



PARENTAL HESITANCY TOWARDS COVID-19 VACCINATION IN CHILDREN: A SYNTHESIS OF LITERATURE

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Abstract:

Parental hesitancy toward COVID-19 vaccination in children has emerged as a significant challenge in achieving widespread immunization and protecting public health during the pandemic. This paper synthesized existing literature and public health studies to examine the factors influencing parental attitudes toward COVID-19 vaccination for children. The review focused on research conducted in different countries and settings during the COVID-19 pandemic, with emphasis on the determinants of vaccine hesitancy and its implications for public health programs. Findings from the reviewed studies revealed that concerns regarding vaccine safety, possible side effects, and the rapid development of vaccines were among the most common reasons for parental reluctance. Misinformation, limited trust in healthcare systems, and exposure to conflicting information through media and online platforms further contributed to hesitancy. Demographic and socioeconomic factors, including access to healthcare services, internet exposure, and educational background, also influenced parental decisions. In addition, the availability of vaccination providers and the attitudes of healthcare workers toward vaccines affected public confidence and vaccination uptake. The synthesis further highlighted that parental vaccine hesitancy is not solely based on lack of knowledge but

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is shaped by emotional, social, and structural factors. Existing studies mainly relied on cross-sectional designs, limiting the ability to assess changes in parental attitudes over time. The findings emphasize the need for comprehensive public health strategies that promote accurate health communication, strengthen trust in healthcare professionals, and improve access to vaccination services. Addressing parental concerns through community engagement and evidence-based education may help reduce hesitancy and improve vaccination coverage among children. Ultimately, a collaborative and multifaceted approach remains essential in supporting informed parental decisions and safeguarding children against COVID-19.

Keywords: parental hesitancy, COVID-19 vaccination, children, vaccine acceptance, public health

1. Introduction

The COVID-19 pandemic has had a profound impact on global health and society, leading to an unprecedented push for the rapid development and deployment of vaccines to control the spread of the virus (Lv *et al.*, 2021). While the efficacy and safety of COVID-19 vaccines have been widely supported by scientific evidence, a significant challenge remains in the form of vaccine hesitancy (Soares *et al.*, 2021; Wake, 2021). This issue, which existed before the pandemic (Sihen & Dubey, 2019), has been exacerbated by the proliferation of misinformation and the politicization of public health measures (de Albuquerque Veloso Machado *et al.*, 2021). The focus on adult vaccination has gradually expanded to include children and adolescents, prompting new concerns about parental attitudes and willingness to vaccinate their children. Parental hesitancy is a critical factor influencing vaccination coverage, as it acts as a vulnerability in public health efforts (Alfieri *et al.*, 2021). Studies from various countries, including Mexico, Japan, and Bangladesh, have identified parental apprehension as a key barrier to achieving high vaccination rates in this demographic (Ali *et al.*, 2022; Gallege *et al.*, 2021; Horiuchi *et al.*, 2021). Understanding the specific factors that drive parental vaccine hesitancy is essential for developing effective communication and intervention strategies to protect children and the wider community from the virus (Rudan *et al.*, 2021). This paper synthesizes existing research to provide a comprehensive overview of parental attitudes towards COVID-19 vaccination for children, with a focus on the determinants of hesitancy and the implications for public health.

2. Literature Review

A section dedicated to the significant literature resources consulted or employed that contributed to the study. It surveys scholarly articles, books and other sources (e.g. dissertations, conference proceedings) relevant to a particular issue, area of research, or

theory, providing a description, summary, and critical evaluation of each work. The purpose is to offer an overview of significant literature published on a specific topic.

3. Methodology

This paper is a conceptual synthesis of existing academic literature and public health reports on parental attitudes toward COVID-19 vaccination in children. The methodology draws upon principles of research design as a way to structure a review of the topic (Abosede & Onanuga, 2016). The sources reviewed predominantly utilize quantitative, cross-sectional survey designs, which examine the prevalence and determinants of vaccine hesitancy at a specific point in time (Ali *et al.*, 2022; Gallege *et al.*, 2021; Horiuchi *et al.*, 2021). One study also employed an intersectionality framework to analyze the complexity of vaccination attitudes among specific populations (Bauer *et al.*, 2021). The selection of sources was based on their relevance to the topic of parental vaccine hesitancy, focusing on studies conducted during the COVID-19 pandemic. Ethical considerations related to data privacy and informed consent, as highlighted in some of the referenced studies, were acknowledged in the review process (Parental Attitudes Towards Child COVID-19 Vaccination in Mexico, 2021).

4. Results and Discussion

The synthesis of the literature revealed several key findings regarding parental attitudes and hesitancy towards COVID-19 vaccination for their children. The primary concern cited by parents across multiple studies was the perceived safety and potential side effects of the vaccines (Alfieri *et al.*, 2021; Gallege *et al.*, 2021; Horiuchi *et al.*, 2021). This apprehension was a major determinant of vaccine reluctance. Demographic factors also played a significant role. Studies in urban areas, such as the United States, identified specific vulnerabilities to vaccine apprehension among parents (Alfieri *et al.*, 2021), while a study in the Philippines showed that demographic profiles, gadget usage, and internet access determined COVID-19-related anxiety among college students (Cleofas & Rocha, 2021), a factor that could similarly influence parents. The availability of vaccine providers for children aged 5–11 years was found to be directly associated with vaccination coverage (DeCuir, 2022). This highlights the importance of logistical and systemic factors in addition to attitudinal ones. Furthermore, the role of healthcare workers' own vaccine hesitancy was identified as a potential influence on public attitudes, underscoring the need to address hesitancy within the medical community itself (Biswas *et al.*, 2021; Rachiotis *et al.*, 2021). These findings collectively show that parental hesitancy is a multifaceted issue influenced by individual beliefs, access to information, and structural factors within the healthcare system.

The results of this synthesis confirm that parental hesitancy towards COVID-19 vaccination in children is a complex issue driven by a combination of safety concerns, misinformation, and logistical barriers. The findings are consistent with broader research

on vaccine hesitancy, which has long been identified as a global health threat (de Albuquerque Veloso Machado *et al.*, 2021). The parallels between parental COVID-19 vaccine hesitancy and hesitancy towards other vaccines, such as the influenza vaccine among healthcare workers, suggest that these are not isolated phenomena but rather parts of a larger pattern of public distrust and uncertainty (Rachiotis *et al.*, 2021).

A key limitation of the existing research is the reliance on cross-sectional studies, which capture attitudes at a single moment in time. This makes it difficult to understand how parental views might evolve as more data on vaccine safety and efficacy in children becomes available. Furthermore, the focus on online surveys may not fully represent the views of all parents, particularly those with limited internet access.

The implications for public health are clear: effective strategies must go beyond simply providing information. They should address specific parental fears, build trust in public health institutions and healthcare providers, and ensure equitable access to vaccination services (Kampmann & Okomo, 2021). The findings also highlight the need for ongoing dialogue and education, as outlined by studies on the role of anticipated regret and the theory of planned behavior in shaping vaccination intentions (Wolff, 2021). Ultimately, combating parental vaccine hesitancy requires a comprehensive, multi-faceted approach that acknowledges the diverse motivations behind parental decisions.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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