

Debottlenecking Misinformation-induced barriers for COVID-19 vaccination: Findings from Bihar

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Background

- Safe/effective vaccines were central to the global efforts to combat COVID-19 pandemic.
- Based on our secondary data, it was found that even though majority population had received two doses of the COVID vaccine, there was still a considerable amount of vaccine hesitancy prevailing in the community.
- Factors like inadequate information, lack of trust in government, community belief, etc. majorly determines the acceptance and uptake of the vaccine.*
- Misinformation acquired from different sources led to mistrust in government healthcare services, affecting not only COVID vaccination but also routine immunization.

Vaccine Hesitancy...

"A context-specific and behavior-specific phenomenon"

Method

Cross-sectional study – A phone-based survey

Districts categorized into 4 quartiles based on the COVID-19 fully vaccinated population rates

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Random selection of 2 districts belonging to each quartile

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30 % blocks randomly selected from the selected districts

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30% of panchayats of the selected blocks were randomly selected and all the villages of these panchayats were chosen

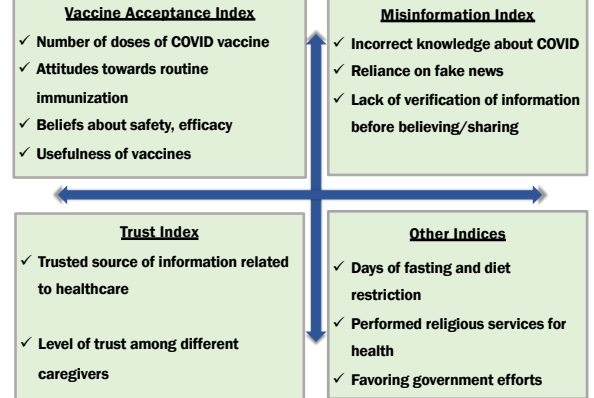
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A total of 1172 adults were interviewed

Specific Objectives

- To identify demand-side constraints to vaccine hesitancy in Bihar
- To determine the burden and role of misinformation on vaccine acceptance

Measuring Indices



Results

~40% Adults presented with:

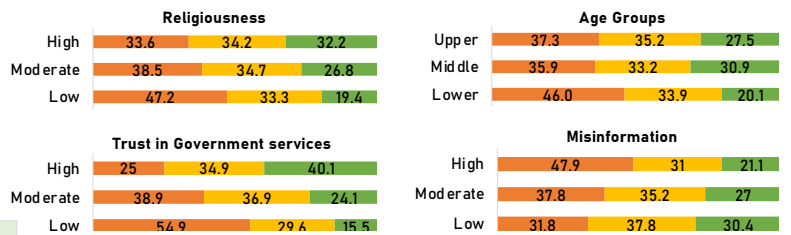
- Poor Vaccine Acceptability
- Lack of trust on public health services
- Misinformation

➤ Lower vaccine acceptability presented among:

- ✓ Lower age group
- ✓ Non-Hindus,
- ✓ Non-marginalized, males, and who received education till 10th

➤ The higher the misinformation regarding the vaccines, the lower is the vaccine acceptability among lower (aOR=0.5, p=0.0042) and higher (aOR=0.3, p<.0001) age groups, both sexes and caste, and Hindus (aOR=0.5, p<.0001)

Vaccine Acceptability*



*Responses from individual components were summed to get an aggregate score which was categorized into Poor (5-17), Average (18-19), and Good (20-21) based on tertile boundaries.

Trust in public health service system (AOR:3.7, p<0.0001)

Favouring governmental efforts (AOR:2.2, p<0.0001)

Increased religiosity (AOR:1.8, p<0.0001)

Less misinformation



Conclusion

From Smallpox to COVID, vaccine acceptance revolves around a few basic but crucial parameters namely; trust in the public health system, side-effects of vaccines, misinformation, etc. Misinformation regarding the side effects, efficacy, and safety of vaccines has led to skepticism and lack of trust among specific groups of people. This hesitancy has not only impacted the acceptance of Covid-19 vaccines but has also influenced people's perception towards routine immunizations. Misinformation was thus found to be a critical deterrent in vaccine acceptance, requiring immediate attention. Trust-building through early involvement of community was suggested as a solution along with media literacy promotion. System preparedness required evidence about the nature and magnitude of the influence of misinformation.

Acknowledgement

- We gratefully thank SABIN Vaccine Institute for the funding for the Social and Behavioral Grants 2021-22
- We thank the Government of Bihar for their support provided in this study
- We thank Mr. Omnath and Mr. Chanchal Kumar Singh and, for providing support for data collection and detailed feedback on the questionnaire
- We thank Dr. Deepak Kumar and Mr. Suryakant Kumar for providing technical assistance and support
- We thank all the faculty, staff at ADRI and CARE India team for their intellectual and logistic support at various stages of this research
- Authors are grateful for their study participants and field investigators for their time and effort

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