

Childhood Vaccination Decisions during the Pandemic: Tradition, Generational Influence, and Spiritual Perspectives

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Abstract

Vaccination is carried out as a preventive measure against infection, both in adults and children. This study aims to determine the effect of parental attitudes, family history, and spiritual contexts on children's vaccination decisions, in this case, the COVID-19 vaccination. This study used a cross-sectional online survey method, with parents who have children aged 6–11 and willing to take part in this study as respondents. Data collection was carried out from November 2022 to April 2023. There were 66 participants who met the criteria, and then an analysis was carried out using the Structural Equation Model (SEM) method, which was processed using Partial Least squares (PLS). According to this study, parents' perspectives has an important role of 56.56% in determining vaccinating childerns. Meanwhile, family history have an influence of 5.9% and spiritual beliefs have an influence of 18.21%. According to research findings, parents' points of view play an important role where up to 80% of respondents said they support vaccinating their children, in this case with the COVID-19 vaccination. Parental attitudes of vaccination in children in this research is strongly influenced by parents' views and also their spiritual leaders. Other influential factors are spiritual context and family history influence from family regarding COVID-19.

Vaksinasi dilakukan sebagai upaya pencegahan terhadap infeksi, baik pada orang dewasa maupun anak-anak. Penelitian ini bertujuan untuk mengetahui pengaruh sikap orang tua, riwayat keluarga, dan konteks spiritual terhadap keputusan vaksinasi anak, dalam hal ini vaksinasi COVID-19. Penelitian ini menggunakan metode survei online cross-sectional, dengan orang tua yang memiliki anak berusia 6-11 tahun dan bersedia mengikuti penelitian ini sebagai responden. Pengumpulan data dilakukan pada bulan November 2022 hingga April 2023. Terdapat 66 partisipan yang memenuhi kriteria, kemudian dilakukan analisis dengan menggunakan metode Structural Equation Model (SEM), yang diolah

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dengan menggunakan Partial Least squares (PLS). Menurut penelitian ini, perspektif orang tua memiliki peran penting sebesar 56,56% dalam menentukan pemberian vaksin pada anak. Sementara itu, riwayat keluarga memiliki pengaruh sebesar 5,9% dan keyakinan spiritual memiliki pengaruh sebesar 18,21%. Menurut temuan penelitian, sudut pandang orang tua memegang peranan penting dimana sebanyak 80% responden menyatakan mendukung untuk memvaksinasi anaknya, dalam hal ini vaksinasi COVID-19. Sikap orang tua terhadap vaksinasi pada anak dalam penelitian ini sangat dipengaruhi oleh pandangan orang tua dan juga pemimpin spiritual mereka. Faktor lain yang berpengaruh adalah konteks spiritual dan pengaruh riwayat keluarga terkait COVID-19.

Keywords: Parents Attitudes; Family History; Spiritual Perspective; Covid-19 Vaccination; Childhood Vaccination

Introduction

Vaccination is a process in the body by which a person becomes immune or protected from a disease. Vaccines are biological products that contain antigens in the form of microorganisms or parts thereof or substances they produce that have been processed in such a way that they are safe and, when given to someone, will cause active specific immunity against certain diseases.¹ There are various types of vaccines, such as the HPV vaccine, the BCG vaccine, the influenza vaccine, and most recently the COVID-19 vaccine.

The 2019 Corona Virus pandemic, commonly known as COVID-19, has been going on since late 2019 until early 2022. This virus has infected all age groups, from children to the elderly. The Corona virus also has a very high ability to mutate, giving rise to many variants.^{2,3,4} In Indonesia, the COVID-19 pandemic has implications for loss of life and material, which has an impact on social, economic, and social welfare aspects.^{5,6} As one of the measures to save

¹ Stanley Plotkin, "History of Vaccination," *Proceedings of the National Academy of Sciences of the United States of America* 111, no. 34 (2014): 12283–87, <https://doi.org/10.1073/pnas.1400472111>.

² Asim Biswas et al., "Emergence of Novel Coronavirus and COVID-19: Whether to Stay or Die Out?," *Critical Reviews in Microbiology* 46, no. 2 (2020): 182–93, <https://doi.org/10.1080/1040841X.2020.1739001>; Thomas M. Gallagher and Michael J. Buchmeier, "Coronavirus Spike Proteins in Viral Entry and Pathogenesis," *Virology* 279, no. 2 (2001): 371–74, <https://doi.org/10.1006/viro.2000.0757>.

³ Gallagher and Buchmeier, "Coronavirus Spike Proteins in Viral Entry and Pathogenesis."

⁴ Mohammad Isa Irawan et al., "Application of Needleman-Wunch Algorithm to Identify Mutation in DNA Sequences of Corona Virus," *Journal of Physics: Conference Series* 1218, no. 1 (2019), <https://doi.org/10.1088/1742-6596/1218/1/012031>.

⁵ Ekowati Retnaningsih et al., "The Effect of Knowledge and Attitude toward Coronavirus Disease-19 Transmission Prevention Practice in South Sumatera Province, Indonesia," *Open Access Macedonian Journal of Medical Sciences* 8, no. T1 (2020): 198–202, <https://doi.org/10.3889/oamjms.2020.5184>.

and restore the economy and health, the Indonesian government has made it a policy to implement the COVID-19 vaccination.

Vaccination aims to form immunity against the COVID-19 virus in the recipient's body. The implementation of the COVID-19 vaccination aims to reduce the number of negative impacts on a person's health caused by COVID-19. In addition, with vaccination, it is hoped that group immunity or herd immunity will be achieved.⁷⁸

The COVID-19 vaccination was initially carried out for the elderly and adults.⁹¹⁰ However, the government has also started providing COVID-19 vaccinations for children aged 6–11 years. The goal of vaccination for children is to protect them from exposure to the COVID-19 virus. Corona-vac or Sinovac is a type of vaccine used for vaccination in children that has a low rate of post-immunization adjunct events (AEFI). In addition, Sinovac has also obtained an Emergency Use of Authorization (EUA) permit from Badan Pengawas Obat dan Makanan (BPOM) Republic of Indonesia. The vaccination of children provides significant benefits at the individual, societal, and socio-economic levels.¹¹¹²

The vaccination of children is given as a preventive action against a certain disease. It is known from the research results that there are several obstacles to the implementation of vaccination in children, namely the lack of information or understanding by parents about the importance of vaccination for children.¹³ In practice, the implementation of the COVID-19 vaccination does not always receive good reception and support from parents. Therefore, it is necessary to

⁶ Nurin Nadzifatil Fitriyah, Akmal Maulidina, and Luthfan Ahnaf Ghaus, "Health Problems and Related Factors during Work from Home (WfH) in Female Workers throughout COVID-19 Outbreak in Indonesia: A Cross-Sectional Study," *Malaysian Journal of Medicine and Health Sciences* 18, no. Supplement 16 (2022): 11–15.

⁷ Dae Gyun Ahn et al., "Current Status of Epidemiology, Diagnosis, Therapeutics, and Vaccines for Novel Coronavirus Disease 2019 (COVID-19)," *Journal of Microbiology and Biotechnology* 30, no. 3 (2020): 313–24, <https://doi.org/10.4014/jmb.2003.03011>.

⁸ A. H Mubassyr and Nuri Herachwati, "Pengaruh Work-Family Conflict Terhadap Kinerja Perawat Wanita Dengan Variabel Intervening Komitmen Organisasional Di Rsud Bhakti Dharma Husada Surabaya," *Manajemen Teori Dan Terapan* 7, no. 3 (2014): 143–62.

⁹ Plotkin, "History of Vaccination."

¹⁰ Youdiil Ophinni et al., "COVID-19 Vaccines: Current Status and Implication for Use in Indonesia," *Acta Medica Indonesiana* 52, no. 4 (2020): 388–412.

¹¹ Plotkin, "History of Vaccination."

¹² Jody Tate et al., "The Life-Course Approach to Vaccination: Harnessing the Benefits of Vaccination throughout Life," *Vaccine* 37, no. 44 (2019): 6581–83, <https://doi.org/10.1016/j.vaccine.2019.09.016>.

¹³ Feng Xia Xue and Kun Ling Shen, "COVID-19 in Children and the Importance of COVID-19 Vaccination," *World Journal of Pediatrics* 17, no. 5 (2021): 462–66, <https://doi.org/10.1007/s12519-021-00466-5>.

conduct research to examine Parental Attitudes, Generational Influence in this case is Family History, And Spiritual Contexts On Vaccination Choices For Children 6–11 During Covid-19.

Method

From November 2022 to April 2023, we collected research data using an online survey. Information about online surveys is shared through several social media platforms. Respondents who participated in our study were parents who had children aged 6–11 who were willing to take part in the survey. Respondents came from several regions in Indonesia with various educational and occupational backgrounds. At the first, we asked our respondents about their willingness to take part in this survey. After agreeing, respondents will be given several questions that must be answered clearly and honestly. Then, we will collect respondents' answers, process the data, and analyze the data obtained.

This survey consists of three component questions: 1) demographics, 2) parents' perspective, 3) family history, and 4) spiritual views. Each survey consists of several questions that have previously been tested for validity. Answers for each question consist of: 1=strongly disagree; 2=disagree; 3=just normal; 4=agree; 5 = totally agree. The answers to each of these questions will be processed into quantitative data, which will later be used to analyze the research results. Demographic questions concerning location, occupation, and educational background. Parental attitudes regarding the COVID-19 vaccination is measured through a number of questions regarding parents' understanding of the procedures, benefits, and side effects of giving the COVID-19 vaccination, as well as general knowledge about the COVID-19 virus. Generational Influence from Family was measured through questions that described family history regarding COVID-19, whether it was a history of infection, COVID-19 vaccination, or other vaccinations when the child was a toddler. The spiritual contexts describes the understanding and obedience of respondents regarding their religious teachings.

Initially, there were 72 participants, but after seeing their backgrounds, only 66 respondents met the criteria, namely parents who have children aged 6–11 years and are willing to fill out the online survey. The method Structural Equation Model (SEM), which is processed using Partial Least Square (PLS), is

used in this study to investigate the hypothesis. We examine our data gathering findings using the structural and measurement models.¹⁴¹⁵

This research has received approval from the Medical Research Ethics Commission, Faculty of Medicine, UIN Syarif Hidayatullah Jakarta, no. B-025/F12/KEPK/TL.00/04/2022.

Result and Discussion

The 66 respondents who met the criteria have completed the survey. Demographic data can be seen in Table 1.

Table 1.
Characteristic of survey respondents

Characteristics		Number of Respondents (%)
Location	Banten	13 (0.20)
	Yogyakarta	1 (0.02)
	Jakarta	6 (0.09)
	West Java	23 (0.35)
	Middle Java	20 (0.30)
	East Java	2 (0.03)
	Irian Jaya	1 (0.02)
Occupation	Pharmacist	1 (0.02)
	Medical personnel	2 (0.03)
	Teacher/Lecturer	14 (0.21)
	House wife	17 (0.26)
	Employee	5 (0.08)
	Government officials	20 (0.30)
	Entrepreneur	7 (0.11)
Educational background	Senior High School	13 (0.20)
	Undergraduate	38 (0.58)
	Master	14 (0.21)
	Doctor	1 (0.02)

Most of the respondents came from West Java (35%; $n = 23$), worked as government employees (30%; $n = 20$), and had an undergraduate education background.

To ensure that the question items could be trusted to measure variables, the researchers conducted a validity test. From the results of the validity test, six

¹⁴ P. M. Bentler and J. A. Stein, "Structural Equation Models in Medical Research.," *Statistical Methods in Medical Research* 1, no. 2 (1992): 159–81, <https://doi.org/10.1177/096228029200100203>.

¹⁵ Michel Tenenhaus, "Component-Based Structural Equation Modelling," *Total Quality Management and Business Excellence* 19, no. 7–8 (2008): 871–86, <https://doi.org/10.1080/14783360802159543>.

questions were excluded because they had an outer loading value <0.5 .¹⁶ The results of the validity and reliability tests, every variable's AVE value is more than 0.5. Therefore, it can be said that all of the study's variable indicators have achieved convergent validity.

Along with it, the overall Composite Reliability (CR) value is more than 0.70. Every variable is trustworthy. The Goodness of Fit (GoF), a combined measurement technique between the measurement (outer) model or measurement model test and the structural (inner) model or structural model test, is used to validate comprehensive structural models. The influence of variables on the decision to vaccinate children is 79.4%, while the rest are influenced by factors outside the research variables. To see the significance of the relationship between the dependent variable and the independent variable, we can look at Table 2.

Table 2.
Path Coefficients

Variable	T statistic	P Values
PP-> CDV	5.656	0.000
FH -> CDV	0.599	0.550
SB ->CDV	1.821	0.069

Note: PP= Parents' Perspective; CDV = Children Decision Vaccination; FH = Family History; SB = Spiritual Beliefs

According to this study, parents' perspectives has an important role of 56.56% in determining whether their children will be vaccinated or not. Meanwhile, family history have an influence of 5.9% and spiritual beliefs have an influence of 18.21%. Most of respondents stated that they support child vaccination, in this case with the COVID-19 vaccination.

In implementing childhood vaccination, there are several challenges that may be faced so that vaccination can be carried out effectively and safely, including:

1. Parental Trust and Concerns

Many parents may have concerns or doubts about the safety and effectiveness of the COVID-19 vaccine for their children. They may be concerned about short-term or long-term side effects, or about the safety of the vaccine in general.¹⁷

¹⁶ Siu Loon Hoe, "Institutional Knowledge at Singapore Management University Issues and Procedures in Adopting Structural Equation Modelling Technique," *Journal of Quantitative Methods* 3, no. 1 (2008): 76–83, https://ink.library.smu.edu.sg/sis_research/5168.

¹⁷ Teresa L. Salazar et al., "Parental Vaccine Hesitancy and Concerns Regarding the COVID-19 Virus," *Journal of Pediatric Nursing* 65 (2022): 10–15, <https://doi.org/10.1016/j.pedn.2022.03.010>.

2. Access to vaccines

Access to vaccines can be a problem, especially in areas with inadequate health infrastructure or in rural areas. Equitable distribution of vaccines and ensuring that health facilities have sufficient supplies are important challenges.¹⁸

3. Education and Awareness

Raising awareness about the importance of vaccination and educating parents and children about the benefits of vaccines is essential to increasing vaccination rates. Effective education programs are needed to address myths and misconceptions about vaccines.¹⁹

4. Side effects and immune response

Monitoring and managing potential side effects in children and ensuring a good immune response requires adequate medical monitoring and support. This also includes providing clear information about what to expect after vaccination.²⁰

5. Changing policies and guidance

Guidance on vaccination can change over time, especially as new data develops and the virus mutates. Adapting policies and consistent communication about these updates is an additional challenge.²¹

To address the above challenges, it is necessary to identify factors that influence vaccines in children.

Parental attitudes regarding the COVID-19 vaccination

According to a recent study, parents' motivation to get their children vaccinated is influenced by several factors. Intrinsic factors in the form of knowledge and experience. While the extrinsic factors that influence it are the support obtained by the family, support from health workers, and the availability of health services.²² The results of research in Canada stated that the internet has a significant effect on the negative perspective of parents towards

¹⁸ Elizabeth F. Peacocke et al., "Global Access to COVID-19 Vaccines: A Scoping Review of Factors That May Influence Equitable Access for Low and Middle-Income Countries," *BMJ Open* 11, no. 9 (2021): 1–11, <https://doi.org/10.1136/bmjopen-2021-049505>.

¹⁹ Dan Lupu and Ramona Tiganasu, "Does Education Influence COVID-19 Vaccination? A Global View," *Heliyon* 10, no. 3 (2024): e24709, <https://doi.org/10.1016/j.heliyon.2024.e24709>.

²⁰ Petra Zimmermann, "Crossm" 31 (2019).

²¹ Jeff French et al., "Key Guidelines in Developing a Pre-Emptive COVID-19 Vaccination Uptake Promotion Strategy," *International Journal of Environmental Research and Public Health* 17, no. 16 (2020): 1–14, <https://doi.org/10.3390/ijerph17165893>.

²² S. Esposito, N. Principi, and G. Cornaglia, "Barriers to the Vaccination of Children and Adolescents and Possible Solutions," *Clinical Microbiology and Infection* 20, no. S5 (2014): 25–31, <https://doi.org/10.1111/1469-0691.12447>.

vaccines.²³ Other research results in the United States state that parents' social networks play an important role in their vaccination decisions for their children.

Furthermore, parents need to be convinced about the benefits and safety of vaccination. The results of research conducted in America revealed that parents' beliefs about vaccines have a significant effect on the success of the national vaccination program.²⁴ In other studies, we know that a sizable percentage of parents are dubious about the COVID-19 vaccination because they have lower faith in its efficacy, safety, and necessity for their children.²⁵ Based on the results of the study, it is known that the perspective of parents greatly influences the decision to vaccinate their children with COVID-19.

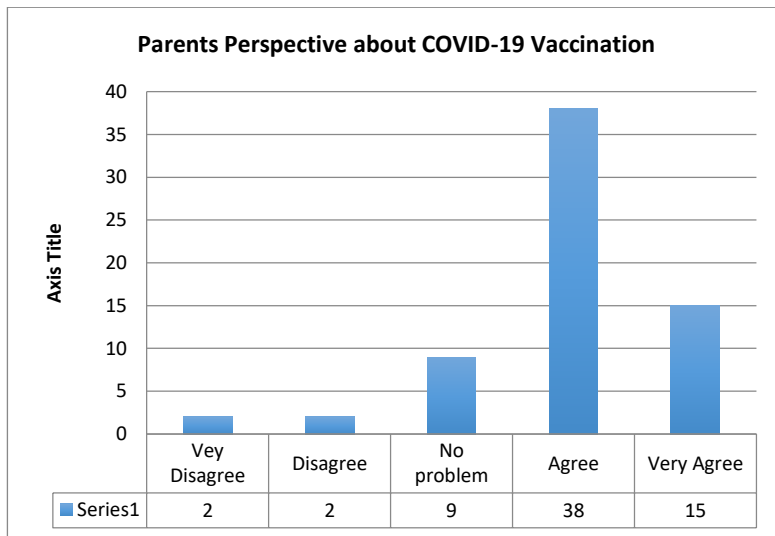


Figure 1.
Parents perspective about COVID-19 Vaccination

In Figure 1, it can be seen that as many as 80% from 66 respondents (38 respondents agree and 15 respondents agree) stated that they are agree and very agree that their children would get the COVID-19 vaccination. They stated that they understood the dangers of COVID-19 infection for their child and the benefits of having a COVID-19 vaccination.

²³ Jordan Lee Tustin et al., "Internet Exposure Associated with Canadian Parents' perception of Risk on Childhood Immunization: Cross-Sectional Study," *JMIR Public Health and Surveillance* 4, no. 1 (2018): 1–12, <https://doi.org/10.2196/publichealth.8921>.

²⁴ Allison Kennedy et al., "Confidence about Vaccines in the United States: Understanding Parents' Perceptions," *Health Affairs* 30, no. 6 (2011): 1151–59, <https://doi.org/10.1377/hlthaff.2011.0396>.

²⁵ Mohamad Hani Temsah et al., "Parental Attitudes and Hesitancy About COVID-19 vs. Routine Childhood Vaccinations: A National Survey," *Frontiers in Public Health* 9, no. October (2021): 1–11, <https://doi.org/10.3389/fpubh.2021.752323>.

This is in line with research conducted in Mexico. According to the correlation analysis of the study, the most representative factors predicting vaccine hesitancy or acceptance are positive attitudes towards vaccination, parents belief that the COVID-19 vaccine will improve the country's economic situation, parents active seeking of information, their willingness to get the COVID-19 vaccine themselves, and the possibility of their children developing side effects.²⁶ From the study in China, we know that a significant percentage of parents agreed that their children under the age of 18 should receive the COVID-19 immunization. The *Theory Of Planned Behavior* (TPB) is a helpful framework to direct the creation of the next parent-targeted COVID-19 immunization campaigns. It's critical to communicate openly about the safety testing and vaccine development processes. Authorities in charge of public health should also promptly address disinformation.²⁷ Researchers and policymakers should consider the ramifications of having faith in the organizations that administer vaccinations.²⁸

Our findings also show that parents are very interested in vaccinating their children. Despite this, the parents stated that she suffered from high rates of their children developing side effects from vaccines.

Generational Influence from Family

According to a recent study, parents' motivation to get their children vaccinated is influenced by several factors. Generational influence from family, in this study was the family history included in this study is, in an overview, the entire patient's family is well educated about preventing COVID-19. It can also be seen that only 47% of the respondent's families had ever been infected with COVID-19. This means that more than 50% of family respondents are well protected. This is supported by data showing that 98% of respondents had received doses 1 and 2 of the COVID-19 vaccination, and 98% of respondents implemented the health protocol recommended by the government during the COVID-19 pandemic. As many as 92% of respondents had also received information about COVID-19 vaccination in children, and 86% had received information about the side effects of giving COVID-19 vaccination to children.

²⁶ Juan Luis Delgado-Gallegos et al., "Parent's Perspective towards Child Covid-19 Vaccination: An Online Cross-Sectional Study in Mexico," *International Journal of Environmental Research and Public Health* 19, no. 1 (2022): 1–14, <https://doi.org/10.3390/ijerph19010290>.

²⁷ Zixin Wang et al., "Parental Acceptability of COVID-19 Vaccination for Children under the Age of 18 Years among Chinese Doctors and Nurses: A Cross-Sectional Online Survey," *Human Vaccines and Immunotherapeutics* 17, no. 10 (2021): 3322–32, <https://doi.org/10.1080/21645515.2021.1917232>.

²⁸ Ohid Yaqub et al., "Attitudes to Vaccination: A Critical Review," *Social Science and Medicine* 112 (2014): 1–11, <https://doi.org/10.1016/j.socscimed.2014.04.018>.

From previous research, it is known that parents' decisions to participate in COVID-19 vaccination for their children are influenced by their understanding of the effectiveness and safety of the COVID-19 vaccine. An understanding of the effectiveness and safety of vaccines will encourage a desire to protect oneself and children, so that a willingness to participate in vaccination will arise.²⁹ As many as 89% of respondents had received complete vaccinations when their children were toddlers. Kaidi et al. stated that history regarding mandatory vaccination in children influences the decision to vaccinate children with COVID-19 because parents' trust in the safety and effectiveness of mandatory vaccines when children are toddlers will affect parents' trust in the safety and effectiveness of the COVID-19 vaccine in children.³⁰

The Spiritual Contexts Regarding The Vaccine Decisions

There has been no previous research that has examined the link between parents' spiritual beliefs and the decision to participate in COVID-19 vaccination in children. Previous research found that parents' spiritual beliefs influence the way they deal with health problems. In previous research, this was the case with the Human Papilloma Virus (HPV) vaccination. The spiritual belief referred to in this case is the pattern of parents' belief in God and the religion they adhere to.

A study in the United States, stronger philosophical, spiritual, and moral beliefs were found to predict more negative attitudes toward each vaccine, and stronger moral beliefs were found to predict more negative attitudes toward the HPV vaccine. This study examined the relationships between religious affiliations and attitudes and behaviors related to the flu, MMR, and HPV vaccines.³¹ Views about health and disease influence individual health care decisions, including vaccines. A qualitative study in the United Kingdom also suggests that some members of the British public have more nuanced views than the health-maximizing approach when considering how childhood

²⁹ Sadie Bell et al., "Parents' and Guardians' Views on the Acceptability of a Future COVID-19 Vaccine: A Multi-Methods Study in England," *Vaccine* 38, no. 49 (2020): 7789–98, <https://doi.org/10.1016/j.vaccine.2020.10.027>.

³⁰ Kaidi He et al., "Parental Perspectives on Immunizations: Impact of the COVID-19 Pandemic on Childhood Vaccine Hesitancy," *Journal of Community Health* 47, no. 1 (2022): 39–52, <https://doi.org/10.1007/s10900-021-01017-9>.

³¹ Ozan Kuru et al., "Religious Affiliation and Philosophical and Moral Beliefs about Vaccines: A Longitudinal Study," *Journal of Health Psychology* 27, no. 13 (2022): 3059–81, <https://doi.org/10.1177/13591053221082770>.

vaccines should be prioritized. This will certainly have a significant impact on the vaccine decisions that will be made.³²

According to other studies, religion is one of many factors that may lead to vaccination refusal or delay. Five types of typology were identified by the researchers. These include: (1) worldview clash, where vaccines are not justified as a health intervention; (2) divine will, which is a type of passive fatalism; (3) immorality, which views some vaccines as unethical due to their production or effect; (4) impurity, which refers to ingredients that will defile the body; and (5) conspiracy, where a vaccine plot is directed towards a particular religious group. It is alleged that typologies play a role in vaccine refusal or delay.³³

Spiritual leaders or teachers in a particular community can have a major influence on their members' views on vaccination. Whether a spiritual leader supports or opposes vaccination can greatly influence the decisions of their followers. A study found that to address doubts and concerns in decision-making about medical products, health professionals explained the facts about the content and process and suggested further dialogue with informed religious leaders. This would be a major consideration for religious believers.³⁴

Religious beliefs constantly instruct their followers to stay safe from a disease epidemic, and this belief has a big impact on the decision to get vaccinated. Health professionals who counsel reluctant patients or parents can help dispel concern regarding vaccines by applying religious understanding to medical product decision-making, providing information about content and procedures, and recommending more discussion with knowledgeable religious leaders.³⁵ In this way, it is hoped that vaccination coverage can be more even and comprehensive, which, of course, will be carried out with full awareness.

From the results of the study, it was found that parents' views on vaccines greatly influence the decision to vaccinate their children, compared to generational influence and parental beliefs. Therefore, we recommend that an intensive approach be taken to parents so that health policies, especially for children, can run effectively and optimally. One of the steps that can be taken is to provide comprehensive knowledge about matters related to the health policy

³² Gemma Lasseter et al., "The Views of the General Public on Prioritising Vaccination Programmes against Childhood Diseases: A Qualitative Study," *PLoS ONE* 13, no. 6 (2018): 1–18, <https://doi.org/10.1371/journal.pone.0197374>.

³³ Hanne Amanda Trangerud, "What Is the Problem with Vaccines? A Typology of Religious Vaccine Skepticism," *Vaccine: X* 14, no. February (2023): 100349, <https://doi.org/10.1016/j.jvacx.2023.100349>.

³⁴ John D. Grabenstein, "What the World's Religions Teach, Applied to Vaccines and Immune Globulins," *Vaccine* 31, no. 16 (2013): 2011–23, <https://doi.org/10.1016/j.vaccine.2013.02.026>.

³⁵ Grabenstein.

to parents, including providing an approach through religious leaders for devout parents.

Conclusion

The proper attitude from parents is required for the successful adoption of COVID-19 vaccination in children because parents's confidence and hesitancy about COVID-19 immunization in children in Indonesia are greatly influenced by parental attitudes, in this case is parents' opinions, about COVID-19. Other influential factors are spiritual context and generational influence from family regarding COVID-19.

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