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Editorial

Strategy to accelerate COVID-19 vaccination coverage

Nildawati [1]✉, Ilhamsyah [2]

[1] *Departement Of Public Health, Faculty of Medicine and Health Science, Universitas Islam Negeri Alauddin, Makassar, Indonesia*
[2] *Departement Of Nursing, Faculty of Medicine and Health Science, Universitas Islam Negeri Alauddin, Makassar, Indonesia*

A B S T R A C T

Vaccination is carried out as an integrated effort to maximize the target of achieving vaccination to reduce mortality, break the chain and achieve herd immunity. Herd immunity can be achieved if the vaccination coverage is 60% -70%. However, until now, there have been many challenges in increasing the coverage of this vaccination. The Government has made various efforts to maximize the achievement of vaccination, but until now, the vaccination has yet to reach the target of 80%. Various factors and obstacles cause this, so a concrete strategy is needed to overcome them. In addition to regulations from the Government, a socio-cultural approach strategy is also needed considering that Indonesia is a country with various ethnicities and beliefs, so perceptions and acceptance of vaccination are also different for each region and society.

INTRODUCTION

Globally, 651,918,402 people worldwide have been confirmed with COVID-19, with the death of 6,656,601.[1] The incidence of Covid-19 cases has increased compared to 2021 with a total of 220,235,222 cases and 4,561,316 deaths.[2] Globally, the number of new cases reported has increased from mid-June 2021 to 2022.[3] In Indonesia, Covid-19 case data shows a significant increase until December 2022, with a total of 6,720,000 cases and a total of 161,000 deaths.[4] Compared to the previous year, there were 4,116,890 confirmed positive cases with 134,930 deaths. Various countries have made integrated prevention efforts to reduce the incidence of Covid-19, but until now, several countries are still reporting a significant increase in cases.

Factors considered having influenced the increase in COVID-19 cases were the loosening of rules and non-compliance by the public in implementing health protocols.[5-7] As well as the not yet maximal coverage of COVID-19 vaccinations, it is estimated that only around 40.3% of the world's population has received at least one dose of the COVID-19 vaccine. In contrast, the COVID-19 vaccination data in Indonesia, which received the first vaccination are 203,893,970 people; the second vaccination is 174,551,723 people; the third vaccination three as many as 67,864,300, and the fourth vaccination as many as 1,080,023, with a national vaccination target of 234,666,020.[8] So this is still very far from achieving the expected vaccination target.

Vaccination is carried out as an integrated effort to maximize the target of achieving vaccination to reduce mortality, break the chain and achieve herd immunity. Herd immunity can be achieved if the vaccination coverage is 60%-70%. However, until now, there have been many challenges in increasing the coverage of this vaccination. Many factors influence vaccine acceptance, such as knowledge and perceptions of COVID-19, vaccine safety, logistics, perceived vaccine efficacy, and perceived risks and side effects. The previous study states that age is positively related to the vaccine's likelihood.[9] Other studies showed that the level of knowledge, positive attitude, and intention to receive the COVID-19 vaccine was 74%, 44.7%, and 62.6%, respectively. In addition, good education and knowledge about vaccines are significantly associated with receiving the COVID-19 vaccine.[10] Several studies have proven that misinformation has a sizeable effect on acceptance of the COVID-19 vaccine.[11,12]

SUPPORTING AND INHIBITING

Factors of Community Characteristics

Some studies have revealed that men tend to receive vaccines and even participate in clinical trials of the COVID-19 vaccine compared to women.[13-15] This could be related to the nature of men who tend to be braver in acting and taking risks. In addition, men are more dominant in thinking, so all decision-making is based on mature thinking and refers to existing facts. At the same time, women are more dominant in feelings and more sensitive to pain, so they tend to feel more afraid of vaccine side effects.[16] In

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the Previous research, most respondents come from urban or suburban areas; this explains the overrepresentation of individuals with higher education as initiated by universities located in urban areas.[17]

Education can contribute to the COVID-19 vaccine so that they can understand information related to the COVID-19 vaccine.[18] Most of the information about COVID-19 is disseminated through social media or online, so exposure to information about COVID-19 can contribute to respondents' knowledge level. Our results are much lower than previous figures found among Thai, Bangladeshi, and Congo populations, with 55-65% of respondents being students or health workers.[18] Religion is often a person's consideration in addressing something. The halalness of vaccines is a primary consideration for some religious adherents, especially Muslims. Indonesia experienced a significant decline in vaccine confidence between 2015 and 2019, sparked in part by the Indonesian Ulema Council issuing a fatwa claiming that the measles, mumps, and rubella (MMR) vaccine was haram and contained ingredients derived from pigs, so that Muslims cannot accept it.[19]

History of Confirmed Positive COVID-19

Previous studies reported that around 307 respondents (10%) had been diagnosed positively with COVID-19. Someone who has previously tested positive for COVID-19 tends to think natural immunity is sufficient to prevent reinfection against COVID-19.[20]

Knowledge, Attitudes and Actions Regarding

Previous studies reported that most respondents knew vaccination was important. Most of the information about COVID-19 is disseminated through social media or online, so exposure to information about COVID-19 can contribute to respondents' knowledge level. This finding is higher than a previous study conducted in Ethiopia, where 44.7% of respondents had a favorable attitude toward the COVID-19 vaccine. A study revealed that attitude is a factor that has more influence on vaccination actions compared to the knowledge variable.[21] Compared to other sub-populations, students are better educated, more open-minded, and more responsive to public health issues. Therefore, their attitudes toward the COVID-19 vaccine may differ.[22] Our findings are in line with other international findings that around 64-80% of adults will receive a COVID-19 vaccination in countries such as the UK, Saudi Arabia, the US, Australia, and France.[23-25] However, our results are lower than the previous figure found among Chinese adults who received the COVID-19 vaccination at 91.3%.[6]

STRATEGY TO ACCELERATE COVID-19 VACCINATION

The Government has made various efforts to implement a strategy to accelerate COVID-19 vaccination coverage. The first strategy is vaccinating health workers and support staff, public service officers, and law enforcement officials, then for vulnerable communities, and lastly, the target group of people. This is included as a strategy in collaborative efforts between stakeholders in the context of the success of government policies related to vaccination.[26] The policy for using the Peduli Lindungi Application, where only vaccinated people are allowed to enter public facilities.[27] Another strategy that must be carried out is to conduct socialization on an ongoing basis to provide an understanding of the benefits of the COVID-19 vaccination and minimize related information related to the side effects of vaccination.

Based on various literature, it was found that to increase the coverage of Covid-19 vaccination for herd immunity, a vaccination campaign with suitable targets has encouraged the domestic pharmaceutical industry to produce its vaccinations in collaboration with the foreign pharmaceutical industry.[28] Several provinces have succeeded in increasing the number of vaccinations, namely by carrying out regular vaccinations at Puskesmas, Hospitals, and Other Health Clinics, which are carried out daily. Then another strategy is mobile vaccination, where the Vaccination Team will visit the community at the Neighbourhood, Hamlet, or community levels, including factories in industrial areas. Another strategy is mass vaccination centers and school vaccinations targeting students or children.

We suggest that in addition to the existence of regulations from the Government regarding Covid-19 vaccination, a community socio-cultural approach strategy is an alternative that is possible to accelerate the achievement of national vaccinations, considering that Indonesia is a country with various ethnicities and cultures so that perceptions and acceptance of vaccinations are also different for each region and public. Using a local cultural approach and involving traditional stakeholders, community leaders, and figures who are considered to play an essential role in the area, as well as collaboration with the Government, health workers, cadres, community leaders, and traditional leaders, is an alternative strategy to have a significant impact on people's willingness to vaccinate.

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