

## Determinants of Community Willingness for COVID-19 Booster Vaccination at Pengasinan Health Center in Bekasi City

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### Abstract

**Introduction:** COVID-19 booster Vaccination is a COVID-19 vaccination after a person has received a full dose of primary vaccination which aims to maintain the level of immunity and extend the period of protection. The COVID-19 booster vaccination is organized by the Government. **Objective:** Knowing the determinants of community willingness to vaccinate the COVID-19 booster at Pengasinan Health Center in Bekasi City. **Method:** This type of research was a quantitative study with a cross-sectional study design. **Result and Discussion:** The results showed that there was a relationship between education ( $p$ -value = 0.000), knowledge ( $p$ -value = 0.001), attitude ( $p$ -value = 0.000), the role of health workers ( $p$ -value = 0.000) and the public's willingness to vaccinate booster COVID-19 and there is no relationship between gender ( $p$ -value = 0.174) and the community's willingness to vaccinate the COVID-19 booster at the Pengasinan Health Center in Bekasi City. **Conclusions:** Education, knowledge, attitudes and the role of health workers are related to the community's willingness to vaccinate the COVID-19 booster at Pengasinan Public Health Center in Bekasi City.

**Keywords:** Gender; Education; Knowledge; Attitude; Role Of Health Workers; COVID-19 Booster Vaccine;

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## **Introduction**

After 2 years the community went through a period of struggle against the COVID-19 disease, now the community is also facing the development of the mutation of the COVID-19 virus which produces new variants which causes a decrease in the effectiveness of vaccines that have previously been given. This made the government establish regulations regarding the Advanced Dose (booster) COVID-19 vaccination (Arami et al., 2022). Advanced Dose of COVID-19 Vaccination (booster) is a COVID-19 vaccination after a person has received a full dose of primary vaccination which aims to maintain the level of immunity and extend the period of protection. This Advanced Dose (booster) COVID-19 Vaccination is organized by the Government (Kemenkes RI, 2022).

Based on data on the Ministry of Health's vaccine dashboard in November 2022, the coverage of the advanced dose (booster) COVID-19 vaccination in Indonesia has only reached 27.86%. Meanwhile, in Bekasi City, based on KPCPEN data in April 2022, the coverage of further doses of COVID-19 vaccination (booster) reached 29,10% (Fitria, n.d.). Based on data on the coverage of COVID-19 booster doses at the Pengasinan Public Health Center, the achievement of booster vaccinations only reached 24,17% or 7,324 people who were vaccinated out of 30,302 people while the achievement standard for the COVID-19 booster vaccination that must be achieved is 50%. Based on data at the coordination meeting held by the Bekasi City Health Office, the Pengasinan Health Center was ranked 25th out of 47 Community Health Centers in Bekasi City, meaning that the coverage of the COVID-19 booster vaccination is still considered low compared to other health centers in Bekasi City.

There are 3 Public Health Center located in the Rawalumbu District area, namely the Pengasinan Health Center, the Bojong Rawalumbu Health Center and the Bojong Menteng Health Center. The coverage of the COVID-19 booster vaccine at the Bojong Rawalumbu Health Center is 11,750, while the Bojong Menteng Health Center is 6,051. Judging from the coverage figures, the Pengasinan health center received the lowest coverage of the COVID-19 booster vaccine compared to other health centers in the Rawalumbu District area. The low coverage of the COVID-19 booster vaccine and the low public interest in vaccinating at the Pengasinan Health Center are the main problems that need attention. This can be influenced by several factors so that the coverage rate for the COVID-19 booster vaccination is low.

Factors that can affect the COVID-19 vaccination coverage rate are usually caused by the lack of public interest in booster vaccinations due to the availability of vaccines, public knowledge regarding booster vaccinations and a lack of information regarding the implementation of booster vaccinations for COVID-19. To find out the determinants of people's willingness to do the COVID-19 booster vaccination, the researchers conducted a preliminary study on 30 respondents at the Pengasinan Health Center in Bekasi City, found that 14 people (46.7%) were willing to do the COVID-19 booster vaccination and 16 people (53, 5%) 3%) others are not willing. The population in this study were all people aged 18-59 years who had received the primary dose of vaccination at the Pengasinan Health Center in Bekasi City. Based on the results of the preliminary study, it shows that there are still many people who are not willing to do the COVID-19 booster vaccination.

## Method

This type of research is a quantitative study with a cross-sectional research design. The population in this study were people who visited the salting health center, namely 518 people. The data was taken in the last 1 week. The sample used in this study amounted to 70 people. The sampling technique used is accidental sampling.

## Result and Discussion

### Result

#### A. Univariate Analysis

**Table 1**

Description of willingness, gender, education, knowledge, attitudes, and roles of health workers at the Pengasinan Health Center in Bekasi City

Variable	Frequency	Percentage
<b>Willingness</b>		
Not willing	37	52,9%
Willing	33	47,1%
<b>Gender</b>		
Male	21	30%
Female	49	70%
<b>Education</b>		
Low	27	38,6%
High	43	61,4%
<b>Knowledge</b>		
Low	57	81,4%
High	13	18,6%
<b>Attitude</b>		
Negative	36	51,4%
Positive	34	48,6%
<b>Role of health workers</b>		
Low	47	67,1%
High	23	32,9%

Based on table 1, it was found that the highest proportion was the community who were not willing for the COVID-19 booster vaccination, as many as 37 people (52.9%), female sex as many as 49 people (70%), higher education as many as 43 people (61.4%) , low knowledge of 57 people (81.4%), negative attitudes of 36 people (51.4%) and low role of health workers as many as 47 people (67.1%).

## B. Bivariate Analysis

**Table 2**

Statistical Test of Determinants of Community Willingness for COVID-19 Booster Vaccination at the Pengasinan Health Center in Bekasi City

Variable	Willingness				p-value	PR 95% CI
	Not Willing		Willing			
	N	%	N	%		
Gender						
Male	8	38,1	13	61,9	0,174	0,644 (0,356-1,164)
Female	29	59,2	20	40,8		
Education						
Low	24	88,9	3	11,1	0,000	2,940 (1,832-4,719)
High	13	30,2	30	69,8		
Knowledge						
Low	36	63,2	21	36,8	0,001	8,211 (1,236-54,538)
High	1	7,7	12	92,3		
Attitude						
Negative	33	91,7	3	8,3	0,000	7,792 (3,087-19,665)
Positive	4	11,8	30	88,2		
Role of health workers						
Low	36	76,6	11	23,4	0,000	17,617 (2,574-120,573)
High	1	4,3	22	95,7		

Based on table 2, the results of the bivariate analysis show that there is a relationship between education ( $p\text{-value} = 0.000$ ), knowledge ( $p\text{-value}=0.001$ ), attitude ( $p\text{-value} = 0.000$ ), the role of health workers ( $p\text{-value} = 0.000$ ) and willingness to community for the COVID-19 booster vaccination and there was no relationship between gender ( $p\text{-value} = 0.174$ ) and community willingness for the COVID-19 booster vaccination at the Pengasinan Health Center in Bekasi City in 2023.

## Discussion

### Relationship between Gender and Community Willingness for COVID-19 Booster Vaccination at the Pengasinan Health Center in Bekasi City in 2023

Based on the results of the study, it showed that there was no significant relationship between gender and people's willingness to vaccinate the COVID-19 booster, seen from the results of the Chi-Square statistical test with a  $p\text{-value}$  of  $= 0.174$  ( $p\text{-value} > 0.05$ ). While the Prevalence Ratio (PR) value for the sex variable is 0.644, meaning that gender can reduce the incidence of community availability for the COVID-19 booster vaccination. The results of this study are in line with research conducted by Ratnaningtyas et al (2022) which showed that there was no significant relationship between gender and community participation in the COVID-19 program. Female respondents prefer to get information face-to-face because their interest in direct information is more acceptable to respondents due to insufficient internet access and low interest in reading about the COVID-19 vaccine (Putri et al 2022).

Female respondents, especially housewives who have children, therefore do not have a booster because they feel they do not have the need to leave the house, while men are more

prepared to be vaccinated against the COVID-19 booster because they have the need to leave the house, especially the demands of work. mandatory booster vaccination for COVID-19. So there is a need for socialization or dissemination of transparent and accurate information about the safety and benefits of booster vaccines to build public trust which is carried out intensively, especially for women or housewives who have children. This can be done by collaborating with midwives and cadres during the posyandu and involving community leaders to be able to influence the community regarding the COVID-19 booster vaccination.

### **Relationship between Education and Community Willingness for COVID-19 Booster Vaccination at the Pengasinan Health Center in Bekasi City in 2023**

Based on the results of the study, it showed that there was a significant relationship between education and people's willingness to vaccinate the COVID-19 booster, seen from the results of the Chi-Square statistical test with a p-value of = 0.000 ( $p\text{-value} > 0.05$ ). While the Prevalence Ratio (PR) value for the education variable is 2,940, meaning that education is a risk factor for people's willingness to vaccinate the COVID-19 booster. The results of this study are in line with research conducted by Ratnaningtyas et al (2022) which showed that there was a significant relationship between education and community participation in COVID-19 vaccination. Education possessed by a person certainly affects perceptions of receiving vaccines, where highly educated people tend to have positive perceptions of the co-19 vaccine. This may be related to the experience factor that is owned by the individual itself so that it influences perception and then affects the level of acceptance of a person in carrying out a COVID-19 vaccination (Argista, 2021)

The higher a person's education, the easier it is for that person to receive information so that it influences a person's willingness to do a COVID-19 booster vaccination because people with higher education tend to have a positive attitude or perception of the COVID-19 vaccine. So it is necessary to coordinate with the Education Office to provide direction regarding the implementation of the COVID-19 booster vaccination for people who have a low level of education.

### **Relationship between Knowledge and Community Willingness for COVID-19 Booster Vaccination at the Pengasinan Health Center in Bekasi City in 2023**

Based on the results of the study, it showed that there was a significant relationship between knowledge and people's willingness to vaccinate the COVID-19 booster, seen from the results of the Chi-Square statistical test with a p-value of=0.001 ( $p\text{-value}>0.05$ ). Meanwhile, the Prevalence Ratio (PR) value for the education variable is 8,211, meaning that knowledge is a risk factor for people's willingness to vaccinate the COVID-19 booster. The results of this study are in line with research conducted by Fina et al (2022) which showed that there was a significant relationship between the level of knowledge about the COVID-19 vaccine and the cancellation of the COVID-19 vaccination dose 3 (Booster). The low level of knowledge about COVID-19 vaccination can be caused by a lack of information obtained by respondents about the importance of COVID-19 vaccination or the many "hoax" news

circulating in the community which can lead to an understanding of information in society so that it can influence people's judgments (Yolanda et al., 2022).

Pengasinan Health Center has carried out outreach and education regarding the COVID-19 booster vaccination, it's just that not all people do not take part in these activities resulting in low knowledge of the community, some respondents said they did not know the purpose of the third dose of vaccination while they had already carried out the primary dose of vaccination, and the community was afraid if it happened something if too many vaccines.

Knowledge about the COVID-19 booster vaccine has social relations, considering that people around, especially community leaders, have the function of delivering effective messages to increase public knowledge and the function of parents is also very effective in providing information to their families. So there is a need for education using leaflets and posters as well as information dissemination through social media to make it easier for the public to get information about the COVID-19 vaccination, either directly or indirectly.

### **Relationship Between Attitudes and Community Willingness for COVID-19 Booster Vaccination at the Pengasinan Health Center in Bekasi City in 2023**

Based on the results of the study, it showed that there was a significant relationship between attitudes and people's willingness to vaccinate the COVID-19 booster, seen from the results of the Chi-Square statistical test with a p-value of = 0.000 (p-value > 0.05). Meanwhile, the Prevalence Ratio (PR) value for the education variable is 7,792, meaning that attitude is a risk factor for people's willingness to vaccinate the COVID-19 booster. The results of this study are in line with research conducted by Marisa (2022) which shows that there is a relationship between attitude and COVID-19 vaccination. The relationship between attitude and the COVID-19 program is inseparable from the influence of the people around us. Judging from the factors that influence the formation of attitudes, namely the influence of people around. This negative attitude is due to feelings of fear related to the side effects of the COVID-19 vaccination which are also influenced by the people around them, so that one's worries and fears lead to actions not to do the COVID-19 vaccination (Marisa, 2022).

People who have low knowledge also raise negative attitudes towards the COVID-19 booster vaccination. The attitude of this respondent is determined by the trust and benefits of an object. This can also be influenced by people around, especially family, friends or neighbors, and local community leaders. So to change people's attitudes to be positive, namely by taking an approach involving community leaders and religious leaders in conducting counseling or outreach to the community so that with this approach the community has more trust and confidence in the benefits of eradicating COVID-19.

### **Relationship between the Role of Health Workers and Community Willingness for COVID-19 Booster Vaccination at the Pengasinan Health Center in Bekasi City in 2023**

Based on the results of the study, it showed that there was a significant relationship between the role of health workers and the public's willingness to vaccinate the COVID-19 booster, seen from the results of the Chi-Square statistical test with a p-value of = 0.000 (p-value > 0.05). Meanwhile, the Prevalence Ratio (PR) value for the education variable is 17,617,

meaning that the role of health workers is a risk factor for people's willingness to vaccinate the COVID-19 booster. The results of this study are in line with research conducted by Sakka & Indarjo (2021) which shows that there is a relationship between the support of health workers and behavior towards the COVID-19 program. Health workers have sufficient knowledge about the benefits of the COVID-19 vaccination and what impact will be caused by COVID-19. Health workers also act as communicators in providing information and counseling about stopping COVID-19 so that people who are educated about the information provided will act better in carrying out COVID-19 vaccinations (Marisa, 2022).

The uneven distribution of the community in obtaining the role of health workers has directly resulted in some people losing the role of health workers as communicators in providing information regarding the COVID-19 booster vaccination program. So it is necessary to increase the role of health workers as communicators, namely by conducting counseling through the method of providing leaflets, posters and brochures that are easily understood by the public. Then it is also necessary to give rewards to health workers who play an active role in implementing the COVID-19 booster program as a form of appreciation so as to grow health workers in educating and increasing the ability of the COVID-19 booster activation program. After that, monitoring and evaluation was carried out to assess the performance and achievement of the goals of the COVID-19 booster vaccination program.

## **Conclusion**

There is no relationship between gender and the community's willingness to carry out the COVID-19 booster vaccination at the Pengasinan Health Center in Bekasi City. There is a relationship between education and the public's willingness to carry out the COVID-19 booster vaccination at the Pengasinan Health Center in Bekasi City. There is a relationship between knowledge and the community's willingness to program the COVID-19 booster at the Pengasinan Health Center in Bekasi City.

There is a relationship between attitude and the community's willingness to carry out the COVID-19 booster vaccination at the Pengasinan Health Center in Bekasi City. There is a relationship between health workers and the community's willingness to carry out the COVID-19 booster vaccination at the Pengasinan Health Center in Bekasi City

### Reference

- Arami, M. W., Purnamasari, N. & Rahayu, S. 2022. Analisa Yang Mempengaruhi Keputusan Tenaga Kesehatan Melakukan Vaksinasi Covid-19 Dosis Lanjutan (Booster). *Jurnal Mahasiswa BK An-Nur : Berbeda, Bermakna, Mulia*, 8(2), pp.51–54.
- Argista, Z. L. 2021. *PERSEPSI MASYARAKAT TERHADAP VAKSIN PERSEPSI MASYARAKAT TERHADAP VAKSIN COVID-19 DI SUMATERA SELATAN*.
- Fina, A. Dedu, S. 2022. *Hubungan Tingkat Pengetahuan Tentang Vaksin COVID-19 Dengan Ketersediaan Vaksinasi COVID-19 Dosis 3 (Booster) Di Desa Rengasdengklok Selatan Tahun 2022*. 1.
- Fitria, F. n.d. *Gambaran Perilaku Vaksinasi COVID-19 pada Kelompok Lanjut Usia di Desa Muaro Kalaban, Kota Sawahlunto, Sumatera Barat Tahun 2022*. UIN Syarif Hidayatullah Jakarta-FIKES.
- Kemenkes RI. 2022. *VAKSINASI BOOSTER COVID-19*.
- Marisa, M. 2022. *Skripsi faktor-faktor yang berhubungan dengan vaksinasi covid-19 di puskesmas ambacang tahun 2022*.
- Putri, D. K. Arumsari, A. 2022. Penerimaan Vaksin COVID-19 Pada Responden Wanita di Desa Pelangki. *Bencoolen Journal Of Pharmacy*, 2, pp.3–7.
- Ratnaningtyas, T. O., Safitri, D. & Holidah. 2022. *Edu Dharma Journal : Jurnal Penelitian FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN PARTISIPASI*. 06(02).
- Sakka, D. N. H. & Indarjo, S. 2021. Perilaku terhadap Vaksinasi COVID-19 pada Masyarakat Usia 18-59 Tahun di Kelurahan Lompio Diva. *Higeia Journal of Public Health Research and Development*, 5(3), pp.227–238.
- Yolanda, D. Natsir, M. 2022. Faktor Yang Mempengaruhi Persepsi Ibu Hamil dan Nifas Terhadap Vaksinasi Covid 19 Di Bidan Praktek Mandiri Kota Padang Panjang. *Jurnal Endurance*, 7(2), pp.367–377.



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