



## Community Knowledge and Stigma Against COVID-19 Phase III Vaccine (Booster) and Health Workers in Handling COVID-19 in Parepare City

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### ABSTRACT

The COVID-19 pandemic has caused fear among some people. Feelings of fear can make a person alert. However, when the feeling of fear becomes excessive, it can create a negative impression. This study aimed to determine the level of knowledge and stigma of the people of Parepare City towards the Phase III COVID-19 vaccine (Booster). This research is a descriptive study using a quantitative approach. The tool used in data collection is a questionnaire. This research was conducted in Parepare City from 11 to July 18, 2022. The population in this study were all people living in Parepare City, totaling + 154,524 people. The sample or sampling technique uses accidental sampling and 100 samples. Data were analyzed univariately and presented in the form of a frequency distribution. Research shows that the level of public knowledge of the Phase III vaccine (Booster) is 63%. The level of public knowledge of health workers in handling COVID-19 is in the high category of 73%. The stigma level of the people of Parepare City towards the Phase III vaccine (Booster) is in the high category of 69%. The level of community stigma towards health workers in handling COVID-19 is in the high category of 78%. In general, the people of Parepare City have high knowledge of the stage III vaccine (Booster) and health workers. However, implementing the Phase III vaccine (Booster) is still low due to the high stigma of the people of Parepare City towards health workers and Phase III vaccines (Boosters).

**Keywords:** booster vaccines, health workers, knowledge, stigma.

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### INTRODUCTION

Coronavirus 2019 (COVID-19) is an infectious disease caused by acute respiratory syndrome coronavirus 2 (SARS-CoV2) (Hamdan et al., 2021). This disease was first discovered in December 2019 in Wuhan, the capital of China's Hubei Province, and has since spread globally worldwide, resulting in the 2019-2020 coronavirus pandemic (Acter et al., 2020). WHO declared the 2019-2020 coronavirus outbreak a Public Health Emergency of International Concern (PHEIC) on January 30, 2020, and a pandemic on March 11, 2020.

Based on WHO data, as of June 24, 2022, there were 547,386,723 cases of COVID-19 infection in the world, with 6,347,567 deaths and 522,675,831 recovered from COVID-19 (WHO, 2022). Indonesia first detected a COVID-19 case on March 2, 2020, with two people confirmed positive for COVID-19. Since then, COVID-19 has spread so quickly until June 24, 2021. Indonesia has reported 2,053,995 confirmed cases of COVID-19, with a death rate of 1,826,504 from 34 provinces (Ministry of Health, 2022).

Various efforts have been made to overcome the impact of the COVID-19 pandemic, one of which is the vaccination effort (Gandryani & Hadi, 2021). Vaccines help maintain the body's condition and prevent disease. Vaccines can help create immunity to protect themselves from infection (Salimi-Jeda et al., 2021). This makes all countries in the world compete to make vaccines or drugs to deal with

COVID-19 both for use in their own countries and assistance from other countries and hopes to be able to restore the world.

Indonesia has not been able to produce its vaccines. However, Indonesia has received vaccine assistance from several countries to support handling the COVID-19 pandemic. Indonesia uses several vaccine brands. The details are 3 million doses that have arrived in Indonesia (as of January 6, 2021) plus another 122.5 million doses from Sinovac, then from Novavax 50 million doses, from COVAX/Gavi 54 million doses from Astra Zeneca 50 million doses and Pfizer's batch of 50 million vaccine doses. Total the vaccines ordered were 329.5 Million doses of the COVID-19 vaccine (Gandryani & Hadi, 2021).

Since the beginning of the distribution of the COVID-19 vaccine in Indonesia, the government has suggested doing vaccines with Phase I and II doses. In contrast, the time interval between Phase I and II is one month. Entering 2022, the number of cases of COVID-19 has not subsided, so the government is advising the public to get the Phase III vaccine (Booster) on January 12, 2022, starting with health workers. Phase III vaccines (Booster) given to residents must first receive Phase I and II vaccines six months apart (Rokom, 2022).

Booster vaccines are additional vaccine doses that can provide extra protection against disease. This is because the effects of some vaccines can wear off over time. Booster vaccines can enable the body's system to recognize and respond to viruses that cause disease faster against evolving virus variants (Barnes et al., 2023).

Health workers play an essential role in delivering and administering the COVID-19 vaccine in Indonesia, especially in efforts to accelerate the coverage of COVID-19 vaccinations. In addition, health workers also play an important role in dispelling people's doubts about receiving the COVID-19 vaccine due to fears about the safety of the COVID-19 vaccine, whose level of effectiveness is unclear, and the impact after the vaccine process or post-vaccine follow-up events, so that people are more motivated in participating in the COVID-19 vaccination program (Cáceres et al., 2022).

The public's enthusiasm for the COVID-19 vaccine in South Sulawesi is urgently needed by the whole community where the implementation of the Phase III (Booster) vaccine for all people ranging from 18-60 years of age, the implementation of vaccines for all people has been implemented since July 2021. It is calculated that there is 8.83% of the community in Indonesia has carried out the Phase III vaccine (Booster).

As of June 24, 2022, the South Sulawesi province has contributed 143,338 cases of COVID-19, with a death rate of 2,464 and a recovery rate of 140,627 people. The City of Parepare is one of the cities in Indonesia that was affected by the COVID-19 virus. The knowledge of the community needs to be improved in causing various kinds of stigma, which has resulted in the people of Parepare City seeing all the government's efforts in dealing with the spread of COVID-19 negatively. In particular, the information obtained about the vaccine program for the community has harmful side effects for the body, making people afraid to carry out health checks/vaccines for COVID-19. In addition, the public's understanding of the COVID-19 vaccine and health workers is still lacking. Much negative stigma against health workers makes people increasingly reluctant to carry out health checks, and Phase III advanced vaccines (Booster).

Based on data from the Parepare City Health Office that Phase III (Booster) vaccine coverage is still low, namely as much as 16.79%; it was found that data on people who had not done the vaccine in Parepare City had already done the Phase I COVID-19 vaccine as much as 97.51% and Phase II as much as 80.57% (RAF, 2021). The Municipal Government of Parepare has taken various ways to deal with the spread of COVID-19, including carrying out a mandatory complete vaccine after the Phase II vaccine for the community, especially the elderly.

Based on the problems described, this research aims to study further the community's knowledge and stigma towards the Phase III COVID-19 vaccine (Booster) and health workers handling COVID-19 in Parepare City. So, the benefit of this research is to find out the level of public knowledge about the phase III COVID-19 vaccine (booster) and efforts to deal with COVID-19 in Parepare City. The research results can assist the government and health workers in developing information and education programs about the COVID-19 vaccine and the importance of complying with health protocols in handling COVID-19.

## METHODS

This research uses descriptive methods and data about knowledge and public stigma against Stage Vaccine III (Boosters) COVID-19 and health workers in Parepare City in 2022. This research is a descriptive study using a quantitative approach to examine apparent problems, has a large population, and prioritizes data depth, not data quantity. The population in this study are all people who live in Parepare City, totaling  $\pm$  154,524 people, the latest data in 2022, aged 20 to 50 years. The number of samples in this study was 100 people, of which 22 were in Ujung District, 32 in Soreang, 16 in Bacukiki, and 30 in West Bacukiki. By means of non-random sampling, samples are taken randomly by using an accidental sampling technique. This data collection uses two methods, namely the method of observation and questionnaires. The research questionnaire concerns stigma and public knowledge regarding the Phase III vaccine (Booster) for COVID-19 and health workers handling COVID-19. Data analysis in this study used univariate analysis. The univariate analysis aims to explain or describe the characteristics of each research variable. Generally, this analysis produces a distribution of frequencies and percentages of each variable.

## RESULTS AND DISCUSSION

### Distribution of Respondents

**Table 1. Distribution of Respondents Based on Characteristics**

Characteristics	N	%
<b>Gender</b>		
Man	45	45.0
Woman	55	55.0
<b>Age (years)</b>		
20-30	47	47.0
31-40	42	42.0
41-50	11	11.0
<b>Education</b>		
Did not finish school/did not finish elementary school	3	3.0
Graduated from elementary school/equivalent	7	7.0
SLTP/Equivalent	19	19.0
High School/Equivalent	55	55.0
Academic/Higher Education	16	16.0
<b>Work</b>		
Not Working	15	15.0
TNI/POLRI/retired	2	2.0
Worker/Worker	4	4.0
Farmer	16	16.0
Private sector employee	34	34.0
Traders/entrepreneurs	29	29.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Table 1 shows the Characteristics of the sexes of most respondents, namely women, as many as 55 respondents (55.0%), and men, as many as 45 respondents (45.0%). Characteristics based on the age of the respondents were mainly in the age group of 20-30, with 47 respondents (47.0%), and the least

were in the age range of 41-50 years, namely 11 respondents (11.0%). The education characteristics of most respondents were high school/equivalent with 55 respondents (55.0%), and the least were not completing school/not graduating from elementary school with three respondents (9.0%). Characteristics of the work of the most respondents, namely the category of private employees, as many as 29 respondents (29.0%), and the least, TNI / POLRI / Pensioners, only reached two respondents (2.0%).

**Table 2. Distribution of Respondents' Level of Knowledge of Phase III COVID-19 Vaccine (Booster) in Parepare City in 2022**

Community Knowledge Level	Tall		Low		Total	
	n	%	N	%	n	%
Edge District	13	59,1	9	40,9	22	100.0
Sorang District	19	59,4	13	40,6	32	100.0
Bakukiki district	7	43,8	9	56,3	16	100.0
West Bacukiki District	24	80.0	6	20.0	30	100.0
<b>Total</b>	<b>63</b>	<b>63.0</b>	<b>37</b>	<b>37.0</b>	<b>100</b>	<b>100.0</b>

Distribution of knowledge levels community is already high, reaching 63.0%. This proves that public knowledge of the benefits and substances of the Phase III vaccine (Booster) is good. Some people, namely 37.0%, have common knowledge because one of the reasons is not knowing how important it is to do the Phase III vaccine (Booster).

**Table 3. Distribution of Respondents' Level of Knowledge of Health Workers in Handling COVID-19 in Parepare City in 2022**

Community Knowledge Level	Tall		Low		Total	
	n	%	n	%	n	%
Edge District	16	72,7	6	27,3	22	100.0
Sorang District	20	62.5	12	37.5	32	100.0
Bakukiki District	12	75.0	4	25.0	16	100.0
West Bacukiki District	25	83.8	5	16,7	30	100.0
<b>Total</b>	<b>73</b>	<b>73.0</b>	<b>27</b>	<b>27.0</b>	<b>100</b>	<b>100.0</b>

The distribution of public knowledge is already high, reaching 73.0%. This proves that the people of Parepare City know the duties of health workers in treating patients infected with COVID-19. Meanwhile, as much as 27.0% of the public needed to understand the role of health workers in controlling and breaking the chain of COVID-19 in the community.

**Table 4. Distribution of Respondents' Stigma Levels Regarding Phase III COVID-19 Vaccine (Booster) in Parepare City in 2022**

Community Knowledge Level	Tall		Low		Total	
	n	%	n	%	n	%
Edge District	14	63,6	8	36,4	22	100.0
Sorang District	29	90.6	3	9,4	32	100.0
Bakukiki district	9	56,3	7	43,8	16	100.0
West Bacukiki District	17	56,7	13	43,3	30	100.0
<b>Total</b>	<b>69</b>	<b>69.0</b>	<b>31</b>	<b>31.0</b>	<b>100</b>	<b>100.0</b>

The distribution of high community stigma reached 69.0% due to adverse information spreading in the community, such as Phase III vaccine substances (Booster) can weaken the body's immune system and cause allergies. Meanwhile, 31.0% of the public knows the benefits of vaccination and has carried out a complete vaccine to a follow-up vaccine, namely Phase III (Booster).

**Table 5. Distribution of Respondents' Stigma Levels Regarding Health Workers in Handling COVID-19 in Parepare City**

Community Knowledge Level	Tall		Low		Total	
	n	%	n	%	N	%
Edge District	18	81.8	4	18,2	22	100.0
Sorang District	28	87.5	4	12.5	32	100.0
Bakukiki District	12	75.0	4	25.0	16	100.0
West Bacukiki District	20	66,7	10	33,3	30	100.0
<b>Total</b>	<b>78</b>	<b>78.0</b>	<b>22</b>	<b>22.0</b>	<b>100</b>	<b>100.0</b>

The distribution of high societal stigma, i.e., reached 78.0%. This is because health workers are infected with COVID-19, making people keep their distance. Apart from that, diagnosing patients/communities without further examinations are only based on symptoms and taking advantage in the case of COVID-19. Meanwhile, 22.0% of the public no longer believes in the issues circulating in the community regarding health workers carrying the COVID-19 virus.

#### **Level of Public Knowledge of Phase III Vaccine (Booster)**

Based on the research results, it was found that the level of public knowledge in Parepare City was in the high category of 63.0%. This proves that the Phase III vaccine (Booster) is already well known among the people of Parepare City. Reporting of the Phase III vaccine (Booster) is no longer new among the public, as with the COVID-19 Phase I and II vaccines. This is because it is straightforward for the public to access information about the Phase III vaccine (Booster) through any media, such as TV news, social media, and government education to the public.

This research shows, where people have high knowledge, namely 70%, in breaking the chain of COVID-19. However, Phase III (Booster) vaccine coverage is still very far from the target because many people still refuse it for several reasons, such as the safety and halalness of the vaccine and false news about vaccines, resulting in low public trust in the government (Balaputra, 2022).

In contrast to research, which stated that 48.0% of the public's level of knowledge about the Phase III (Booster) vaccine schedule was still low. Some even did not know at all. However, the implementation of the Phase III vaccine (Booster) based on recapitulation data from the Parepare City Health Office shows that the number of people who have received the Phase III vaccine (Booster) as of June 26, 2022, only reached 16.79%. One of the reasons is that the public does not yet know how important it is to do the Phase III vaccine (Booster). Apart from that, there is also a requirement that the timeframe for administering the Phase III vaccine (Booster), which is six months after the administration of the Phase II vaccine, so there is no time/opportunity to do a complete vaccine.

This study shows that the highest public knowledge of the Phase III vaccine (Booster) is in West Bacukiki District, amounting to 24 respondents with a percentage of 80.0%. This is because West Bacukiki is directly adjacent to Barru Regency, which is the main route for the province and the main route for transmission of COVID-19 entering Parepare City so that people in West Bacukiki District seek information and keep abreast of developments on COVID-19. One of the efforts that the public can make to avoid the risk of contracting COVID-19 is to get a complete vaccination after doing the Phase III vaccine (Booster).

This proves that the main route between cities/regencies is the main center for the Parepare City government to break the COVID-19 chain between districts and within the community, especially in administering the complete vaccine and Phase III (Booster) vaccines.

However, this study is different from research, with the results obtained that there were still 56 respondents, 26.7% had a different perception of Phase III (Booster) vaccines. Ultimately, it also affected their unwillingness to do the Phase III vaccine (Booster). Namely, there were still 71 respondents, 33.8%. Meanwhile, in this study, the level of knowledge that was still low was found in the Bacukiki District, amounting to 43.8%. The lack of readiness of the community due to the culture

and customs of the people, who are still strong and refusing to be interviewed, has slowed the entry of information in Bacukiki District, resulting in delays in administering the Phase III vaccine (Booster) (Ainun et al, 2021).

This research is in line with research, that the level of knowledge about the Phase III vaccine (Booster) is high, namely 90%. However, there is a lack of information or outreach, education, and the use of various information media to provide understanding and understanding for the community so that they are interested in carrying out a complete vaccine, namely the Phase III vaccine (Booster) (Mardiono et al, 2021).

### **Level of Public Knowledge of Health Workers in the Treatment of COVID-19**

The results of the study show that the level of public knowledge of health workers in handling COVID-19 is included in the high category, namely 73.0%. This proves that the people of Parepare City know the duties of health workers in treating patients who have contracted COVID-19. At the beginning of the COVID-19 pandemic, the media was busy talking about the role of health workers in this case, handling COVID-19 with the main task of health workers to reduce the spread of COVID-19 in the community. Thus, a collaboration between health workers and the community is needed so that they can stop the transmission of COVID-19, which increases public knowledge about the roles and duties of health workers during the COVID-19 pandemic.

The level of public knowledge of health workers in Ujung District is included in the high category, reaching 72.7%. This is because the Ujung sub-district had the most cases at the start of the COVID-19 pandemic. Hence, health workers focused more on educating the public to reduce the chain of transmission of COVID-19 in the Ujung sub-district. Meanwhile, in Bacukiki, the level of public knowledge is included in the high category, reaching 75.0%. This is due to the high level of public knowledge in Bacukiki District due to the enthusiasm of health workers when carrying out socialization or counseling received positively.

This research is different from the research, using Pubmed and google scholar electronic search databases where the public has insufficient knowledge of health workers, namely as much as 30.0%. This is due to the lack of information received by the public and the government's lack of conservative attitude to educating regarding health services in handling COVID-19 (Astuti et al. 2021).

The level of knowledge in West Bacukiki District is 83.3%. This number is because the people in West Bacukiki Sub-District often participate in outreach conducted by health workers and are in border areas between districts/cities; the community is aware of the critical role of health workers in handling COVID-19. Whereas in Soreang District, it reached 62.5% due to the positive cases of COVID-19 that occurred at the Cempae Health Center, so the socialization of health workers in the community was hampered.

### **Level of Community Stigma Against Phase III (Booster) COVID-19 Vaccine**

The study results show that the community's stigma towards Phase III vaccine information (Booster) is in the high category, namely 69.0%. This is because public awareness of the Phase III vaccine (Booster) is still low due to issues of spreading negative information. For example, Phase III vaccine substances (Booster) can weaken the body's immunity and cause allergies, making people not interested in doing the whole vaccine. Then people fear the content of the Phase III vaccine substance (Booster) because people think it will be dangerous for people who suffer from underlying diseases, unsafe for the body, and incompatibility with the vaccines provided.

The number of issues and information obtained through social media has caused so much stigma in the community, especially in Soreang District, reaching 90.6%. So people have a high stigma, and there is no time to do Phase III (Booster) vaccines.

In contrast to research, the community has a negative stigma in the COVID-19 vaccination program of 72.9%. This causes the coverage of the Phase III vaccine (Booster) to be very far from the target and low confidence in the Phase III vaccine (Booster) (Sanjaya et al. 2022).

The level of stigma in Ujung District is 63.6% regarding the spread of issues regarding the Phase III vaccine (Booster), which has a high dose and contains dangerous substances and lard. Moreover, COVID-19 cases have not occurred, so people think that the Phase III (Booster) vaccine does not have to be done. This stigma also occurs in people in Bacukiki District, which reaches 56.3%, and West Bacukiki District, as much as 56.7%. The community refuses to do the Phase III vaccine (Booster) and also because the Phase III vaccine (Booster) is a government program to take advantage of the community.

#### **Level of Community Stigma Against Health Workers in Handling COVID-19.**

Where people have a high stigma reaching 78.0%, which is caused by health workers being infected with COVID-19, which makes people keep their distance; in addition, diagnosing the patient/community without carrying out further examinations is only based on symptoms and benefits in the case of COVID-19 so that it becomes one of the driving factors for the community to make decisions in the form of action in implementing the Phase III vaccine (Booster). One of the stigmas that have developed in society is health workers who are the source of the COVID-19 virus, discrimination against patients carrying out optimal tasks, taking advantage of the public in the financial sector, manipulation and information.

This research aligns with research show that negative stigma and discrimination against health workers reached 70%. This is due to the public's concern for health workers directly exposed to COVID-19 patients (Hermawan & Mas'ud, 2022).

According to information from cheerful medical staff for COVID-19, community stigma in Soreang District reached 87.5%, which was caused by the presence of health workers who were susceptible to contracting COVID-19 at the Cempae Health Center. Hence, people were afraid and kept their distance from health workers. Meanwhile, in Ujung Subdistrict, as much as 81.0% of which was caused by health workers diagnosing the community without objective evidence, and health services when taking swabs were carried out roughly.

This research show there is an increasing number of reports of public stigma against medical personnel in hospitals from areas affected by the pandemic in Indonesia, where medical personnel gets social behavior such as isolating and avoiding direct contact with health workers because it can spread the transmission of the virus to the community (Azimah, 2021).

In Bacukiki District, the stigma is 75.0%, and in West Bacukiki District, it reaches 66.7%. This indicates that the community's stigma against health workers in Parepare City is easily spread through environmental and social media. Due to a lack of public awareness received. So that there is an exaggerated response from any side of the community which results in people not trusting and not caring anymore about what is conveyed by health workers, both the risks and the development of COVID-19 in Parepare City.

#### **CONCLUSION**

Based on the results of research on community knowledge and stigma regarding the COVID-19 vaccine stage III (Booster) and health workers in handling COVID-19 in Parepare City, it can be concluded that the level of public knowledge of the COVID-19 phase III vaccine (Booster) has a high category of 63%, the level of community stigma towards the stage III vaccine (Booster) was in the high category of 69%, the level of public knowledge of health workers was in the high category of 73%, and the level of community stigma towards health workers in Parepare City was in the high category of 78%.

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