



EXPLORING FACTORS INFLUENCING THE ACCEPTANCE OF THIRD COVID-19 VACCINE DOSE: A QUALITATIVE STUDY IN MADHYA PRADESH, INDIA

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ABSTRACT

This qualitative exploratory study aims to investigate the factors influencing individuals' willingness to receive a third dose of Covid-19 vaccination in Madhya Pradesh, India. Through in-depth interviews with 27 participants, the study explores the themes related to safety, efficacy, community protection, and demographic differences. The findings highlight the complex interplay of factors shaping individuals' decisions and provide insights for public health strategies aimed at enhancing vaccine uptake.

KEYWORDS: *Third COVID-19 vaccine dose, Acceptance factors, Vaccine hesitancy, Healthcare communication, Cultural influences*

INTRODUCTION

The ongoing global effort to combat Covid-19 has brought attention to the necessity of a third dose of vaccination to address emerging variants. This study seeks to understand the underlying factors influencing individuals' decisions to either accept or decline the additional dose. Given the diverse concerns surrounding vaccine hesitancy, exploring the perspectives of individuals in Madhya Pradesh, India, can provide valuable insights for public health interventions.

RESEARCH QUESTIONS ADDRESSED

1. What are the primary reasons behind individuals, being willing or unwilling to receive a third COVID-19 vaccine dose?
2. How do factors such as previous vaccination experiences, access to information, and trust in healthcare authorities influence the acceptance of a third COVID-19 vaccine dose?
3. Are there demographic differences (age, gender, education, etc.) in the acceptance levels of a third COVID-19 vaccine dose?
4. To what extent do concerns about vaccine safety and efficacy affect the willingness to receive a third COVID-19 vaccine dose?
5. Are there any cultural or social factors that influence the acceptance of additional vaccine doses, and if so, how do they manifest?
6. What are the perceived benefits and risks associated with receiving a third COVID-19 vaccine dose, and how do these perceptions differ across various segments of the population?

METHOD

Participants

Purposive sampling was employed to select 27 participants from various age groups, genders, and backgrounds in Madhya Pradesh, India.

Data Collection

Semi-structured interviews through video conferencing were conducted to elicit participants' views on the third Covid-19 vaccine dose. Verbatim transcriptions were generated for analysis. Consent from participants were obtained through google forms.

Data Analysis

Thematic analysis was utilized, involving open coding and iterative refinement of categories. Themes and subthemes were identified to capture the multifaceted factors driving individuals' willingness.

RESULTS

Theme 1: Safety and Long-Term Effects

Subtheme 1.1: Vaccine Hesitancy due to Safety Concerns

Participant quotes revealed concerns about potential long-term effects and side effects associated with the third dose.

"I understand the importance of vaccination, but I'm concerned about the potential long-term effects and side effects that might come with it and I want to be sure that the benefits outweigh the risks before getting it."

Subtheme 1.2: Lack of Trust in Vaccine Development

Some participants expressed scepticism about the rapid development of the vaccine and its implications for safety.

"I find it difficult to fully trust the development of a third COVID vaccine dose due to the rapid rollout of the initial vaccines made me"



question the thoroughness of the testing process. It feels like they are constantly changing their recommendations, and that uncertainty reduces my confidence in their effectiveness and safety."

Subtheme 1.3: Mistrust in Pharmaceutical Companies

A subset of participants highlighted concerns about the motives of pharmaceutical companies and their influence on vaccine safety.

"Because of the rushed development and rollout of COVID-19 vaccines by pharmaceutical companies, I doubt about profit motives overshadowing public health. It's hard to shake the feeling that corners may have been cut, compromising safety and efficacy, when the stakes are so high.

Theme 2: Efficacy and Necessity

Subtheme 2.1: Efficacy in Face of Variants

Participants willing to take the third dose cited concerns about emerging variants and the need for enhanced immunity.

"In the big battle against COVID-19 and its variants, I strongly believe in the unwavering efficacy of vaccines. These vaccines are our most powerful tool in adapting to the changing landscape of the virus, offering not just protection against severe illness but also a glimmer of hope for a return to normalcy."

Subtheme 2.2: Doubts about Vaccine Effectiveness

Others questioned the necessity of a third dose, based on their perception of having sufficient protection.

"I've been hearing a lot about the COVID vaccine, and while I appreciate the efforts behind it, I can't help but am having doubts about its effectiveness. I mean, the virus keeps mutating, and we keep hearing about breakthrough cases, so it's hard not to wonder if the vaccine is really as fool proof as they claim."

Subtheme 2.3: Personal Experience of Vaccine Effectiveness

Participants who experienced milder side effects after previous doses were more inclined to consider the third dose for added protection.

"In my own perspective, getting vaccinated against COVID-19 was a game-changer. After receiving both doses, I felt a sense

of relief and confidence in my ability to protect myself, my family and those around me. It was a personal experience that not only gave me peace of mind but also allowed me to actively participate in ending this pandemic."

Theme 3: Community Protection

Subtheme 3.1: Contributing to Public Health

Several participants expressed a sense of responsibility toward community protection and were willing to take the third dose for this reason.

Subtheme 3.2: Altruism and Responsibility

A subset of participants mentioned altruistic motivations, aiming to protect vulnerable populations by receiving the third dose.

Subtheme 3.3: Scepticism about Community Impact

Some participants questioned the extent to which their individual decision would impact community immunity.

DEMOGRAPHIC VARIABLES

Theme 4: Age and Vaccination History

Subtheme 4.1: Older Age and Vaccine Experience

Certain older participants were hesitant due to concerns stemming from previous vaccination experiences.

Subtheme 4.2: Younger Adults and Risk Perception

Younger participants perceived themselves as more exposed to risk and were open to receiving the third dose.

Theme 5: Gender Differences

Subtheme 5.1: Gender-Based Concerns

Females often expressed greater caution, citing concerns about potential side effects.

Subtheme 5.2: Empowerment and Informed Decision-Making

Female participants emphasized the need for information to make informed decisions about the third dose.

Themes	Subthemes
Safety and Long-Term Effects	Vaccine Hesitancy due to Safety Concerns
	Lack of Trust in Vaccine Development
	Mistrust in Pharmaceutical Companies
Efficacy and Necessity	Efficacy in Face of Variants
	Doubts about Vaccine Effectiveness
	Personal Experience of Vaccine Effectiveness
Community Protection	Contributing to Public Health
	Altruism and Responsibility
	Scepticism about Community Impact
Demographic Variables	Age and Vaccination History
	Younger Adults and Risk Perception
Gender Differences	Gender-Based Concerns
	Empowerment and Informed Decision-Making

Table 1: Themes and Subthemes in Participants' Perspectives on Third Covid-19 Vaccine Dose



DISCUSSION

The findings of this study highlight the intricate interplay of factors influencing individuals' willingness to receive a third Covid-19 vaccine dose. The identified themes provide insights for tailored public health strategies that address safety concerns, efficacy perceptions, and community protection motivations. Additionally, the study underscores the significance of demographic variables, such as age, gender, educational status etc, in shaping these viewpoints.

Themes and Subthemes Importance

1. Safety and Long-Term Effects:

- **Vaccine Hesitancy due to Safety Concerns:** Safety concerns play a crucial role in shaping individuals' decisions regarding the third Covid-19 vaccine dose. Understanding these concerns is vital for public health campaigns to address and alleviate fears related to potential adverse effects and long-term consequences of the vaccine.
- **Lack of Trust in Vaccine Development:** A lack of trust in the rapid vaccine development process can lead to vaccine hesitancy. Acknowledging and addressing these concerns is crucial for establishing credibility and promoting vaccine acceptance among individuals who doubt the speed of development.
- **Mistrust in Pharmaceutical Companies:** Some individuals express scepticism about pharmaceutical companies' intentions, which can influence their decision-making process. Recognizing these concerns allows for targeted communication strategies that emphasize transparency and the rigorous testing process.

2. Efficacy and Necessity:

- **Efficacy in Face of Variants:** Understanding the perceived efficacy of the third dose, particularly in addressing emerging variants, is essential. This insight helps public health agencies tailor their messaging to highlight the potential benefits of the additional dose.
- **Doubts about Vaccine Effectiveness:** Addressing doubts about the necessity of a third dose is important for ensuring individuals understand the scientific rationale behind booster shots. Providing clear and evidence-based explanations can mitigate concerns and enhance vaccine acceptance.
- **Personal Experience of Vaccine Effectiveness:** Recognizing that personal experience influences perceptions of vaccine effectiveness allow for targeted communication with individuals who have had positive outcomes from previous doses. Highlighting the tangible benefits can sway those who are hesitant about the third dose.

3. Community Protection:

- **Contributing to Public Health:** The willingness of individuals to contribute to the overall health of the community reflects a sense of collective responsibility. This finding emphasizes the importance of fostering a

community-oriented perspective to encourage individuals to take the third dose for the greater good.

- **Altruism and Responsibility:** Altruistic motivations underscore individuals' desire to protect vulnerable populations, even if they may perceive themselves as low-risk. Leveraging these motivations through messaging can help individuals see their role in safeguarding their communities.
- **Scepticism about Community Impact:** Some individuals may underestimate the impact of their individual decisions on community protection. Addressing this scepticism is critical for conveying the message that collective action has a significant impact on overall immunity.

4. Demographic Variables:

- **Age and Vaccination History:** Understanding how different age groups approach the decision-making process provides insights into generational perspectives on vaccination. This knowledge aids in tailoring messaging and interventions that resonate with the concerns of specific age demographics.
- **Younger Adults and Risk Perception:** Younger adults' perception of increased risk due to their lifestyles or occupation informs public health strategies that emphasize their vulnerability and the potential benefits of receiving the third dose.

5. Gender Differences:

- **Gender-Based Concerns:** Acknowledging gender-based concerns about side effects and vaccine safety allows public health campaigns to provide targeted information that addresses these specific worries. This approach can empower individuals to make informed decisions based on their gender-related considerations.
- **Empowerment and Informed Decision-Making:** Recognizing the importance of information in decision-making, particularly among females, emphasizes the need for transparent communication and accessible resources that empower individuals to make choices aligned with their values and concerns.

By understanding and addressing these themes and subthemes, public health authorities can tailor their strategies to effectively communicate the benefits, safety, and importance of the third Covid-19 vaccine dose. This approach enhances informed decision-making and encourages higher vaccine uptake within the community

CONCLUSION

This qualitative exploratory study offers valuable insights into the multifaceted nature of individuals' willingness to receive a third Covid-19 vaccine dose. The themes and subthemes identified underscore the importance of addressing concerns related to safety, efficacy, and community protection in order to facilitate informed decision-making and enhance vaccine uptake. The study's implications can guide public health interventions aimed at promoting wider acceptance of the third dose.



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