



FACTORS AFFECTING COVID-19 VACCINATION AMONG CHILDREN: PARENTS' PERSPECTIVE ON CHILDREN'S HEALTH

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Abstract:

The COVID-19 pandemic greatly affected public health systems, economies, and communities across the world. Vaccination became one of the primary strategies used to reduce the spread of the virus and prevent severe complications. Despite the availability of COVID-19 vaccines for children, many parents remained hesitant because of concerns regarding vaccine safety, effectiveness, and possible side effects. This study aimed to determine the factors affecting COVID-19 vaccination among children from the perspective of parents. Specifically, the study examined the respondents' demographic profile, the factors influencing parents' decisions regarding vaccination, the perceived implications of vaccination, and the relationship between these variables. The study utilized a quantitative descriptive-correlational research design. Thirty parents with children aged 5–11 years old from Asingan, Pangasinan, Philippines participated in the study through purposive sampling. A self-made questionnaire validated by experts and tested for reliability using Cronbach's Alpha served as the primary data-gathering instrument. Statistical tools such as percentage, weighted mean, standard deviation, and Pearson Product-Moment Correlation were used to analyze the collected data. Findings revealed that parents generally agreed that COVID-19 vaccination is important in protecting children from severe illness, reducing virus transmission, and strengthening the immune system. Parents also believed that vaccination helps protect children's health and contributes to saving lives. However, the study found no significant relationship between the factors affecting vaccination decisions and the perceived implications of

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vaccination. The study concludes that while parents recognize the importance of vaccination, their decisions may still be influenced by external factors such as misinformation, personal beliefs, and access to reliable health information. The study recommends strengthening public health education programs and promoting accurate vaccine information to improve parental awareness and acceptance of COVID-19 vaccination for children.

Keywords: COVID-19 vaccination, parents' perspective, children's health, vaccine hesitancy, public health

1. Introduction

The COVID-19 pandemic significantly affected health systems, economies, and daily life around the world. Governments and health organizations implemented preventive measures such as quarantine protocols, social distancing, mask-wearing, and vaccination programs to reduce the spread of the virus and protect public health. Among these interventions, vaccination became one of the most effective methods in controlling COVID-19 and preventing severe complications.

Scientists and researchers rapidly developed COVID-19 vaccines through global scientific collaboration and modern medical technology. Vaccination programs were introduced not only for adults and high-risk groups but also for children aged five years old and above. Despite the availability of vaccines, many parents expressed concerns regarding vaccine safety, effectiveness, and possible side effects, which contributed to vaccine hesitancy (Gallegos *et al.*, 2021).

According to the World Health Organization (2023), immunization is one of the most successful and cost-effective public health interventions because it prevents millions of deaths every year. COVID-19 vaccination programs have significantly reduced severe illness, hospitalization, and mortality rates worldwide. Vaccination also contributes to community protection by reducing virus transmission and supporting healthcare systems.

However, misinformation and misleading claims regarding vaccines continue to influence public opinion. Some parents believe that children are less vulnerable to severe COVID-19 infection and therefore do not require vaccination. These concerns highlight the importance of understanding parents' perspectives regarding childhood vaccination (Alfieri *et al.*, 2020).

This study aimed to determine the factors affecting COVID-19 vaccination among children from the perspective of parents. The findings may provide useful information for healthcare professionals, educators, and policymakers in developing effective health education strategies and vaccination programs.

2. Literature Review

Vaccination remains one of the most effective strategies for preventing infectious diseases and protecting public health. According to the World Health Organization (2023), immunization prevents approximately two to three million deaths annually worldwide by reducing the spread of serious illnesses.

Several studies have explored factors influencing parents' willingness to vaccinate their children against COVID-19. Goldman *et al.* (2021) found that parents' acceptance of COVID-19 vaccines is strongly influenced by their perceptions of vaccine safety, effectiveness, and possible side effects. Parents who trust healthcare professionals and scientific information are more likely to vaccinate their children.

Similarly, Szilagyi *et al.* (2021) reported that parental confidence in vaccines significantly influences vaccination decisions. Their findings showed that parents who believed vaccines were safe and effective demonstrated greater willingness to vaccinate their children.

Another important factor affecting vaccination decisions is misinformation spread through social media platforms. Loomba *et al.* (2021) explained that exposure to false information regarding vaccines can reduce public confidence and increase vaccine hesitancy among parents.

Socioeconomic status also affects vaccination acceptance. Troiano and Nardi (2021) stated that parents with higher educational attainment and income levels are more likely to seek reliable health information and accept vaccination.

Furthermore, Zhou *et al.* (2022) emphasized that vaccinating children helps reduce virus transmission within households and communities, particularly when combined with preventive measures such as mask-wearing and proper hygiene practices.

Overall, previous studies indicate that parental knowledge, trust in healthcare systems, and access to reliable information play essential roles in childhood vaccination decisions.

3. Material and Methods

This study utilized a quantitative descriptive-correlational research design. Quantitative research involves collecting numerical data and analyzing it through statistical methods to identify patterns, relationships, and trends among variables (Creswell & Creswell, 2018).

The study was conducted in Asingan, Pangasinan, Philippines. The respondents consisted of 30 parents with children aged 5–11 years old who had not yet received COVID-19 vaccination at the time of the study. Purposive sampling was used because the participants possessed characteristics relevant to the research objectives (Etikan *et al.*, 2016).

A self-made questionnaire served as the primary data-gathering instrument. The questionnaire consisted of three parts: respondents' profile, factors affecting COVID-19 vaccination, and perceived implications of vaccination.

To ensure content validity, the questionnaire was evaluated by expert validators. Reliability testing using Cronbach's Alpha produced a coefficient of 0.849, which indicated high internal consistency (Polit & Beck, 2018).

The researchers personally distributed the questionnaires through a house-to-house approach. Respondents were informed about the purpose of the study and were asked to sign informed consent forms before participation.

Statistical tools such as percentage, weighted mean, standard deviation, and Pearson Product-Moment Correlation were used in analyzing the collected data.

4. Results and Discussion

The findings revealed that the majority of respondents were female parents and college-level graduates. Most respondents belonged to the age groups 26–30 years old and 31–35 years old.

Parents generally agreed that COVID-19 vaccination protects children from severe illness and hospitalization. The highest-rated indicator under child safety was the belief that vaccination protects children from severe complications caused by COVID-19, with a weighted mean of 4.21 interpreted as Strongly Agree. This finding supports the study of Rudan *et al.* (2021), which stated that vaccination significantly reduces severe outcomes and hospitalization.

In terms of reducing virus transmission, parents strongly agreed that vaccination strengthens children's immune systems. The indicator "It protects the immune system that fights coronavirus in children" obtained the highest weighted mean of 4.23. This finding is consistent with Polack *et al.* (2020), who explained that COVID-19 vaccines stimulate the immune system to produce protective antibodies.

Regarding the prevention of severe illness, parents agreed that vaccination provides additional protection for children's immune systems. Kampmann and Okomo (2021) emphasized that vaccines play an important role in preventing severe COVID-19 complications among children and adolescents.

Parents also perceived several important implications of vaccination. In terms of child protection, the highest-ranked indicator was the belief that vaccination provides antibody protection against COVID-19. This finding supports the World Health Organization (2023), which stated that vaccines stimulate the immune system to develop protective antibodies.

To save lives, parents strongly agreed that vaccination helps fight coronavirus and reduces severe health complications among children. Kozlov (2021) explained that COVID-19 vaccination significantly reduces mortality rates and severe illness worldwide.

In terms of boosting the immune system, parents believed that vaccination improves the body's immune response against infectious diseases. According to Alagawany *et al.* (2021), vaccines strengthen immune system functions by helping immune cells recognize and fight viruses effectively.

However, the Pearson Product Moment Correlation analysis showed no significant relationship between the factors affecting vaccination and the perceived implications of vaccination. This suggests that parents' decisions may also be influenced by misinformation, trust in healthcare systems, personal experiences, and accessibility to health services (Szilagyi *et al.*, 2021).

5. Recommendations

Based on the findings of the study, the following recommendations are proposed:

- 1) Government agencies and healthcare institutions should strengthen public health information campaigns regarding COVID-19 vaccination.
- 2) Healthcare workers and educators should conduct community-based seminars and health education programs to address vaccine misconceptions and misinformation.
- 3) Schools and healthcare providers should collaborate in promoting vaccination awareness among parents and children.
- 4) Local government units should improve accessibility to vaccination programs and healthcare services.
- 5) Future researchers are encouraged to conduct similar studies involving larger populations and broader geographical coverage.

6. Conclusion

The study concluded that parents generally recognize the importance of COVID-19 vaccination in protecting children from severe illness, reducing virus transmission, and strengthening the immune system. Parents believe that vaccination contributes to health protection, disease prevention, and community safety.

Although parents acknowledge the benefits of vaccination, the findings revealed no significant relationship between the factors influencing vaccination decisions and the perceived implications of vaccination. This indicates that parental decisions may still be influenced by external factors such as misinformation, personal beliefs, and healthcare accessibility.

Overall, the study highlights the importance of strengthening public health education and promoting reliable vaccine information to improve parental confidence in childhood vaccination programs.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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