



# RESEARCH BRIEF

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## A review of barriers and facilitators towards COVID-19 vaccine acceptance

**Research article:** A social ecological approach to identify the barriers and facilitators to COVID-19 vaccination acceptance: A scoping review. *Published in PLOS ONE in October 2022. Click [here](#) to view the published article online.*

**Authors:** Ms Penny Lun, Dr Jonathan Gao, Mr Bernard Tang, Dr Chou Chuen Yu, Mr Khalid Abdul Jabbar, Dr James Alvin Low, Dr Pradeep Paul George

**Research brief written by:** Dr Jonathan Gao, Research Fellow, GERI.

### KEY FINDINGS

1. Individual factors bore the most influence on COVID-19 vaccine acceptance: personal characteristics and preferences, concerns with COVID-19 vaccines, history/experience of vaccination, knowledge/perception on COVID-19 and health-related information.
2. Other factors included: (a) influence from family/friends, (b) trust in government, (c) impact of media, (d) rate of community vaccination, and (e) politics.
3. Influence of factors goes both ways (e.g. high rate of vaccination can encourage or discourage acceptance).

### IMPLICATIONS AND SIGNIFICANCE OF FINDINGS

1. Barriers and facilitators were identified at different levels (i.e. intrapersonal, interpersonal, institutional, community, and public policy), allowing for targeted interventions at the different levels to improve vaccine acceptance.

While vaccine efficacy and safety were universal factors in influencing vaccine acceptance, other identified factors were more context-specific. For example, while having comorbidities could be a motivating factor for vaccination to avoid the negative consequences of COVID-19 infection, it could also discourage vaccination over concerns about the potential effect of vaccination on one's health.

2. Interpersonal influence (e.g. family and friends or knowing people who got vaccinated) could play a substantial role on influencing COVID-19 acceptance, highlighting the need to explore further in future research.
3. The general population's acceptance towards a vaccine is likely to fluctuate over time. Findings of this review provide a snapshot of factors influencing vaccine acceptance during a pandemic, shortly after vaccines were newly developed.

4. This information could guide relevant stakeholders in formulating an appropriate response plan for future pandemics, such as pre-emptively addressing the general public's concerns about newly developed vaccines before a vaccination campaign.

## **BACKGROUND**

While measures such as lockdowns and social distancing help to reduce the spread of COVID-19 infections, these are not long term solutions. Vaccinations help in protecting against the consequences of an infection and in restoring normalcy. However, initial research in 2020 indicated some hesitancy towards the newly developed COVID-19 vaccines. Such hesitancy has been observed in Singapore too, among older adults who are more vulnerable to the negative consequences of an infection.

The human factor is an important consideration in the acceptance towards COVID-19 vaccination. Aside from scepticism on the vaccine's efficacy and safety, previous studies indicated that individual factors such as: (a) race, (b) religion, (c) gender, (d) education, and (e) perception of COVID-19 were some of the factors influencing vaccine acceptance. Still, vaccine acceptance/hesitancy is a complex issue and there is a need to go beyond the individual level. The use of the socio-ecological model in this review guided the identification of factors associated with acceptance at different levels, such as how institutional factors or public policies could facilitate or prevent acceptance of COVID-19 vaccines.

Additionally, the review focused on studies that collected data after the release of major COVID-19 vaccine clinical trials results, which could have changed the general public's view on COVID-19 vaccine acceptance. Hence, there was a possibility that the review could discover findings that differed from previous research.

## **FOCUS OF PROJECT**

The objective was to examine the barriers and facilitators that affect acceptance of COVID-19 vaccines among adults in the general public. A search for studies examining the barriers and facilitators towards COVID-19 vaccination acceptance/hesitancy was done, and results from relevant studies were synthesised. Findings can potentially provide some insights into the general population's view on accepting a newly developed vaccine, identifying areas for further investigation and guiding relevant stakeholders for future pandemics.

## **DATA INCLUDED**

Literature search yielded 1,066 unique international citations on COVID-19 vaccination acceptance among adults with data collection period from September 2020 onwards. Of the 1,066 citations, 51 met criteria for inclusion in this review.

## **STUDY DESIGN**

This is a scoping review of literature on barriers and facilitators towards COVID-19 vaccination acceptance.

## **AUTHOR AFFILIATIONS**

### **Geriatric Education and Research Institute (GERI), Singapore**

Ms Penny Lun, Dr Jonathan Gao, Mr Bernard Tang, Dr Yu Chou Chuen, Mr Khalid Abdul Jabbar, Dr James Alvin Low (Principal Investigator), Dr Pradeep Paul George

### **Khoo Teck Phuat Hospital, Singapore**

Dr James Alvin Low (Principal Investigator)

### **Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore**

Dr James Alvin Low (Principal Investigator), Dr Pradeep Paul George

### **Health Services and Outcomes Research, National Healthcare Group, Singapore**

Dr Pradeep Paul George

### **Faculty of Health Sciences, University of Adelaide, Adelaide, Australia**

Dr Pradeep Paul George

