

**How to Cite:**

Sumarni, R., & Sutantri, S. (2022). The perception and participation of the elderly in the COVID-19 vaccination program: Literature review. *International Journal of Health Sciences*, 6(S4), 259–266. <https://doi.org/10.53730/ijhs.v6nS4.5511>

# The Perception and Participation of the Elderly in the COVID-19 Vaccination Program: Literature Review

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**Abstract**--The purpose of this study was to see what perceptions and factors influence the participation of the elderly in the COVID-19 vaccination program. Research method : in the form of single data, namely literature review by searching the data base using Pubmed, Science Direct, Scopus using terms related to perceptions, Participation, Elderly, COVID-19, and Vaccination obtained a database of 1,691 articles and additional manual searches on get 5 articles, so you get 6 articles that will be reviewed. The results of the research are that the factors that influence the COVID-19 vaccination in the elderly include gender, education level, finances, level of knowledge, health facilities, vaccine safety, information about vaccines, benefits of vaccines, and side effects of vaccines. Perceptions of the elderly in receiving COVID-19 vaccinations in the elderly can be formed from lack of vaccine information, doubts about the benefits of vaccines and side effects, in addition to factors that affect the participation of the elderly to carry out the COVID-19 vaccination program, which are influenced by gender, education level, finances, level of education, knowledge, health facilities, vaccine safety, information about vaccines, vaccine benefits, and vaccine side effects.

**Keywords**---perceptions, participation, elderly, COVID-19, vaccination.

**Introduction**

Coronavirus is group of viruses that can cause a disease in animals and humans. There is a type of coronavirus that can contagious to humans causing infection of

the respiratory tract symptoms caused start from cough, runny nose until more Serious Severe Acute Respiratory Syndrome (SARS) (Directorate General of P2P, Ministry of Health, Republic of Indonesia, 2020). On January 31<sup>st</sup>, 2020 WHO declared COVID-19 as *Public Health Emergency of International Concern (PHEIC)*.

Since announced as a pandemic, coronavirus cases in the world keep increasing from WHO data (2021) increase COVID-19 cases as of December 15<sup>th</sup>, 2021 reached 271,376,643 confirmed cases, with case Dead reached 5,324,969 inhabitants. In Indonesia, the first confirmed case of COVID-19 was on March 2<sup>nd</sup>, 2021, there were 2 cases positive Coronavirus and on increase by significant. Based on data from the Ministry of Health (2021) cases confirmed COVID-19 as of December 16<sup>th</sup>, 2021 reached 4,259,857 people recovered cases 4,111,045 people and declared cases die due to COVID-19 reaching 143,979 people (Ministry of Health, 2021).

COVID-19 pandemic in various countries in the world start develop vaccine to create herd immunity to prevent more wide spread of viruses. Operate a vaccine program is not easy because there are still lots of pros and cons among public especially in the elderly who are considered as susceptible group to infected with COVID-19 (Harianja & Eryando, 2021)

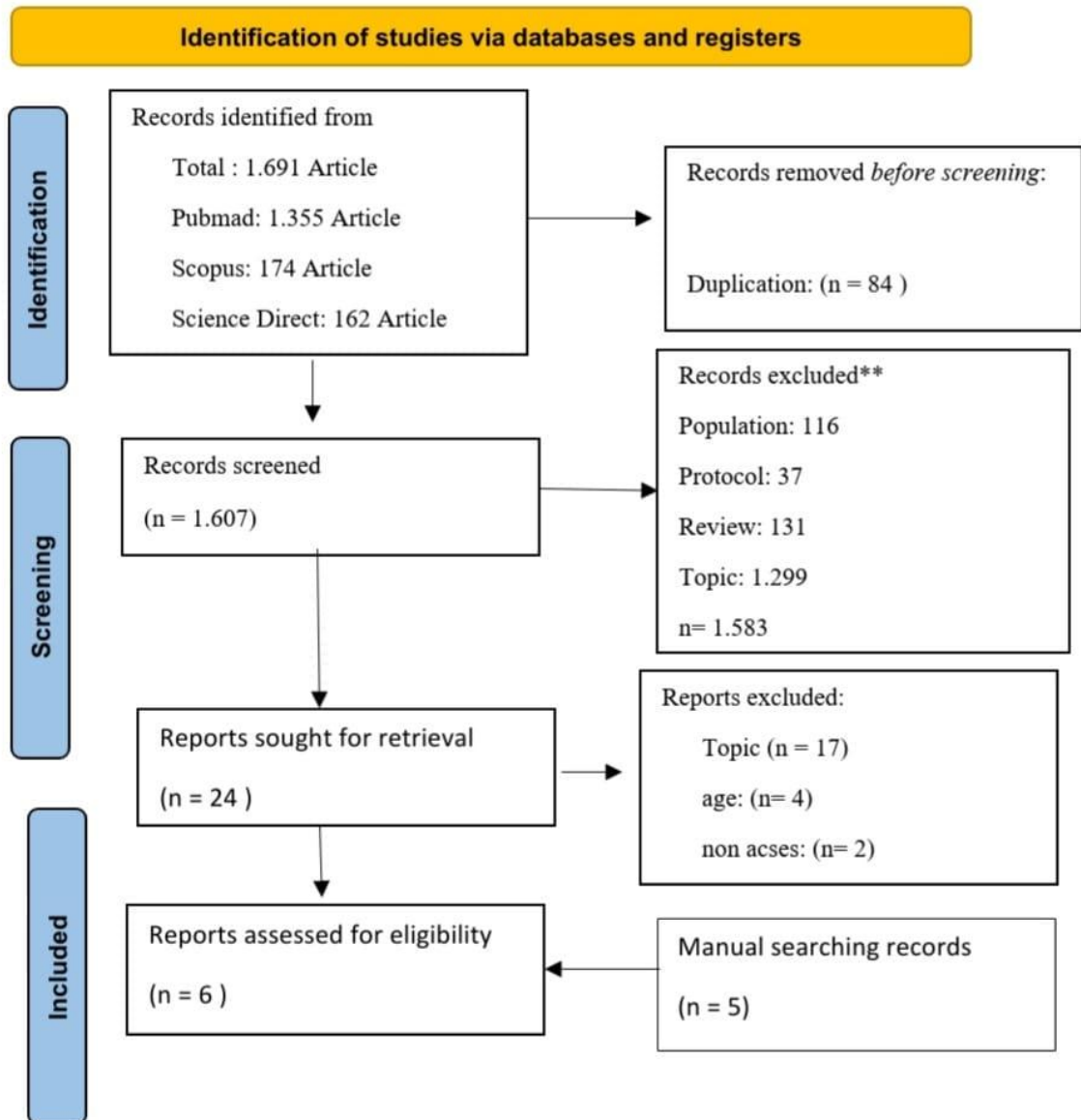
The Indonesian government is prioritizing COVID-19 vaccine for elderly, because the condition of the elderly who are susceptible and easy to infected with COVID-19. Based on data from Ministry of Health, (2021) percentage for vaccination elderly still low approximately 10,849,366 (50.34%) for first vaccine dose and second vaccine dose around 6,814,315 (31.62%) with a total target from government that vaccinates around 21,553,118. even though to support the success of government in the COVID-19 vaccine program depending on perception, desire as well as participation of elderly for accept vaccination but many obstacles met for do vaccination for the elderly such as less information about vaccine, fear of the effect side of vaccine, there is no companion at the moment of vaccine (Harianja & Eryando, 2021) Based on behind background above, then this review literature purpose is to see perception and factors on what affects for elderly participation in the COVID-19 vaccination program.

## **Research Methods**

Comprehensive, relevant, reviewed database search techniques using databases including Pubmed, Science Direct, and Scopus, search strategy use related terms with *perceptions, participation, elderly, COVID-19* and vaccination with using synonym for search *elderly (aged)* search added *Boolean phrases* AND or OR for make it easy database search. Get a total of 1,691 articles and additional articles search, manually get 5 articles, so obtained 6 articles that will conducted *reviews*.

Criteria inclusions that used to search this database is as following : Published literature from 2020 to 2022, Literature that used design study quantitative and qualitative, Study participants used by people aged 50-85 years, English language literature, Respondents used in the literature is elderly.

Table1. Schematic / Tree Diagram (PRISMA)



## Research Results

Review results from a number of literature that meets criteria presented in the table following :

**Table 1. Study of literature**

Researcher Name & Year	Title	Design	Settings	Characteristics respondent	Influencing factors _ _ vaccine	outcame
( Malesza & Wittmann, 2021)	<i>Acceptance and intake of COVID-19 vaccines among older germans</i>	Study cross sectional	In Germany	1,037 respondents consist respondent men and women Age respondent elderly used 75+ years	perception of vaccines acceptance , benefits vaccine	mostly elderly refuse vaccine because their perception about effect side , lack of information , safety from vaccine
(Chen, Dai, & Xia, 2022)	<i>Perceived facilitators and barriers to intentions of receiving the COVID-19 vaccines among elderly Chinese adults</i>	Study qualitative	In China	2 weeks time 35 respondents consist respondent women and men Age respondent elderly used 65-85 years old	benefit of vaccine , side effects of vaccines , finances , distance to Health facilities , willingness vaccine ,	Most of elderly refuse for vaccine influenced by from benefit of vaccine , side effect of vaccines , finances , distance to Health facilities , as well as readiness vaccine
(Silva et al., 2022)	<i>Perceptions, knowledge and attitudes about COVID-19 vaccine hesitancy in older Portuguese adults</i>	Study cross sectional	In Portugal	Time 26 days 602 Respondents consist from men and women Age respondent >65 years old	level knowledge , benefits of vaccine , side effect of vaccine ,	reception of vaccine for elderly in Portugal are influenced by perception , level knowledge and most of the elderly there worried about the benefit of COVID-19 vaccine and side effect from vaccine
(Fadda, Suggs, & Albanese,	<i>Willingness to vaccinate</i>	Study qualitative	In Southern Switzerland	19 Respondents consist men and	Attitude of vaccines acceptance , benefits of	group elderly in the range of 64-85 years say that

2021)	<i>against COVID-19: A qualitative study involving older adults from Southern Switzerland</i>			women	vaccines , safety of vaccine , side effect of vaccine	they refuse for do vaccination because doubt about benefit vaccines and side effects of vaccine they choose other protection than COVID-19 vaccination .
(Gallè et al., 2021)	<i>Acceptance of COVID-19 Vaccination in the Elderly: A Cross-Sectional Study in Southern Italy</i>	Study cross sectional	In Southern Italy	Age respondent elderly 64-85 years old 1.5 months time 1,041 respondents consist men and women	Type of gender , level knowledge , resources information , level education	Most of them ready to vaccine is elderly female , level education and level knowledge influence elderly for do vaccines , most of elderly who have high level of education tend willing for vaccine
(Al-Hanawi, Alshareef, & El-Sokkary, 2021)	<i>Willingness to Receive COVID-19 Vaccination among Older Adults in Saudi Arabia: A Community-Based Survey</i>	Study cross sectional	In Saudi Arabia	3 months time 488 respondents consist men and women Age respondent 50 years to on 1 week time	Type of gender , level of education , side effects of vaccines , safety of vaccine , efficacy vaccine	Elderly man more willing for vaccine than types of elderly women , elderly with higher education level more willing for vaccines and most of the elderly there said doubt for vaccinated because side effect , safety and efficacy from COVID-19 vaccine

## Discussion

Study results shows 6 literatures obtained that influencing factors of COVID-19 vaccine for the elderly influenced by type of gender , level of education, finance, level of knowledge, facilities health, safety of vaccines, information about vaccines , benefits of vaccine, as well as side effect of vaccine . Based on research by Al-Hanawi, Alshareef, & El -Sokkary (2021) obtained results that level education for the elderly who have high level of education more tend for ready to be vaccinated than low educated elderly , in line with research conducted by Gallè et al., (2021) results study showing that low educated elderly more tend to refuse for do vaccination than elderly who have high education. Inside of the research conducted by Fitriani & Riniasih (2021) that results study showing there is meaning connection with low level of education with reception vaccines for the elderly because with low level education, elderly tend not enough have motivation or high desire for study about new information specifically information about COVID-19 vaccine .

Other influencing factors to elderly for do vaccination is level knowledge , fit with research conducted by Silva et al., (2022) found results that elderly who have good knowledge about vaccine tend willing for do vaccination. In line with research conducted by Gallè et al., (2021) that level knowledge of elderly influenced from level education, seniors who graduated education high more many willing for do vaccination. according to Wawan (2012) stated that knowledge is one of the important factor that changes trust health and potential causing change behavior of individual health , so required more information about vaccines and benefits of vaccines and safety of vaccine for help reduce doubt about vaccination . Education is one of the factors that can influence knowledge. Knowledge of somebody to some information could influenced by someone education , that is the more high level of someone education so will the easier for somebody accept information. This Study supported by research Febriyanti et al., (2021) who stated that results significance of 0.000 (<0.05) so that could concluded that there is influence of knowledge to readiness of elderly for participate in the vaccination program .

In reception COVID-19 vaccine in the elderly is also affected by the type of gender , result study Gallè et al., (2021) mention that results the research of 1,041 respondents seniors who come in the research group of woman more tend willing for do COVID-19 vaccine from 607 participants (58.3%) who were willing to be vaccinated as much as 572 (94.2%) compared to types of elderly of man out of 434 (41.7%) around 90.6% are willing do vaccine . Different with results research conducted by Al - Hanawi , Alshareef , & El -Sokkary , (2021) that results of research showing that elderly manifold gender of man tend willing do about 148 (69.16%) of the 488 samples who participated , while in the elderly with gender of woman tend refuse do COVID-19 vaccine only about 66 (30.48 %) of the 488 participating samples were willing to do COVID-19 vaccination , because gender is (sex) which refers to the difference biological Among men and women existence of difference in Things of attention refers to the role , activity or certain culture that will influence someone perception, man tend could control emotion than women , so required clear information about vaccination because woman more affected by the environment and other stimuli , the need for there is straighten

perception negative for the elderly in order to achieve the target of the planned vaccination program government ( Rosmalia , 2017).

View from financially factor, research conducted by Chen, Dai, & Xia, (2022) results study show the elderly worried cost for do vaccination exceed their income so that many elderly over there refuses for do COVID-19 vaccination. This Study in line with results of survey reception COVID-19 vaccination in Indonesia carried out by the Ministry of Health , ITAGI, UNICEF, and WHO in November 2020 results survey show that ready elderly pay for vaccine only about 24% of the 5,142 samples the elderly who are accompanied , most of elderly state don't want to pay for vaccine , because average of them don't have fixed income. Besides that factor from facility health and available Vaccines also affect readiness vaccination in the elderly , research conducted (Chen, Dai, & Xia, (2022) also showed that elderly worried about readiness vaccines in the area they living and elderly refuse vaccine because distance from facility health far away from them .

Other influencing factors COVID-19 vaccination in the elderly is affected by safety of vaccines , information about vaccines , benefits of vaccine . from study of Malesza & Wittmann, (2021) results study showing that most of elderly refuse for do vaccine because their perception hesitate to vaccination therefore many bad information bout vaccines, the elderly also revealed afraid of side effect from vaccines that cause fever, headache or painful at injection area, the elderly also revealed still doubt of the benefit of vaccines that can protect them from the COVID-19 virus. in line with (Chen, Dai, & Xia, 2022; Silva et al., 2022; Gallè et al., 2021; Al- Hanawi , Alshareef , & El -Sokkary , 2021) results research also shows doubt vaccination elderly influenced by information about vaccines that don't right , benefit of vaccines and side effects of vaccine . Research conducted by Fadda , Suggs, & Albanese, (2021) in southern Switzerland also stated that that group elderly in the range of 64-85 years say that they refuse for do vaccination because doubt about benefit vaccines and side effect of vaccine they choose other protection than COVID-19 vaccination .

## **Conclusion**

Could concluded that perception of elderly in reception of COVID-19 vaccination can formed from lack of information about vaccine , fear of side effect of vaccine or safety of vaccine benefit from vaccine so that causing doubts to the group of elderly for implementing the COVID-19 vaccination program, in addition to that influencing factors participation of elderly in participating in the COVID-19 vaccination program can seen from type of gender , level of education , finance , level of knowledge, health facilities, safety of vaccines, information about vaccines, benefits of vaccines , as well as side effect of vaccine that causes many group of elderly do rejection for vaccine even though they know that their group easy to infected with COVID-19.

## **Suggestion**

Recommended that socialization for COVID-19 vaccination focus on elderly group, socialization can be done through mass media, television nor officer health for the elderly to get clear information about benefit COVID-19 vaccine and side

effect from COVID-19 vaccine so that the elderly no doubt and worry for do COVID-19 vaccination.

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