

SARS-COV-2 vaccine hesitancy: the “5c model of the causes of vaccination hesitation

Abstract

Background and aims: The According to the World Health Organization, vaccination hesitancy is a behavior that is influenced by a number of variables, including concerns with confidence (do not trust vaccine or provider), complacency (do not recognize a need for a vaccine, do not value the vaccine), and convenience (access). The intention of this review article is to identify factors that influence vaccine influence among the people globally.

Methods: The author assessed through 49 different published articles for the accomplishment of this case report. Google search engine was used for accessing published articles from databases like Google Scholar, Research Gate, PubMed, Scopus database, Cochrane Database and CLINMED international library.

Results: Vaccine reluctance can be viewed as a widespread occurrence with variations in the reasons given for vaccine rejection. The perceived dangers vs advantages, specific religious views, and lack of knowledge and awareness were the most common justifications for vaccination rejection. There are three main causes of vaccine hesitancy: I lack of trust in and fear of vaccines, especially due to the misconception that vaccines carry a risk of infection; (ii) lack of understanding of the need for a vaccine (for example, due to an underestimation of the severity of the disease); and (iii) difficulty in obtaining the vaccine for an individual or a community.

Conclusion: Low trust in vaccinations and low uptake are mostly caused by structural factors such as health disparities, socioeconomic disadvantages, systemic racism, and access hurdles.

Keywords: confidence, SARS-COV-2, vaccine hesitancy

Volume 12 Issue 1 - 2023

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Received: December 30, 2022 | **Published:** January 11, 2023

Introduction

Vaccine hesitation is described by the World Health Organization as «a delay in accepting or refusing safe immunizations notwithstanding the existence of vaccine services.¹⁻³ «Vaccine hesitation can be a complex cognitive and behavioral construct that varies depending on the vaccine, the location, and the circumstance.^{4,5} Conspiracy theories, anxiety, skepticism, mistrust of scientific knowledge, and a lack of information can all contribute to vaccine hesitation.^{6,7} Vaccine reluctance can be viewed as a widespread occurrence with variations in the reasons given for vaccine rejection. The most common justifications for vaccination rejection included perceived risks against benefits, particular religious convictions, and a lack of information and awareness.⁸⁻¹⁴ People who are vaccine-hesitant are a diverse population that have varying degrees of hesitation regarding particular immunizations.¹ The «5C model of the causes of vaccination hesitation,» a concept developed from studies conducted in high-income nations, lists five key individual person-level factors for vaccine reluctance, including:

Confidence: Lack of SARS-COV-2 vaccination confidence puts health at risk in both direct and indirect ways and might divert attention from attempts to stop the current epidemic. Social disadvantages like low education and limited access to accurate information, misinformation, disinformation, rumors, and conspiracy theories, especially on social media, a lack of effective public health messages or targeted campaigns, structural racism, healthcare and socioeconomic inequities, and research on some ethnic minority classes conducted in the past in an unethical manner are some of the causes and drivers of low confidence in SARS-COV-2 vaccines.

Complacency: Comes from the belief that vaccinations are unneeded because one believes they have a minimal chance of contracting SARS-COV-2 or suffering severe illness effects, or because this belief is a persistent barrier to vaccination. The patients think there is a high danger of getting SARS-COV-2 and that getting the vaccination might have a negative impact on their life and the lives of those close to them.¹⁷

Convenience (or constraints): Some people believe they can't afford to get immunized, and some people are suspicious because they can't physically access a vaccination facility. Many people have incorrect beliefs about the quality of immunization services.¹⁸

Calculation of risk: Is to deliberately compare the hazards of infection versus vaccination in order to make a choice. The vaccination has fully persistent side effects and unknowable long-term health repercussions, according to a variety of persons.¹⁹

Collective responsibility: A decreased desire to get the SARS-COV-2 vaccine is associated with a reduced feeling of communal responsibility.²⁰

Today, a number of psychological theories have been put forth in relation to vaccine hesitancy, including altruistic beliefs, neuroticism and conscientiousness as personality traits, conspiracy, religious, and paranoid beliefs, and distrust of reputable members of society like government officials, scientists, and medical professionals.²¹⁻²⁷ SARS-COV-2 vaccine hesitation is frequently associated with characteristics that also have an effect on vaccination hesitancy for other vaccines. These variables include political variables, attitudes and beliefs connected to vaccinations, and vaccination-associated characteristics.^{28,29}

Individual attitudes

Greater reluctance has also been linked to outright skepticism in vaccination, false beliefs about the seriousness of SARS-COV-2 infection, and a preference for spontaneous immunity. Younger people, those with less education, those without jobs, those who are jobless, and several ethnic and racial minority groups, including Hispanics and African Americans, who have been disproportionately impacted by SARS-COV-2, all showed greater vaccination hesitation.^{28,30-35}

Political factors

Attempts to swiftly proceed with aggressive federal financing and deploy vaccinations with US Food and Drug Administration emergency use authorisation may exacerbate worries about vaccine safety and efficacy. Data from public surveys in the United States also show the impact of political issues on reluctance, where lack of faith in vaccine advocates, the nation of vaccine origin, and worries about commercial or political objectives increase public mistrust.^{28,36}

Vaccine attributes

According to survey results, there is general skepticism regarding the efficiency of the SARS-COV-2 vaccination, doubt regarding the duration of protection, and concern regarding safety or negative consequences. Important data on the characteristics of vaccines, such as immunity duration and immunogenicity, are steadily accumulating and will differ by vaccine manufacturer and/or between populations. The public's confidence is at risk due to the developing understanding of SARS-COV-2 immunology and virology as well as the historically rapid development of vaccines.^{28,37-41}

A complicated decision-making process promotes vaccine reluctance. These elements include communication and media, historical effects, religion/culture/gender/socioeconomic, political, geographic obstacles, prior vaccination experience, risk perception, and vaccination program design.⁴²⁻⁵⁰

Conclusion

The term «vaccine hesitancy» refers to the hesitation or refusal to get a vaccination against a disease, even though the vaccine has been found to be safe and effective. Complacency stems from thinking immunizations are unneeded because one believes they have a minimal chance of contracting SARS-COV-2 or suffering serious adverse effects, or because it is a persistent barrier to vaccination. The patients think there is a high danger of getting SARS-COV-2 and that getting the vaccination might have a negative impact on their life and the lives of those close to them.

A variety of variables influence and complicate vaccine reluctance. Lack of knowledge about the vaccination, lack of faith in the vaccine itself, false information from social media, conspiracy theories, and worry about side effects are some of the variables associated with SARS-COV-2 vaccine reluctance.

Acknowledgments

None.

Conflicts of Interest

None.

Funding

None.

Competing interests

The author has no financial or proprietary interest in any of material discussed in this article.

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