Original Articles

Factors Related to The Community's Decision to Accept Covid-19 Vaccination:

A Literature Review

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Abstract
Background: The COVID-19 vaccination program was an effort made to prevent the transmission of the COVID-19 virus. Various considerations arise when this program was implemented. Individual factors are one of the factors that influence the decision to receive a COVID-19 vaccination.
Objective: This literature review aims to review the factors related to the decision to receive the COVID-19 vaccination.
Methods: The design used was literature review with PICO criteria (Population: General public (adult), Intervention: there no Intervention just to know the correlation, Comparison: there no comparison, Outcome: factor that correlate with decision to accept COVID-19 vaccination. Other criteria is the method: quantitative study) The keywords in two languages. The keywords for articles in Indonesian are "vaksin covid-19", "keputusan", "menerima", "masyarakat", "faktor". The keywords for English articles are "Factor", "Acceptence", "Decision", "Covid-19 vaccination", "Community". There was conducted through two databases, including: Google Scholar (479 articles in Indonesia), and Science Direct (217 articles). Articles limited from January 2020 to Mei 2022. Then the author re-sorted the articles according were free access and full text, in the form of original articles.
Results: There are 10 articles that appropriate with the criteria. Those articles are quantitative studies with a cross sectional approach. Based on the results of the article review, the authors found that there were factors related to the decision to receive the COVID-19 vaccination, namely knowledge, information about COVID-19, perception, education level, income, age, gender, and previous flu vaccine experience.
Conclusion: Factors related to the decision to receive COVID-19 vaccination, namely knowledge, information about COVID-19, perception, education level, income, age, gender, previous flu vaccine experience, and history of illness. These factors can be the basis for the government to achieve successful COVID-19 vaccination achievements.

INTRODUCTION

The COVID-19 pandemic that has occurred since 2020 has become a new health problem in the world. This is enough to cause panic in the community. A systematic review of 53,000 hospitalized patients showed that 20.2% of Covid-19 cases developed severe illness with a mortality rate of 3.1%. In the elderly and among those with comorbidities, such as cardiovascular disease, chronic kidney disease, and chronic obstructive pulmonary disease, the mortality rate increases significantly (Yuni et al., 2021). Various efforts have been made to prevent the spread of this disease. Efforts have been made to reduce transmission by wearing masks, washing hands, maintaining distance, reducing mobilization and avoiding crowds. Another effort that has been made is the provision of COVID-19 vaccination. The COVID-19 vaccination is administered in two stages of administration known as the 1st dose and the 2nd dose with an interval of 14 to 28 days for each dose, which is injected intramuscularly (Rachmadi et al., 2021)

The provision of COVID-19 vaccination has been declared effective in reducing cases of COVID-19 transmission. This is evidenced by the decreasing number of COVID-19 cases. Data regarding the achievement of COVID-19 vaccination in May 2022 for the first dose in the world reached 65.5%. In Indonesia, the achievement of COVID-19 vaccination for the first dose reached 72.2% (WHO, 2022). The achievement of full vaccination in the world reaches 59% and in Indonesia it also reaches 59%. Indonesia is currently ranked 5th in the world for vaccination achievements.

This vaccination achievement still needs to be improved because it has not met the target. There is an important problem in the success of achieving the COVID-19 vaccination, namely the hesitation in receiving the vaccination, or in other words, the public's hesitation to take the vaccine voluntarily. Such hesitancy can be attributed to several reasons, most notably, lack of awareness and trust in vaccine safety and misinformation about the COVID-19 vaccine and its technological approach (Alagarsamy et al., 2022). Various factors are said to have a relationship and influence the community's decision to receive the COVID-19 vaccination. Therefore, it is necessary to conduct a literature review to find out the factors related to people's decisions to receive the COVID-19 vaccination.

The theory of Health Belief Model is a theory that is used to explain the relationship between health attitudes and behavior towards a disease. The main components in the theory of health belief model are: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self-involvement in a health behavior and triggers for action. Perceived susceptibility refers to beliefs about susceptibility to infection, while perceived severity refers to beliefs about the negative effects of contracting an infection. In relation to vaccines, perceived benefit can be defined as an individual's belief in vaccination and perceived barriers are described as an individual's inability to receive the vaccine due to psychosocial, physical, or financial factors. Triggers to act or cues to action include, information, people, and/or events that prompt a person to be vaccinated (Wong et al., 2020).
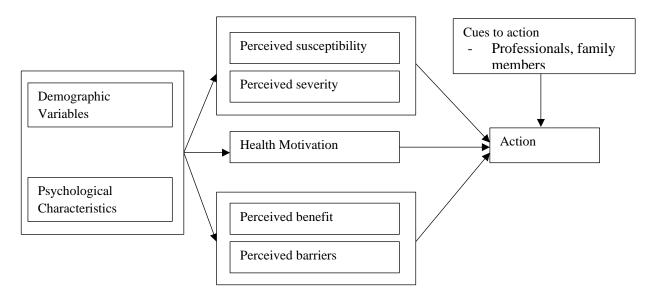
Conceptual Framework

Figure 1. Conceptual Framework based on Health Belief Model

The HBM theory has proven to be the most widely used theory in the case of receiving vaccinations other than the COVID-19 vaccine. The health belief model theory approach can be used to determine the acceptance of the COVID-19 vaccine (Puspasari & Achadi, 2021). In this model, it is interpreted that if a person has a high perception of vulnerability and perceived severity of a health problem, perceives the target behavior as having a positive benefit in reducing the emergence of health problems, and perceives the barriers to adopting the target behavior are quite low, he will perform a health behavior and then tend to adopt the health behavior (Erawan et al., 2021).

METHODS

Study Design

The design used was literature review. PICO criteria (Population, Intervention, Comparison, and Outcome) were used to develop eligibility criteria for study inclusion and exclusion. Population: General public (adult), Intervention: there no Intervention just to know the correlation, Comparison: there no comparison, Outcome: factor that correlate with decision to accept COVID-19 vaccination. Other criteria is the method: quantitative study.

Search method

The keywords in two languages. The keywords for articles in Indonesian are "vaksin covid-19", "keputusan", "menerima", "masyarakat", "faktor". The keywords for English articles are "Factor", "Acceptance", "Decision", "Covid-19 vaccination", "Community". There was conducted through two

databases, including: Google Scholar using Indonesian language there are 479 articles and Science Direct using English there are 217 articles. Articles limited from 2020 to Mei 2022.

Author re-sorted the articles according were free access and full text, in the form of original articles. The article was narrowed down by eliminating duplication and adapted to PICO, focusing on factors that has correlation in accept COVID-19 vaccination. Article deemed appropriate by the reviewers were used in this literature review. The article selection process and results are presented in the PRISMA diagram in (figure 1).

Records were then filtered through titles and abstracts to exclude review articles and adjustment criteria. The article feasibility study was conducted by reviewing the full text article. Articles deemed appropriate by the reviewers were used in this literature review. Based on the results found there are 10 articles that match the needs of the author.
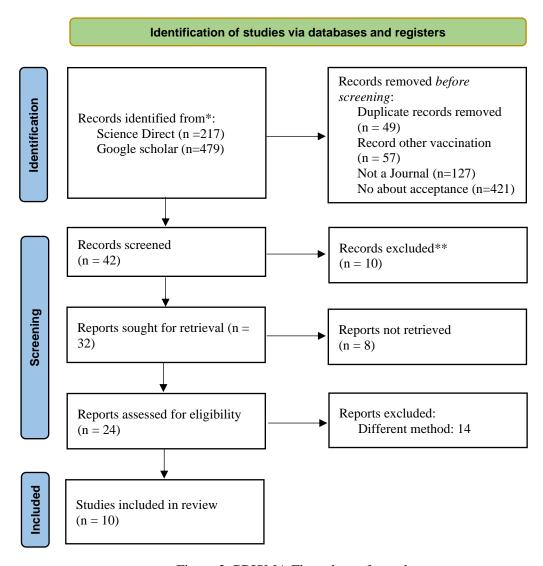

Figure 2. PRISMA Flow chart of search outcome

RESULTS

      Based on the results of the article review, the authors found that there were factors related to the decision to receive the COVID-19 vaccination, namely knowledge, information about COVID-19, perception, education level, income, age, gender, and previous flu vaccine experience. The following is a table that presents the results of article reviews.

Table 1. Article Review Results

No	Author	Population	Goals	Method	Findings
1.	(Yuni et al., 2021)	People who live in Talang Kelapa Village and Alang Alang Lebar Village	Analysing public acceptance of the covid-19 vaccination program	Quantitative-cross sectional	The results of the bivariate analysis using SPSS showed that there was a relationship between knowledge (p-value 0.041), availability of access to information (p-value 0.009) and family support (p value 0.000) with acceptance of the Covid-19 vaccination program.
2.	(Azim et al., 2021)	Communities in Poasia District, Kendari City	Knowing the factors related to the acceptance of the covid-19 vaccine in Poasia District, Kendari City based on the theory of health belief model	Quantitative-cross sectional	There is a relationship between knowledge, perception and level of education with acceptance of the Covid-19 vaccine in the community in Poasia District, Kendari City.
3.	(Al Naam et al., 2022)	Saudi Arabia Community	To assess the amount of vaccine hesitancy and its determinants in relation to various demographic, social, and personal characteristics among the Saudi population	Quantitative-cross sectional	Knowledge, perception, sufficient information (40.7% of respondents) has a relationship with the desire to vaccinate against COVID-19. Likewise, personal characteristics related to receiving the COVID-19 vaccine were higher education, high income, and retirement (P < 0.001)
4.	(Walsh et al., 2022)	Irish and UK population	To understand and determine the causes of weak and/or	Quantitative-cross sectional	The univariate analysis highlighted that gender and age played an important role in vaccine intent, with

No	Author	Population	Goals	Method	Findings
			positive vaccination intentions is vital in order to ensure the success of future and current vaccination programmes through the provision of effective, evidence-based health messaging.		women under the age of 30 reporting higher levels of vaccine doubt.
5.	(Akiful Haque et al., 2021)	Bangladesh population	to understand the acceptance level of the COVID-19 vaccine and its determinants among the adult Bangladeshi population.	Quantitative-cross sectional	Respondents who have a graduate education level or more, age 50 years), students, monthly income 41,000 UDB, as a rural resident, respondents from the Khulna division are more likely to receive the COVID-19 vaccine.
6.	(Abu-Farha et al., 2021)	Middle East Population	Assessed the willingness of Middle Eastern Arab publics to receive COVID-19 vaccines and investigated the factors behind any reluctance to receive them	Quantitative-cross sectional	Multinomial logistic regression analysis identified eight factors that have been shown to be protective against COVID-19, namely: monthly income > $1,000, unmarried, living in Saudi Arabia or Iraq, having received previous influenza vaccines, having a high fear score for COVID-19 and feeling at risk of being infected with COVID-19. 19. On the other hand, factors that were significantly associated with higher rejection of COVID-19 vaccine (P 0.05 with OR greater than 1) included female gender and having been infected with COVID-19.

No	Author	Population	Goals	Method	Findings
7.	(Ichsan et al., 2021)	The people of Central Sulawesi	To find out the determinants of people's willingness to receive the Covid-19 vaccination in Central Sulawesi.	Quantitative-cross sectional	The factors that influence the willingness of the people of Central Sulawesi to receive vaccination are age, education level, occupation, marital status, religion and ethnicity.
8.	(Sanggu Dedu et al., 2022)	Sukabungah community	to identify the relationship between knowledge level and COVID-19 vaccination readiness at productive age in Sukabungah village 2021	Quantitative-cross sectional	There is a relationship between knowledge level and COVID-19 vaccination readiness at productive age in Sukabungah Village in 2021.
9.	(Shariff et al., 2022)	individuals with a recent history of homelessness in Ontario, Canada	describe COVID-19 vaccine coverage (ie, the estimated percentage of people who have received a vaccine) and determinants of vaccine receipt among individuals with a recent history of homelessness	Quantitative-cross sectional	In the multivariable analysis, factors positively associated with COVID-19 uptake were one or more outpatient visits to a GP, older age, receipt of influenza vaccine in one of the two previous influenza seasons, identified as homeless through visits to health centres. community versus exclusively hospital-based encounters, receipt of one or more SARS-CoV-2 tests between 1 March 2020, and 30 September 2021, and the presence of a chronic disease condition
10.	(De Freitas et al., 2021)	Trinidad and Tobago Population	to evaluate public trust in information sources, confidence in institutions and COVID-19 vaccine willingness in Trinidad and Tobago	Quantitative-cross sectional	Overall, 62.8% of participants said they would take the COVID-19 vaccine if it was available. Regression analysis showed those who agreed that everyone should adhere to the national immunization schedule and those who would take the flu vaccine.

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Table 2. Identification Factors Relating to Accepting COVID-19 Vaccine

No	Factor	Article
1.	Knowledge	1, 3, 8
2.	Information about COVID-19	1, 3
3.	Perception	2, 3
4.	Level of education	3, 5
5.	Income	3, 5, 6
6.	Age	4, 5, 7
7.	Gender	6
8.	Previous flu vaccine experience	9, 10

DISCUSSION

Knowledge

According to Yuni et al. (2021), knowledge relates to public acceptance of COVID-19 vaccination. It is also stated by other researchers, that knowledge has a relationship and influence on the decision to receive the COVID-19 vaccination (Al Naam et al., 2022; Azim, La ode liaumin, Rahman, 2021). A good level of knowledge about COVID-19 will make people willing to accept COVID-19 vaccination (Febriyanti et al., 2021). Conversely, poor knowledge will have an impact on the community's unpreparedness to receive the COVID-19 vaccination (Sanggu Dedu et al., 2022).

Information about COVID-19

Sufficient information regarding COVID-19 vaccination relates to people's decisions to receive COVID-19 vaccination (Al Naam et al., 2022; Yuni et al., 2021). People who have received information about COVID-19 vaccination have better knowledge and this is related to the decision to receive COVID-19 vaccination. Information regarding COVID-19 vaccination can be in various forms, namely through television, social media or direct outreach activities that have an impact on changing public knowledge so that people are willing to receive COVID-19 vaccinations. Socialization regarding COVID-19 vaccination is a form of providing information to the public that can increase the public's willingness to receive COVID-19 vaccination (Abidah et al., 2021).

Perception

Public perception of COVID-19 vaccination has a relationship with the decision to receive COVID-19 vaccination (Al Naam et al., 2022; Azim et al., 2021). According to Prasetyaning Widayanti & Kusumawati (2021), the public perception of the effectiveness of the COVID-19 vaccination is related to the public's willingness to receive the COVID-19 vaccination.

Level of education

Education level is one of the factors related to people's decisions to receive COVID-19 vaccination (Akiful Haque et al., 2021; Al Naam et al., 2022). Education level is associated with knowledge level. As previously explained the level of knowledge is related to acceptance of the COVID-19 vaccination.

Income

The results show that income is one of the individual characteristics that is related to the community's decision to receive the COVID-19 vaccination (Abu-Farha et al., 2021; Akiful Haque et al., 2021). According to Al Naam et al. (2022), the perception of COVID-19 vaccination is good with regard to income, where people who do not work have a less good perception.

Age

Age is related to the decision to receive the COVID-19 vaccination. Older ages, such as those at retirement age, tend to be more prepared to receive COVID-19 vaccinations (Akiful Haque et al., 2021; Ichsan et al., 2021). People who are younger than 30 years tend to refuse COVID-19 vaccination (Walsh et al., 2022). Older people tend to be more readily receptive to COVID-19 vaccination for fear of contracting the virus than younger people (Ichsan et al., 2021).

Gender

Community characteristics, namely gender, also have a relationship with public acceptance of the COVID-19 vaccination. Women are more likely to refuse COVID-19 vaccination than men (Abu-Farha et al., 2021). Women are easier to accept fake news related to vaccines, this has an impact on receiving COVID-19 vaccinations (Arumsari et al., 2021).

Previous flu vaccine experience

The community's experience of receiving previous flu vaccinations is related to the community's decision to receive the COVID-19 vaccination (De Freitas et al., 2021; Shariff et al., 2022). Giving flu vaccination before can give public confidence in the effectiveness of the vaccine, and also as a first anticipatory step to prevent virus transmission

CONCLUSION

Based on the results of the article review, the authors found that there were factors related to the decision to receive the COVID-19 vaccination, namely knowledge, information about COVID-19, perception, education level, income, age, gender, and previous flu vaccine experience. These factors can form the basis for the government in achieving successful COVID-19 vaccination achievements. The government can also determine strategies or policies to increase public acceptance of COVID-19 vaccination by taking into account factors related to the community's decisions. The limitation in this

research is that only 2 databases are used due to limited access. In the process of searching, there are many articles whose population is health workers, so only a few articles meet the criteria.

AUTHOR CONTRIBUTION

Made Indra Ayu Astarini: Conceptualization, Methodology, Writing- Original draft preparation, Software, Data curation, Visualization, Investigation.

Maria Theresia Arie Lilyana: Writing- Reviewing and Editing Validation, Supervision.

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CONFLICT OF INTEREST

The results of this study do not have a conflict of interest.

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