



Development community participation questionnaire to understand the factors that influence Covid-19 booster vaccination in Yogyakarta, Indonesia

Kuncoro Kuncoro^{a,1,*}, Ezi Emira^{b,2}, Eka Kurnia Sari^{c,3}, Nurul Kodriati^{d,4}, Sitti Nur Djannah^{e,5}

^{a,b,d,e} Faculty of Public Health, Ahmad Dahlan University, Yogyakarta, Indonesia

^c Social Welfare Corporation Uguisuen, Okayama, Japan

*Corresponding Author : Kuncoro Kuncoro (kuncoro2107053007@webmail.uad.ac.id)

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ABSTRACT

Covid-19 has resulted in fatalities and property losses not just in Indonesia but across the globe. Indonesia has the second-highest number of Covid-19 cases in Southeast Asia. The government has attempted several efforts, including vaccination. The enormous impact of vaccination in preventing illness, disability, and even death from diseases that can be prevented by immunization has been documented throughout history. The goal of COVID-19 immunization is to prevent the spread of COVID-19, lessen COVID-19-related morbidity and mortality, create community-wide herd immunity, and protect individuals against COVID-19. Achievement of booster vaccinations in the work area of PHC Playen 1 is only 41%; there is a gap of 9% from the target. This research aims to create assessment tools to identify the variables that may affect community involvement in the COVID-19 booster immunization program. Making a legitimate and trustworthy questionnaire to determine the factors that influence community participation in booster vaccinations in the working area of UPT PHC Playen 1 is the research's unique goal. This study uses a cross-sectional research design and is descriptive. The research was conducted in October 2022. Questionnaires were distributed to pre-selected respondents using the purposive random sampling method. Testing the validity and reliability of the questionnaire requires a sample of 30 people from the PHC Playen 1's working area to make up the sample. The questionnaire had five sections: the respondent's sociodemographic, their willingness, their level of knowledge, the regulation of booster vaccinations, and the community's access to booster immunization services. The data were validated and verified employing Cronbach Alpha score of 0.861 and a Pearson correlation test result showing that each statement item was valid and trustworthy by having a correlation value of higher than 0.361. Thus, this questionnaire could be employed in other related research.

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1. Introduction

The non-natural disasters brought on by COVID-19 have influenced the number of fatalities and property losses, the size of the disaster's impacted area, and broad socio-economic issues in Indonesia. Through Presidential Decree of the Republic of Indonesia Number 12 of 2020 about Stipulation of Non-Natural Disasters with the Spread of Corona Virus Disease 2019

(COVID-19) as a National Disaster, the government has declared this man-made disaster to be a national disaster.

In the year 2021, there were 307,153,229 confirmed cases of COVID-19 worldwide, resulting in 5,488,628 fatalities. There were 144,096 fatal COVID-19 cases and 4,262,720 confirmed cases in Indonesia in 2021. After India, Indonesia has the second-highest number of COVID-19 cases in Southeast Asia.

The most successful and efficient public health strategy for preventing some extremely severe infectious diseases is vaccination. History has shown the significant contribution that vaccination has made to preventing vaccine-preventable diseases from causing illness, disability, and even death in the global society (PD3I). To combat the COVID-19 pandemic, COVID-19 immunization seeks to develop herd immunity in the community, protect the community from COVID-19 so they may maintain their health, and reduce COVID-19 transmission/transmission, morbidity and mortality from COVID-19. productive both socially and economically [1–5].

According to Circular Letter HK.02.02/II/252/2022 regarding Advanced Dose of COVID-19 Vaccination (Booster), the study's findings indicate that antibodies start to decline six months after receiving the entire primary dose of COVID-19 vaccination, indicating that additional or booster doses are required to increase protection for individuals, particularly in vulnerable groups of people. People over the age of 18 are the intended audience for the concurrent COVID-19 booster immunization, which will begin on January 12, 2022 [4]. The responders' readiness to take part in the Covid-19 booster immunization campaign was contained in the second section. The respondents' level of awareness on the Covid-19 booster shot was contained in the third section. The fourth section covers rules established by the government about the Covid-19 booster shot. The public can access Covid-19 booster vaccination treatments in the fifth section [6-8].

Up till May 2022, Indonesia has a vaccine coverage rate for COVID-19 of 96.34% for dose 1, 80.58% for dose 2, and 22.52% for dose 3. DIY has a COVID-19 vaccination coverage of 101.7% for vaccine dose 1, 94.38% for vaccination dosage 2, and 34.18% for vaccination dose 3. Up till May 2022, Gunung Kidul Regency had 85.23% coverage for dose 1 of the COVID-19 vaccine, 79.28% for dosage 2, and 22.08% for dose 3. The government's aim of 50% vaccination coverage for COVID-19 dose 3 in Gunung Kidul Regency is still far from being reached [9,10]. In the Working Area of PHC Playen 1, vaccination coverage at doses 1 and 2 was 81.16%, 72.86%, and 34.86%, respectively [11,12].

The goal of this project is to create assessment tools or questionnaires to identify community involvement in the Covid-19 booster vaccination campaign. Making a legitimate and trustworthy questionnaire to determine the factors that influence the level of community participation in booster vaccinations in the working area of public health center (PHC) Playen 1 is the research's unique goal.

2. Method

This study employed a cross-sectional research design and was descriptive in nature [13,14]. The research was conducted in October 2022, using the purposive random sampling method, questionnaires were distributed to pre-selected respondents to conduct the survey [15,16]. Testing the validity and reliability of the questionnaire required a sample of 30 people [17]. There were 5 parts to the questionnaire that was used. The respondents' sociodemographic information was included in the first section. This study contained sociodemographic information on age, gender, marital status, education, employment, and income [18-21]

Direct distribution of the generated questionnaires to the community followed. The data was then validated and reliability-tested using the SPSS series 26 program and Microsoft Excel. [22] Questionnaire statements were valid if the *r* count value is greater than the *r* table value [16]. For significant assertions and not covered by other statements, the researcher will first revise the statement if it was false before ultimately returning it to the respondent. The researcher eliminated items from the questionnaire that new assertions have replaced. A reliability test was performed after all claims had been verified as authentic. If the obtained Cronbach Alpha value was higher than 0.70, the claim is considered reliable. Statements on the questionnaire were categorized as either favorable or unfavorable. Each positive statement's component was scored on a Likert scale ranging from 1 to 5, where 1 indicated strongly disagree and 5 indicated strongly agree. While negative remarks were evaluated differently. Responses for favorable questions were rated from 1 for Strongly Disagree (STS) to 5 for Strongly Agree (SS). While unfavorable questions received opposite values.

To protect the respondents' privacy, personal information including complete names were left out of the questionnaire. After being informed about the research, respondents consented to participate by signing a form.

3. Results and Discussion

3.1. Results

The purpose of the study tool created was to identify the variables that would affect community involvement in the Covid-19 booster immunization campaign. Age, gender, marital status, education, employment, income, knowledge, regulation, and availability to Covid-19 immunization services were the variables that were examined in this study [7,8,24–26]. The characteristics of the research subjects are shown in table 1. Gender of research subjects is equally divided, 50% male and female, the age category is dominated by the age under 50 years 60%, 73.3% of research subjects were married, with the most education at the high school level 76.7%. Most of the research subjects work 25%, with income above the minimum wage of 63.3%. 5% of research subjects who had experienced a previous Covid-19 infection.

Table 1. Descriptive Analysis of Demographic Characteristics of Research Subjects

Variable	Amount	
	n=30	%
Gender		
Male	15	50
Female	15	50
Age (years)		
18-30	12	40
31-50	6	20
51-65	9	30
66-80	3	10
Marital Status		
Married	22	73,3
Unmarried	8	26,7
Education		
Elementary School	0	0
Junior High School	1	3,3
Senior High School	23	76,7
University	6	20
Work		
Employee	25	83,3
Unemployee	5	16,7

Variable	Amount	
Income		
≥ Rp.2.000.000	19	63,3
< Rp.2.000.000	11	36,7
Infected state		
Once or more	5	16,7
Never	25	83,3

The statements included in this questionnaire must all be true. Testing the relationship between the values of each statement and the sum of the statements can reveal this. To evaluate the reliability of the assertions in this questionnaire, the Pearson correlation test is utilized as a correlation test. The Pearson correlation test findings are used to determine the value of r . For a statement to be considered valid, the calculated r value must be higher than the r table value. For the 30 responders, the value of the r table is 0.361. If any statement items are discovered to be invalid, the statement items are amended, and the questionnaire is then redistributed. If after redistributing the questionnaire invalid statements are still discovered, then these statements can be eliminated if there exist other representative statements [27]. The following table lists the findings of the validity test that was done with 30 respondents.

Table 2. First result of Validity Test

No	Statement	1st test		2nd test		3rd test	
		Coefficient correlation	Con clusion	Coefficient correlation	Con clusion	Coefficient correlation	Con clusion
Participation							
1	The Covid-19 booster vaccination is administered by the government for the sake of public health.	0,398	Valid	0,621	Valid	0,389	Valid
2	The Covid-19 booster shot must be given until it is finished.	0,737	Valid	0,378	Valid	0,373	Valid
3	Families do not need to be advised to get booster shots.	0,85	Valid	0,561	Valid	0,59	Valid
4	Booster immunization is crucial in the fight against Covid-19.	0,478	Valid	0,502	Valid	0,449	Valid
5	Even if you have to pay, you must still receive the Covid-19 booster shot.	0,274	Not Valid	-	-	-	-
6	Booster vaccinations are particularly successful at stopping transmission.	0,511	Valid	0,409	Valid	0,506	Valid
Knowledge							
1	Booster shots boost the body's resistance against the Covid-19 infection.	0,731	Valid	0,604	Valid	0,72	Valid
2	Religious beliefs do not preclude having the Covid-19 booster immunization. Health regulations are not need to be followed if you have received a booster shot.	0,319	Not Valid	-	-	-	-
3	Booster shots are safe to administer.	0,425	Valid	0,424	Valid	0,402	Valid
4	Patients with managed diabetes and hypertension are not advised to have booster shots.	0,416	Valid	0,487	Valid	0,402	Valid
5	Herd immunity cannot be created with booster shots.	0,842	Valid	0,821	Valid	0,841	Valid
6	Booster shots boost the body's resistance against the Covid-19 infection.	0,858	Valid	0,597	Valid	0,585	Valid
7	Before obtaining the Covid-19 booster vaccine, a thorough laboratory evaluation is required.	0,467	Valid	0,231	Not Valid	-	-
Regulation							
1	In order to qualify for Direct Cash	0,844	Valid	0,831	Valid	0,821	Valid

	Assistance, booster vaccinations are administered (BLT).						
2	For the purpose of administering travel vaccinations, booster shots are administered.	0,655	Valid	0,398	Valid	0,535	Valid
3	The officers concerned must have received encouragement at the wedding celebration.	0,185	Not Valid	-	-	-	-
4	Booster vaccinations are administered for reasons other than gaining access to marketplaces, amusement parks, and retail stores.	0,764	Valid	0,864	Valid	0,816	Valid
5	Participate in the recommended booster shots to avoid upsetting their surroundings and their neighbors.	0,96	Valid	0,581	Valid	0,59	Valid
6	If you have had shots for diseases 1 and 2, the government does not mandate a booster shot.	0,364	Valid	0,158	Not Valid	-	-
7	Get your booster shots so you can go outside of the city.	0,647	Valid	0,645	Valid	0,613	Valid
	Access						
1	To utilize up the stock of vaccines before they expire, booster shots are administered.	0,247	Not Valid	-	-	-	-
2	It can be difficult to find places to get booster shots.	0,736	Valid	0,981	Valid	0,743	Valid
3	A lengthy wait is necessary to receive a booster shot.	0,564	Valid	0,843	Valid	0,827	Valid
4	In particular, serving senior people requires picking up the slack.	0,672	Valid	0,652	Valid	0,589	Valid
5	The Playen 1 Health Center UPT area makes it incredibly simple to get a booster shot.	0,691	Valid	0,56	Valid	0,53	Valid
6	It is insufficient to have booster vaccinations available.	0,572	Valid	0,683	Valid	0,662	Valid
7	In hospitals outside of the PHC, booster shots are available.	0,401	Valid	0,268	Not Valid	-	-

Based on the validity test of the first stage using the Pearson correlation test, it was obtained that respondents were willing to pay for booster vaccines with a correlation coefficient of 0.274. A correlation value of 0.319 was obtained for statements about religion which did not prohibit the carrying out of the Covid-19 booster vaccination. The statement that it is important for staff at weddings to receive a booster vaccine first has a correlation coefficient of 0.185. Booster vaccines are carried out to use up existing vaccine supplies to obtain a correlation value of 0.247. The four statements are invalid in the first stage of testing because they have a Pearson correlation value of less than 0.361. This means that the four statements are invalid and cannot be used in a research questionnaire to measure factors that influence community participation in the Covid-19 booster vaccination in the PHC Playen 1 area. Twenty-three statements, which were then redistributed with 30 different respondents.

The results of the second phase of the validity test showed a statement that laboratory tests must be carried out before receiving a booster vaccine, obtaining a correlation coefficient of 0.231. The government's statement not requiring the public to take booster vaccines after receiving stage 1 and 2 vaccines has a correlation coefficient of 0.158. The Pearson correlation test showed that booster vaccination statements could be obtained outside the PHC at 0.268. The three statements proved to be invalid and were removed from the questionnaire, so that a new questionnaire was composed consisting of 20 statements. Furthermore, questionnaires

were distributed again to 30 other respondents to measure the validity of this research questionnaire. The results of the third validity test show that all of the questionnaire statements have an r value greater than 0.361, so it can be concluded that all twenty statements in the questionnaire are valid.

Questionnaire Reliability Test

Reliability testing was done after the questionnaire's statements had all been deemed valid. A reliability test was conducted to demonstrate that the generated questionnaire may be used frequently in different investigations. The statements in this questionnaire were reliable with value of Cronbach Alpha 0,861.

3.2. Discussion

This research activity's questionnaire was created to study community engagement in the co-19 booster immunization campaign. The study's dependent variable was participation in booster immunization campaigns by the community. The independent variables in this study were public awareness of booster vaccinations, government restrictions on booster vaccinations, and community access to booster vaccinations. A questionnaire was then created from each variable, referencing each variable, yielding a total of 20 statement items.

The statement items in this questionnaire are deemed to be valid if they can accurately capture the original statement's meaning. Finding the association between the scores of each statement item and the overall score of the statements from all respondents served as the validity test for this questionnaire. There were 30 respondents that participated in the trial of the study questionnaire that had been created. With a significance level of 5%, the r table value for 30 respondents is 0.361. The statement item is invalid if the calculated r value from the Pearson correlation test results is less than the value listed in the r table [23,28]. If a statement item is invalid, phrase adjustments may be made to help respondents grasp the study statement, or the statement item may be eliminated if other statements already adequately express it.

According to the findings of the initial validity test, up to 4 statement items exhibited correlation coefficient values of 0.361. As a result, these statement items were removed from the research questionnaire because they cannot be used to gauge community involvement in the co-19 booster immunization program since they are not valid. In addition, the researcher ran a second validity test using 30 different respondents from the study respondents for the first validity test, using a total of 23 statement items. Three statements with a correlation coefficient of 0.361 were found from the results of the second validity test. This demonstrates that it is impossible to gauge community involvement in the co-19 booster immunization program using the three statement points. The validity of the 20 new assertions was then again tested by the researcher using as many as 30 respondents, all of whom were fresh to the test. The third validity test produced a correlation value for each statement item of more than 0.361 utilizing 20 research statements about community involvement in the Covid-19 vaccination campaign. The 20 statement items created to gauge community involvement in the Covid-19 booster immunization campaign were all deemed valid, it can be inferred.

A validity test is a test carried out on an instrument to determine its level of precision, accuracy, and correctness in performing its role as a measuring tool. The degree of accuracy of a tool employed as a measuring device to ascertain the contents of the subject or target to be measured is known as the validity of the research instrument. When an instrument can show or demonstrate a phenomenon that the researcher wants to measure, it is considered to be valid. [29] It is important to adjust the research instrument that has been created when the instrument

cannot yield adequate validity and is therefore not yet appropriate for use as a research instrument.

Two techniques—item validity and component validity—were used to evaluate the study instrument's validity. Item validity is used when the research instrument is constructed and created to contain only one variable to be examined, as opposed to factor validity, which is used when the research instrument uses many factors. By calculating the correlation between the score received and the overall score received, these two validity models were tested. The correlated score in the factor validity test is the factor score with the total factor score, whereas the correlated score in the item validity test is the item/item question/research statement with the overall score.

Whether or not the prepared research instrument is practical for use in research activities as a research instrument depends on the findings or value of the correlation coefficient achieved. The degree of relevance that researchers typically utilize also varies. The conventional threshold for significance is 1% (0.01) or 5% (0.05). The Pearson correlation test is one of the correlation tests used to evaluate the reliability of the research tool. Through this test, the measured score and the final score are correlated. In this study, the total score and each item score provided by the research participants were correlated to derive a r value. The statement item is correct if the calculated r value obtained is higher than the r table value. According to the findings of the Pearson correlation test for research statements about community involvement in the Covid-19 vaccination program, the correlation value for each statement item was found to be greater than 0.361, indicating that the 20 statement-strong research instrument was deemed valid in its entirety.

From the reliability test findings, a Cronbach's Alpha value of 0.861 was calculated. The community participation research questionnaire for the Covid-19 booster immunization program has 20 reliable statement items, as shown by the Cronbach's Alpha value achieved, which is greater than 0.70. As a result, the research questionnaire can be utilized repeatedly in subsequent studies. The analysis's findings revealed that the study questionnaire that was created had a high degree of reliability. The questionnaire for community engagement research on the Covid-19 booster immunization program is also appropriate for use as a research tool.

The capability of a research instrument to be employed as a measuring device in the execution of research operations is known as its reliability. This suggests that any research question can produce answers or results that are consistent among study subjects. Additionally, stability, consistency of measuring devices, forecasting capacity, and correctness of a research tool are all examples of reliability. If a research tool can generate accurate output data, it is said to be appropriate for use in research operations [29]

Depending on the concepts that will be applied by researchers to conduct testing and analysis, there are several options for the foundation for making decisions on the dependability of research instruments. According to some experts, a survey is considered credible if the Cronbach's Alpha value achieved is more than 0.60 [30] Additionally, several experts agree that a tool is considered dependable for use in research activities if the Cronbach's Alpha value achieved is greater than 0.70. According to this theory, the research instrument is considered to have adequate reliability if the Cronbach's Alpha value obtained is greater than 0.70, and the research questionnaire can be said to be reliable and have a high level of reliability if the Cronbach's Alpha value obtained is greater than 0.80. strong / reliable. The justification demonstrates that the author's study questionnaire has a high reliability value of (0.861), as is demonstrated above. In order to quantify community involvement in the Covid-19 booster immunization campaign, a credible and repeatable research tool to gauge people's opinions

toward the program must have been created. However, using the most recent information or theories discovered or further developed, the outcomes of the construction of this questionnaire can still be improved.

4. Conclusions

The questionnaire developed by the author to measure people's attitudes about the Covid-19 booster vaccination program was valid and reliable for use in research in the community, with a total of 20 statements. This questionnaire measures demographic factors, knowledge, access to vaccine services, and regulations on community participation in the Covid-19 booster vaccine. This questionnaire is open in nature where every researcher who will take advantage of this questionnaire, can directly use this questionnaire either by testing the validity and reliability again or directly using it as a research instrument. For future researchers who want to develop the questionnaire that has been compiled, they can also directly carry out the stages of developing the questionnaire.

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Author contributions

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Disclosure statement

I declare that there is no conflict of interest regarding the publication of this paper. I, the corresponding author on behalf of all contributing authors, hereby declare that the information given in this disclosure is true and complete to the best of my knowledge and belief.

Ethics and consent

When reporting experiments on patients or population surveys, please indicate whether the procedures followed were approved by the local ethics committee and/or in accordance with the Helsinki Declaration of 1975, as revised in 2008

REFERENCES

1. Adams SH, Schaub JP, Nagata JM, Park MJ, Brindis CD, Irwin CE. Young Adult Perspectives on COVID-19 Vaccinations. *J Adolesc Health*. 2021;69:511–4.
2. Zhang K, Fang Y, Chan PS, Cao H, Chen H, Hu T, et al. Behavioral Intention to Get a Booster Dose of COVID-19 Vaccine among Chinese Factory Workers. *Int J Environ Res Public Health*. 2022;19.
3. Singh A, Khillan R, Mishra Y, Khurana S. The Safety Profile of COVID-19 Vaccinations in the United States. *Am J Infect Control*. 2022;50:15–9.
4. Kemenkes RI.). Surat Edaran Nomor:HK.02.01/1/2007/2021 Tentang Vaksinasi Covid-19 Dosis Lanjutan (Booster). 2022.

5. Chencula S, Karunakaran P, Sharma S, Chavan M. Current Evidence on Efficacy of COVID-19 Booster Dose Vaccination against the Omicron Variant: A Systematic Review. *J Med Virol*. 2022;94:2969–76.
6. Wirawan GBS, Harjana NPA, Nugrahani NW, Januraga , P.P. Health Beliefs and Socioeconomic Determinants of COVID-19 Booster Vaccine Acceptance: An Indonesian Cross-Sectional Study. *Vaccines (Basel)*. 2022;10(724).
7. Paul E, Fancourt D. Predictors of uncertainty and unwillingness to receive the COVID-19 booster vaccine: An observational study of 22,139 fully vaccinated adults in the UK. *Lancet Reg Health Europe*. 2022;14.
8. Qin C, Wang R, Tao L, Liu M, Liu J. Association Between Risk Perception and Acceptance for a Booster Dose of COVID-19 Vaccine to Children Among Child Caregivers in China. *Front Public Health*. 2022;10(68).
9. Kemenkes RI. Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/Menkes/9806/2020 Tentang Penetapan Jenis Vaksin Untuk Pelaksanaan Vaksinasi Corona Virus Disease 2019. 2020.
10. Kemenkes RI. Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/Menkes/4638/2021 Tentang Petunjuk Teknis Pelaksanaan Vaksinasi Dalam Rangka Penanggulangan Pandemi Corona Virus Disease 2019 (COVID-19). 2021.
11. Dinas Kesehatan Kabupaten Gunungkidul. Laporan Capaian Vaksinasi Dosis 1,2 dan 3. Kabupaten Gunungkidul. 2022.
12. Puskesmas Playen II. Profil Puskesmas Playen II. Gunungkidul; 2021.
13. Dahlan S. Pintu Gerbang Memahami Epidemiologi, Biostatistik, dan Metode Penelitian. 2nd ed. Jakarta: PT. Epidemiologi Indonesia; 2018.
14. Notoatmodjo S. Metodologi Penelitian Kesehatan . Bandung: PT.Rineka Cipta; 2002.
15. Dahlan S. Besar Sampel Dalam Peneltian Kedokteran dan Kesehatan . 5th ed. Jakarta: PT. Epidemiologi Indonesia; 2020.
16. Budiarto E. Biostatistik Untuk Kedokteran dan Kesehatan Masyarakat . Jakarta: EGC; 2001.
17. Nuryani. Validitas dan Reliabilitas Kuesioner Pengetahuan, Sikap dan Perilaku Gizi Seimbang Pada Remaja. *Jurnal Gizi dan Kesehatan*. 2019;3(2):37–46.
18. Yadete T, Batra K, Netski D, Antonio S, Patros M, Bester J. Accessing Acceptabilty of Covid-19 Vaccine Booster Dose among Adult Americans. 2021.
19. Balan A, Bejan I, Bonciu S, Eni. Romanian Medical Students Attitude Towards and Perceived Knowledge on Covid-19 Vaccination. 2021;
20. Folcarelli L, Miraglia D, Corea F, Angelillo I. Intention to Receive the Covid-19 Vaccine Booster Dose in University Community in Italy. . 2022;10(2).
21. Ma L, Yang J, Zhang T, Huang Q, Yang Y. Willingness Toward Covid-19 Vaccination, Coadministration with Other Vaccines and Receive a Covid-19 Vaccine Booster. 2022.
22. Ngambut K. Pengantar Biostatistik (Aplikasi Penggunaan SPSS). Yogyakarta: Gosyen Publishing; 2011.
23. Dahlan S. Langkah-Langkah Membuat Proposal Penelitian Bidang Kedokteran dan Kesehatan . 5th ed. Jakarta: Sagung Seto; 2018.
24. Wong LP, Alias H, Siaw YL, Muslimin M, Lai LL, Lin Y, et al. Intention to receive a COVID-19 vaccine booster dose and associated factors in Malaysia. *Hum Vaccin Immunother*. 2022;18.
25. Sonderskov KM, Vistisen HT, Dinesen PT, Ostergaard SD. positive update on COVID-19 booster vaccine willingness among Danes. *Dan Med J*. 2022;69.
26. Jairoun AA, Al-Hemyari, el Dahiyat, Shahwan M, Al-Ani M, Habeb M, et al. Assessing Public Knowledge, Attitudes and Determinants of Third COVID-19 Vaccine Booster Dose Acceptance: Current Scenario and Future Perspectives. *JPharm Policy Pract*. 2022;15(26).
27. Notoadmodjo S. Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta; 2014.

28. Dahlan S. Statistik Untuk Kedokteran dan Kesehatan: Deskriptif, Bivariat dan Multivariat Dilengkapi Aplikasi Menggunakan SPSS . 6th ed. Jakarta: PT.Epidemiologi Indonesia; 2020.
29. Yusup F. Uji Validitas dan Reliabilitas. Jurnal Tarbiyah: Jurnal Ilmiah Kependidikan. 2018;7(1).
30. Ghazali I. Aplikasi analisis multivariate dengan program IBM SPSS 25. Semarang: Badan Penerbit Universitas Diponegoro; 2018.