The Correlation of Community's Perception and Anxiety of Adverse Events Following Immunisation Covid-19 in The City District Kediri City

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ABSTRACT

Keywords: Perception Anxiety Covid-19 Vaccine **Background:** The Covid-19 pandemic is now entering its second year of 2020. Based on data from WHO, in 2020 it was stated that WHO had identified 10 of the 42 COVID-19 vaccine candidates who had gone through the third clinical trial stage, While in Indonesia there are 3 types of Covid-19 vaccines. (Putri, 2020). Currently, a policy program has been issued, that is vaccination activities are carried out by the Indonesian government as an effort to have community immunity (herd immunity), especially in East Java the coverage of the Covid-19 vaccine is still low below 40%. (Kompas, 2021). This allows people to still be worried about side effects of the Covid-19 vaccin. The purpose of this study is to analyze the public's perception and anxiety of adverse events following immunisation.

Methods: This type of research is analytic with a cross sectional approach. The study was conducted in the City District, Kediri City with a sample that met the research criteria of 140 respondents using a simple random sampling technique. Contingency coefficient test was carried out with SPSS and the level of significance = 0.05.

Results: Based on the test results obtained p value 0.000 < significance (0.05) so that the research hypothesis is accepted which means that there is a relationship between public perception and anxiety of adverse events following immunisation Covid-19 Vaccine.

Conclusions: Socialization activities about the Covid-19 vaccine still need to be carried out to provide understanding to the whole community.

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I. INTRODUCTION

According to Matsumoto & juang, perception is the process of gathering information about the world through the sensing that we have. Each person's perception is different in interpreting the sensing he receives. Public perception of the Covid-19 vaccine has an impact of course on community participation. As for the data of people who have received the first Covid-19 vaccine by 61.5% and 39.2% have received the second Covid-19 Vaccine and 32,2% have received the third Covid-19 Vaccine. Based on the description above it can be concluded that public participation in the interest to get the Covid-19 vaccine with high enthusiasm, as a form of formation of immunity (herd immunity). The purpose of this study is to find out the Relationship of Public Perception and Anxiety to The Incidence of Follow-up To Covid-19 Vaccine in Kediri City Sub-District. Anxiety experienced by the community is also related to the type of vaccine available. The public began to look for information about the side effects of various types of vaccines that will be obtained. This anxiety and fear increases when the public gets information about of adverse events following immunisation Covid-19. Based on survey data, 22% were doubtful about the effectiveness of Vaccine Covid-19 and 12% were concerned about the side effects of Covid-19 vaccine. Based on the publication on Pubmed August 2021, the long-term impact of Covid-19 80% of survivors experienced 1% of the effects of smaping, while the incidence of long-term effects is generally 1 year including: 58% fatigue, 44% headache, 27% visual impairment, 25% hair loss, 24% naïve tightness (dyspnea). Public participation in the interest in getting the Covid-19 vaccine with high enthusiasm, as a form of formation of immunity (herd immunity). The high participation of the community to get the Covid-19 Vaccine is in line with community anxiety as well as the effects of Post-Immunization Follow-up Events (KIPI in Indonesian). Based on survey data, 22% have doubts about the effectiveness of Vaccine-19 and 12% concerns about the side effects of Covid-19 Vaccine.

II. METHOD

This research with this type of analytical research uses a crosssectional approach. The study sample was respondents who conducted the Covid-19 Vaccine in Kediri City Police using a sampling technique with simple random sampling purposive and obtained 140 respondents at the data collection on October 10 - 31, 2021. Independent variables in this study is the public's perception of the covid-19 vaccine, and the dependent variables in This study is anxiety of people who will get vaccinated Covid-19. Using analysis Contingency coefficient.

III. RESULTS AND DISCUSSION

1. Results

The results showed that the general data consisted of Characteristic Respondents based on Age, Gender, Education, Occupation, Information Sources, Public Perception of KIPI covid-19 vaccination, Public anxiety when going to undergo Covid-19 vaccination, while the special data in this study is the relationship of public perception about adverse events following immunisation Covid-19 with anxiety which will to Covid-19 vaccination.

a. Age

Table 1. Characteristics of Study Respondents based on Age in Kediri City District, Kediri City

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No	Age	Total	Percentage (%)
1	21-35 years	27	19,0
2	36-45 years	47	33,1
3	46-60 years	39	27,5
4	>60 years	29	20,4
	Total	142	100

Source: Primary Data, 2021

From the results of the study, the most respondents aged 36-45 years, are 53 respondents (37.8%) and a small percentage of respondents aged >60 years are 15 respondents (10.7%)

b. Gender

Table 2. Characteristics of Study Respondents based on Gender in Kediri City District, Kediri City

No	Age	Total	Percentage (%)
1	Man	63	45,0
2	Woman	77	55,0
	Jumlah	140	100

Source: Primary Data, 2021

From the results of the study, the most respondents based on gender are woman 77 respondents (55,0%) and a small percentage of respondents based on gender man, are 63 respondents (45,0%)

c. Education

Table 3. Characteristics of Study Respondents based on Graduates Education in Kediri City District, Kediri City

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No	Education	Total	Percentage (%)		
1	Graduate junior high school	57	40,7		
2	High school graduation	83	59,3		
'	Jumlah	140	100		

Source: Primary Data, 2021

From the results of the study, the most respondents based on Graduates Education is High school

graduation 83 respondents (55,0%) and a small percentage of respondents based on Graduate junior high school is 63 respondents (40,7%)

d. Occupations

Table 4. Characteristics of Study Respondents based on Occupations in Kediri City District, Kediri City

No	Occupation	Total	Percentage (%)
1	Jobless	23	16,4
2	Freelance	63	45,0
3	Entrepreneur	7	5,0
4	Farmer	47	33,6
	Jumlah	140	100

Source: Primary Data, 2021

From the results of the study, the most respondents based on Occupations is Freelance 63 respondents (45,0%) and a small percentage of respondents based on Occupations is Entrepreneurs 7 respondents (5,0%)

e. Source of information

Table 5. Characteristics of Study Respondents based on Occupations in Kediri City District, Kediri City

No	Source of information	Total	Percentage (%)
1	Television	93	66,4
2	Social Media	31	22,1
3	Others	16	11,5
	Jumlah	140	100

Source: Primary Data, 2021

From the results of the study, the most respondents based on Occupations is Freelance 63 respondents (45,0%) and a small percentage of respondents based on Occupations is Entrepreneur 7 respondents (5,0%)

f. Community's Perception of adverse events following immunisation Covid-19

Table 6. Characteristics of Study Respondents based on Community's Perception of The Incidence of adverse events following immunisation Covid-19 in Kediri City District,

Kediri City

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No	Perception	Total	Percentage (%)
1	Positive Perception	79	56,4
2	Negative Perception	61	43,6
	Jumlah	140	100

Source: Primary Data, 2021

From the results of the study, the most respondents based on Community's Perception of The adverse events following immunisation Covid-19 is Positive Perception 79 respondents (56,4%) and a small percentage of respondents based on Occupations is Negative Perception 61respondents (43,6%)

g. Anxiety of Community's Who Will Get Vaccinated Covid-19

Table 7. Characteristics of Study Respondents based on Anxiety of Community's Who Will Get

Vaccinated Covid-19 in Kediri City District, Kediri City

No	Anxiety	Total	Percentage (%)
1 2	Basic Anxiety Intermediate Anxiety	10 112	7,0 80,0
3	Advance Anxiety	18	12,7
	Jumlah	140	100

Source: Primary Data, 2021

From the results of the study, the most respondents based on Anxiety of People Who Will Get Vaccinated Covid-19 of adverse events following immunisation Covid-19 is Intermediate Anxiety 112 respondents (80,0%) and a small percentage of respondents based on Basic Anxiety is 10 respondents (7,0%)

h. The Correlation Of Community's Perception And Anxiety of Adverse Events Following Immunisation Covid-19 In The City District Kediri City

Table 8. The Correlation Of Community's Perception And Anxiety of Adverse Events Following

Immunisation Covid-19 In The City District Kediri City

Perseption	Anxiety of Adverse Events Following Immunisation Covid-19			
	Basic Anxiety	Intermediate Anxiety	Advance Anxiety	Total
Positive Perception	0	70	9	79
	(0,0%)	(50,0%)	(6,4%)	(100%)
Negative Perception	10	42	9	61
	(10,0%)	(30,0%)	(0,0%)	(100%)
Total	10	112	18	140
	(7,0%)	(80,0%)	(12,7%)	(100%)
Koefisien kontingensi	0,000			

Source: Primary Data, 2021

From the results of the contingency coefficient test with the signification of α (0.05) obtained p value of 0.000. Because the value of p value obtained by 0.000 < signification of α (0.05) then the research hypothesis is accepted which means there is a Relationship between Community's Perception And Anxiety of Adverse Events Following Immunisation Covid-19 In The City District Kediri City

2. Discussion

Adverse reactions, also known as side effects, are considered to be caused by a vaccine. The intensity of these reactions may range from mild to moderate to severe. They often resolve on their own, and may or may not require medical intervention. Not everyone vaccinated against COVID-19 experiencing a post-follow-up reaction or event Immunization. If a reaction arises, that's something natural.

Public perception of covid-19 vaccination

a. Community's perception of adverse events following immunisation Covid-19 vaccination Everyone has a different perception in translating the acceptance of information received and influenced by several factors, including the source of information, type of work, age, level of education, and allow many other influencing factors that have not been identified in this study. Positive Perception provides the results of a dominant study of 79 respondents (56.4%) about

people's perception of post-immunization events, so this shows that the public is enthusiast to get the Covid-19 vaccine despite knowing of the occurrence of follow-up after Covid-19 immunization. This is supported by data that the highest percentage based on the highest level of education factor is high school graduates as many as 83 respondents (59.3%) and influenced by the source factor of information, that is 93 respondents (66.4%). This perception will form a behavior that makes someone take action, in this case that is to do the Covid-19 Vaccination. This is supported by data that the highest percentage based on the highest level of education factor is high school graduates as many as 83 respondents (59.3%) and influenced by the source factor of information, that is 93 respondents (66.4%). According to Pieter in Janiwarti and Saragih (2011) Behavior is the totality of a person's imagination and reaction. Immediately visible or invisible. The onset of behavior due to interrelationation from internal and external stimuli processed through the learning process and reinforcement involving cognitive, affective, and motor components. While the negative perception of respondents can be attributed to the high level of education who are still junior high school graduates, that is 50 respondents (40.7%). According to Azyumardi Azra stated that the level of education is an activity of a person in developing his abilities, attitudes, and forms of behavior, both for the present life and at the same time preparation for life. With regard to the participation of respondents in the Covid-19 vaccine, this shows the impact of the level of education so as to give a negative perception, but it is not a major factor in terms of one's decision-making to get immunization of the Covid-19 vaccine, although it has a negative perception but the source of information is also able to change one's behavior.

In this study shows that the positive perception of the community towards the occurrence of post-immunization follow-up is not an obstacle in a person to continue to get the Covid-19 Vaccine despite the information circulating post-immunization events and supported by the determining factor of a person to behave, namely from the positive perception supported by age factors, sources of information and education levels.

b. Anxiety of People Who Will Get Vaccinated Covid-19 of adverse events following immunisation Covid-19 vaccination

The results of this study showed that the anxiety experienced by respondents belonged to 3 (three) levels of the anxiety category, are mild, moderate and severe anxiety. The highest percentage of anxiety experienced by respondents was Intermediate Anxiety, in 112 respondents (80.0%). The next level of anxiety was Advance Anxiety with 18 respondents (12.7%) and Basic Anxiety 10 respondents (7.0%). Anxiety is something that afflicts almost every person at any given time in his or her life. Anxiety is a normal reaction to a situation that is very stressful in a person's life. Anxiety can arise alone or join other symptoms of various emotional disorders (Ramaiah, 2003 in Asrori, 2016). Anxiety experienced by respondents can be caused by the work factor in this case the highest is not working by 23 respondents (16.4%) and the education level factor of junior high school graduates 50 respondents (40.7%) and get information that is still just following the information of others so that they do not fully understand themselves, that is in 16 respondents (11.5%). Respondents' anxiety about the adverse events following immunisation Covid-19 vaccination with Intermediate Anxiety is something that generally occurs, in this case the Covid-19 pandemic that occurred since 2020 until now there are still cases, but in line with this the acceleration of the Covid-19 vaccine also provides significant results based on data from WHO and the Indonesian Covid-19 Task Force. It is also a support for people's anxiety today. The high level of respondents with the level of high school graduates' education also affects the level of anxiety of respondents

Anxiety experienced by the community is also related to the type of vaccine available. The public began to look for information about the side effects of various types of vaccines that will be obtained. The availability of vaccines allows the public to choose in place of registration of the implementation of the vaccine in accordance with the vaccine desired by the community with the provisions of each and the availability of the type of vaccine. The vaccines available today are Sinovac vaccine and Astra Zeneca with the dominant vaccine is Sinovac vaccine in various vaccination services. In this case, the higher the public is looking for information about different types of vaccines. then vaccine anxiety against the adverse events following

immunisation Covid-19 will be reduced.

The Correlation of Community's Perception And Anxiety of Adverse Events Following Immunisation Covid-19 In The City District Kediri City Based on the data of the highest research results obtained, the perception of respondents to the adverse events following immunisation Covid-19 was 79 respondents (56.4%) with Intermediate anxiety 112 respondents (80.0%). The results of the analysis with the contingency coefficient test showed that with the signification of α (0.05) obtained a p value of 0.000. Because the value of p value obtained by $0.000 < \text{signification of } \alpha (0.05)$ then the research hypothesis is accepted which means there is a relationship between people's perceptions and anxiety of adverse events following immunisation Covid-19 vaccine in In The City District Kediri City. The results of this study are relevant to the research conducted by Dina Kholidiyah et al. (2021) in research title Public Perception Of Covid-19 Vaccine With Anxiety Who Will Get Vaccinated Covid-19 Vaccination. The incident of the Covid-19 pandemic makes people anxious about the physical and psychological impact. The acceleration of the Covid-19 vaccine in Indonesia as a form of herd immunity is an effort that is sought for all Indonesian people, one of which is an effort to reduce psychological anxiety that has a very impact on health.. In addition, education that continues to be carried out by the Government of Indonesia through various cross-sectors is sought so that the public understands the benefits of the Covid-19 vaccine. The acceleration of the Covid-19 vaccine will succeed in line with the high participation of the community, and along with the vaccination there is a post-immunization follow-up event that has an impact on the community so that it is afraid to immunize, so that various educational efforts are needed through various approaches.. Through the education of the Covid-19 Vaccine and the incidence of follow-up after the Covid-19 vaccine immunization there is an increase in knowledge so that community understanding is formed, and the high knowledge of the community is able to affect the anxiety of the community about adverse events following immunisation Covid-19 vaccine.

IV. CONCLUSION

- a. According to the study's findings, more over half of respondents have an unfavorable view of covid-19 immunization. There were 79 people who responded (56.4%), and nearly half of them (61 respondent) thought covid-19 immunization was a good idea (43.6 percent)
- b. When it comes to getting the Covid-19 vaccine, there is a lot of fear among the public. According to the findings of the survey, the majority of respondents had Intermediate anxiety, with 112 respondents (80.0%), and a minor percentage of respondents had Basic anxiety, with 10 respondents (7.0 percent)
- c. A p value of 0.000 was derived from the results of the contingency coefficient test with a significance of (0.05). The research hypothesis is approved since the p value obtained by 0.000 signification (0.05) indicates that there is a relationship of Community's Perception And Anxiety of Adverse Events Following Immunisation Covid-19 In The City District Kediri City

V. REFERENCES

- [1] Addis Adera Gebruj, ^{l,m}, et al. (2021). Global public health significances, healthcare perceptions of comm. unities, treatments, prevention and control methods of COVID-19. Available at accessed from: https://content.iospress.com/download/human-antibodies/hab200422?id=human-antibodies%2Fhab200422
- [2] Astuti, N. P., Nugroho, E. G. Z., Lattu, J. C., Potempu, I. R., & Swandana, D. A. (2021). Persepsi Masyarakat terhadap Penerimaan Vaksinasi Covid-19: Literature Review. Jurnal Keperawatan, 13(3), 569-580.

- [3] CDC (2021). Understanding Adverse Events and Side Effects. Available at accessed from: Understanding Adverse Events and Side Effects | Vaccine Safety | CDC
- [4] Dina Kholidiyah dkk. (2021). Hubungan Persepsi Masyarakat Tentang Vaksin Covid-19 Dengan Kecemasan Saat Akan Menjalani Vaksinasi Covid-19. Jurnal Keperawatan STIKES Dian Husada Mojokerto. Available at accessed from: http://e-journal.lppmdianhusada.ac.id/index.php/jk/article/view/13
- [5] Kemenkes RI. (2020). Tentang Novel Coronavirus (NCOV). Diakses dari: https://www.kemkes.go.id/resources/COVID-19.pdfI.S. Jacobs and C.P. Bean, "Fine particles, thin films and exchange anisotropy," in Magnetism, vol. III, G.T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271-350.
- [6] Keputusan Menteri Kesehatan Nomor Hk.01.07/Menkes/12758/2020 Tahun 2020 tentang Penetapan Jenis Vaksin Untuk Pelaksanaan Vaksinasi Corona Virus Disease 2019 (COVID-19)
- [7] KPCPEN. (2021). Data Vaksinasi COVID-19 (Update per 19 Juni 2021). Komite Penanganan Covid-19 dan Pemulihan Ekonomi. Diakses dari : https://covid19.go.id/berita/data-vaksinasi-covid-19-update-19-juni-2021.
- [8] Pasaribu, T. A. A. (2021). Persepsi Masyarakat Tentang Covid 19. Diakses dari : https://osf.io/qbjmt
- [9] Wang, L. S., Wang, Y. R., Ye, D. W., & Liu, Q. Q. (2020). A review of the 2019 Novel Coronavirus (COVID-19) based on current evidence. International journal of antimicrobial agents, 105948