Research Article

Overview of Knowledge Levels of People Who Are Willing to Vaccinate Against COVID-19 in the COVID-19 Vaccination Program at RSUMM

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Abstract.
It is estimated that COVID-19 cases will continue to increase and reach to 2.5 million cases with an estimated death toll of 250,000 people if there is no prompt and appropriate public health intervention. Therefore, new interventions are needed tocan break the chain of disease transmission, primarily through vaccination efforts. Public perception and knowledge of health and disease prevention are important factors in the success of the COVID-19 vaccination program. This research is a quantitative descriptive study with a cross-sectional research design. The sampling technique used was simple random sampling. To find out the level of knowledge of people who are willing to vaccinate against COVID-19, we used a univariate analysis test and a frequency distribution presented in tabulated form. The results showed that the majority of respondents had good knowledge of the COVID-19 vaccine, with 187 respondents (87.0%). The most widely used source of information by respondents to obtain information related to the COVID-19 vaccine was social media, which was at 51.81%. This study can be used by health workers to give health promotion on social media.

Keywords: COVID-19, knowledge level, COVID-19 vaccination

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1. INTRODUCTION

Coronavirus Disease 2019 (COVID-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The first pneumonia case of unknown etiology was found in Wuhan City, Hubei Province, China on December 31, 2019.[1] Indonesia itself reported the first case of COVID-19 on March 2, 2020. Cases are increasing and spreading rapidly throughout Indonesia. On December 27, 2020, as many as 706,837 confirmed cases of COVID-19 have been reported in Indonesia and 20,994 people have died due to COVID-19.[2]

The level of community vulnerability is also increasing due to the lack of public awareness of the implementation of health protocols such as wearing masks, washing hands, and maintaining a minimum distance of 1-2 meters. It is estimated that COVID-19 cases will continue to increase to reach 2.5 million cases with an estimated death toll of 250,000 people, if there is no prompt and appropriate public health intervention. Therefore, other interventions are needed that can break the chain of disease transmission, namely through vaccination efforts.(2)

The COVID-19 vaccination aims to reduce disease transmission or transmission, reduce morbidity and mortality due to COVID 19, achieve herd immunity and protect the community from COVID 19 in order to remain socially and economically productive. Herd immunity can only be formed if vaccination coverage is high and evenly distributed throughout the region.(2,3) Public perception and knowledge of health and disease prevention are important factors in the success of the COVID-19 vaccination program.(3–5)

2. MATERIALS AND METHODS

This research was a quantitative descriptive with a cross sectional study design. This research was carried out at UMM Hospital in October 2021. The population in this study were people who came to participate in the COVID-19 vaccination program at UMM Hospital in October 2021. The sample in this study were people who came to participate in the COVID-19 vaccination program according to the criteria inclusion and exclusion. The sampling technique was simple random sampling. The instrument in this study used a questionnaire to determine socio-demographic, level of knowledge, and source of information about COVID-19 vaccination. The data were collected after the respondents fill the questionnaire. Then the data will be analyzed in univariate and presented in tabulated form.

3. RESULTS

The results of sociodemographic data from 300 respondents who took part in the COVID-19 vaccination program at RSUMM in October 2021 are listed in Table 1.

Based on the results of sociodemographic data, the majority of respondents were male, namely 111 (51.6%) respondents, while female respondents were 104 (48.4%). The majority of respondents in this study were aged between 21-35 years as many as 147 (68.37%) respondents. The results of this study indicate that most respondents

TABLE 1: Sociodemographic Results.

Variable	Category	Total (n)	Percentage (%)
Gender	Man	111	51.6
	Woman	104	48.4
Age	20 years	41	19.07
	21-35 years old	147	68.37
	35-45 years old	15	6.98
	46-60 years old	10	4.65
	> 60 years old	2	0.93
Level of education	Low	6	2.8
	High	209	97.2
Work	Working	134	62.3
	Doesn't work	81	37.7
Income	< UMR	158	73.5
	UMR	57	26.5
Vaccination willingness	Yes	215	100
	Not	0	0

have a high level of education, which is 209 (97.2%) respondents. The majority of respondents in this study have a job that is equal to 134 (62.3%) respondents. The income of respondents who are below the minimum wage are 158 (73.5%) respondents and those who are above the minimum wage are 57 (23.5%) respondents.

TABLE 2: Knowledge Level of COVID-19 Vaccination.

Knowledge level	Total (n)	Percentage (%)
Well	187	87.0
Not enough	28	13.0

The results of the research related to the level of knowledge of the respondents are shown in Table 2, indicating that the level of knowledge of the respondents is good by 187 (87.0%) respondents. While the rest, 28 (13.0%) respondents have a low level of education.

In this study, the most widely used source of information by research respondents to obtain information about COVID-19 vaccination was social media at 51.81%. Mass media is the second largest source of information used by respondents in this study, which is 27.17%. Only 13.04% of respondents received information related to COVID-19 vaccination from health workers. Other sources of information used by a small proportion of research respondents (7.97%) to obtain information related to COVID-19 vaccination are youtube and websites.
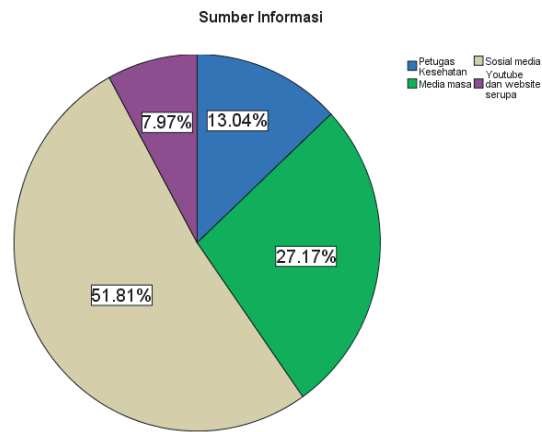
Figure 1: Source of information percentage.

4. DISCUSSION

The general aim of this research is to know the description of the level of knowledge of the people who are willing to vaccinate COVID-19 at UMM Hospital. Respondents in the study amounted to 300 respondents, most of them 87% had a high level of knowledge.

Research conducted by Nugroho, 2021 showed a high level of knowledge of the medical student at 43%. People who have good knowledge will have a positive attitude and good behavior towards COVID-19 prevention efforts.(6) Good knowledge of respondents can make a person aware so that someone will show behavior that is in accordance with the knowledge possessed.(5,7)

The results of this study are different from the results of a survey conducted by the Indonesian Ministry of Health which showed low knowledge of the COVID-19 vaccine in respondents with low income levels.(8) The difference is because in this study, even the majority of respondents had a low income but they had a high level of education. The poorer the level of public knowledge about COVID-19 vaccination, the more difficult it will be to receive COVID-19 vaccinations.(9)

Good knowledge of COVID-19 vaccination is associated with older age, male gender, higher education level, work as a health worker and acceptance of COVID-19 vaccination.(10) This high level of public knowledge is also influenced by the education level of the respondents, the majority of whom have a higher education level. The higher a person's education level, the easier it will be to get access to information about a problem.(11,12)

In this study, it was found that the majority of respondents received information about COVID-19 vaccination from social media as much as 51.8%. In addition, 27.17% of

respondents who received information from the mass media, 13.04% of health workers and a small portion of 7.97% of respondents received information from YouTube and similar websites. This shows that mass media such as television can be an effective information channel for the public in conveying information related to the COVID-19 vaccine. In today's modern era, social media plays an important role in conveying information to the public, including information about the COVID-19 vaccine. The ease of accessing the internet today makes social media very effective for conveying information and messages, so that social media can be used to carry out health promotion (13,14).

5. CONCLUSION

In the conclusion, the majority of respondents in this study had a good level of knowledge about COVID-19 vaccination. In addition, the most common source of information used by respondents to obtain information related to COVID-19 vaccination is social media. This can be used by health workers to promote health on social media.

Acknowledgments

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