ancient remedies, and prayers are preferred as a cure for the disease. Certain sects exhibit vaccine hesitancy as there is the question of morality in its constituents. The use of aborted foetuses in the research and development of vaccination is a common ethical concern for certain communities.9 Consumption of pork is prohibited in a few religious groups therefore, the use of pork gelatine-based derivatives in the packaging and delivery of vaccines provokes religious sentiments. Some communities believe COVID-19 is God's way of telling humans to change the world, and interventions such as vaccines are against the will of God.

Most of the fear or mistrust is attributed to misinformation. The media has had a considerable effect on an individual's perception of the vaccine. Since the pandemic, there has been an increase in COVID-19 related false information, termed 'an infodemic'. A study shows an exponential increase in fake news circulation in the year 2020. Conspiracy theories

such as the vaccines will introduce a nano-chip in the body controlled by 5G towers as a gambit against the minority population or the poor is being shared on the internet. These claims were often made by politicians and circulated in the media. There have also been claims like vaccines will cause infertility or problems during menstruation.<sup>10</sup> One would assume higher literacy would mean better awareness and lower hesitancy, but it is not always the case. The high literates- the young urban population, are more hesitant towards vaccines as the mixed information on the internet influences their decisions. The constantly changing guidelines for COVID-19 vaccination, such as mix and match of vaccines, and the gap between doses, have also sparked confusion giving the impression that the health authorities themselves are unsure.

Vaccination is a personal choice, but not getting vaccinated has serious consequences. The WHO has recognised vaccine hesitancy as a threat to global health and one of the main factors deterring vaccination coverage. Essential measures such as isolation and quarantine pose a serious challenge to one's physical and mental health. Vaccine hesitancy partially stems from a lack of trust in the government. This must be dealt with at all levels by maintaining transparency in risk communication and periodic propagation of information about ongoing research and development of vaccines. Furthermore, the government should also take strict measures against those spreading rumours and misinformation. A pamphlet or a handbook educating people about the vaccination can be made available in regional languages. This will enable the elderly and women to access information from legitimate and official sources, as they are most vulnerable to misinformation. A committee composed of Public Health officials and other significant stakeholders should come together to acknowledge the determinants of vaccine hesitancy such as the cultural, social, and religious beliefs to address them efficiently. The government should plan activities such as public education and communication to inform and motivate people at the community level. This can be carried out by planning community outreach programmes and propagating the message via different media platforms. Incentivebased programmes can also be planned to encourage all members of the family to get vaccinated. Participation of women is essential to promote other female members of the society, tackle misinformation, and increase compliance. The government can reach out to and collaborate with religious leaders and influential people to further motivate and educate communities as well as to raise awareness about vaccine hesitancy.

### **CONCLUSION**

COVID-19 pandemic has initiated a debate in the world and has made us realise that we are at risk of similar pandemics in the future. There is a need to

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diligently analyse all the factors and address hesitancy systematically from the grassroots level to eradicate the misconception and fear surrounding vaccines for the future. It can happen through persistent dialogue, mutual respect, and trust between the government and the community.

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