International Journal of Natural and Health Sciences (IJNHS)
Vol.2, No.1, 2024: 45-54

Are Family Support Correlated to Covid-19 Vaccination Acceptance in the Coastal Area of Indonesian?

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A R T I C L E I N F O

Keywords: Family Support, Vaccination Acceptance, Covid-19, Coastal Area

Received : 3 December
Revised : 18 December
Accepted : 20 January

A B S T R A C T

Vaccination against COVID-19 is a global government program with the goals of reducing the spread of the virus, lowering the number of cases of COVID-19-related illnesses and deaths, and ultimately protecting communities from the disease so that they can continue to thrive socially and economically. A person's level of support from their family is one of the numerous aspects that affects their willingness to get a vaccine. In the island region of Indonesia, this study set out to examine the relationship between family support and the acceptance of the COVID-19 vaccine. The study in question is a correlational one. From February to July of 2022, researchers scoured Sangihe and Talaud Islands. Three hundred and fifty-nine adults (aged 18 and up) participated in the study. Support from family members and willingness to get a vaccine were the factors examined in this research. Specifically, a questionnaire is utilized. The chi-square test was used for bivariate data analysis. Respondents with strong family support are more likely to have accepted the COVID-19 vaccine in its entirety (88.7%), while those with weaker family support are more likely to have received the vaccine in its entirety (79.4%). A significant correlation between family support and acceptance of the COVID-19 vaccine was found, according to the results of the chi-squared test, with a significance level of 0.025 (< 0.05). It follows that having the support of one's family is a correlating factor to the acceptance of the COVID-19 vaccine

DOI: https://doi.org/10.59890/ijnhs.v2i1.1185
E-ISSN: 3025-9665
https://journal.multitechpublisher.com/index.php/ijnhs

INTRODUCTION

As of February 23, 2022, the worldwide prevalence of Corona Virus Disease 2019 (Covid-19) was 424,822,073 cases, with 5,890,312 deaths, or a mortality rate of 1.4%, according to the Ministry of Health of the Republic of Indonesia 2022. There were 55,208,863 confirmed cases in Southeast Asia, with 758,536 deaths (1.4%). There are 228 countries that have been identified as being at very high risk of infection. According to the Kesehatan RI (2022) report, there were 5.35 million confirmed cases in Indonesia, with 147 thousand deaths and 549,431 active cases. As of February 23, 2022, the North Sulawesi Provincial Health Office reported 45,573 confirmed cases, with 1,070 cases resulting in death (Dinas Kesehatan Provinsi Sulawesi Utara 2022).

In order to stop the spread of the COVID-19 virus, the World Health Organization (WHO) recommends a few things: first, staying at least one meter away from sick people (even if they don't seem sick), second, wearing a three-layer mask that fits properly (especially when you can't keep your distance physically), and third, washing your hands thoroughly before and after putting on and taking off your mask (WHO 2021). Additionally, stay away from people for long periods of time and stay away from indoor areas that are overly crowded and have poor ventilation. Outside is a better place to spend time than inside. Appropriate airflow: To let more fresh air in while you're inside, open the windows. It is important to refrain from touching surfaces that have been touched by someone infected with the COVID-19 virus, particularly in public areas or healthcare facilities. Use regular disinfectants to clean surfaces. Hand sanitizer containing alcohol or water and soap are both acceptable options. Use an elbow or tissue to cover your mouth and nose while you sneeze or cough, and then dispose of the used tissue in a closed trash can right away. Proceed to either wash your hands or sanitize them with an alcohol-based product. Get your shots, too (Sumampouw 2020; Polak et al 2020; Nelwan et al 2020; Sumampouw 2020; Sumampouw & Pinontoan 2021).

One measure taken to combat the spread of the COVID-19 pandemic is the use of vaccines. Vaccination against COVID-19 is a global government policy initiative with the goals of lowering the disease's transmission, lowering the number of cases of illness and deaths caused by the virus, and ultimately achieving herd immunity in the community so that everyone can continue to contribute socially and economically. To achieve herd immunity, vaccination rates must be high and uniform across the area. When looking at the cost-effectiveness of different approaches, it is clear that vaccination programs aimed at prevention will come out on top. According to the Indonesian Ministry of Health, 2021 (Kementerian Kesehatan RI 2022), there are currently three stages to administer the COVID-19 vaccine in Indonesia: primary (first and second) vaccinations and booster shots.

The number of individuals in Indonesia who have received the first dose vaccine is 189,815,326 (91.14%), the second dose vaccine is 140,866,212 (67.54%), and the third dose vaccine is 8,670,288 (4.16%), according to data from the COVID-19 task force. The North Sulawesi Health Office reports that 72.44 percent of North Sulawesi residents have received the first dose of the vaccine, while only

32.05 percent have received the second. According to the available data, 46% of the population in Minahasa Regency has received the first dose of vaccine, and 31% have received the second dose. According to vaccination coverage data in West Kawangkoan District, 80% of the population has received the first dose of vaccine and 53% have received the second dose. According to these numbers, vaccination coverage for COVID-19 is still low, particularly for the second dose. Some coastal residents are hesitant to take part in the vaccination program, and some people have the wrong idea about what the vaccine is and why it's necessary. People had also gotten the first dose of the vaccine but not the second, according to the findings. This is because of a lot of things, including the community's traumatization from the first vaccine, the absence of encouragement or support from religious and health professionals, the cost of transportation, and the lack of family support. According to Dinas Kesehatan Provinsi Sulawesi Utara (2022) and Kementerian Kesehatan RI (2022b), these factors will influence vaccination efforts aimed at reducing the harmful effects of COVID-19. Researchers in this study set out to answer the question, "How does family support relate to people's acceptance of the COVID-19 vaccine?" in relation to the coastal area of Indonesia.

LITERATURE REVIEW

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is currently spreading at an aggressive rate primarily through human-to-human transmission. Covid-19 is a dangerous and extremely infectious virus that spreads mostly through the airborne droplets produced by people's coughs and sneezes. People can also contract the COVID-19 virus through touching infected surfaces; this happens when droplets land on nearby objects and surfaces, and then the infected person's nose, eyes, or mouth come into contact with these things. The role of asymptomatic cases in transmission cannot be overlooked. Recent reports from Wuhan, Shenzhen indicate the presence of the coronavirus in excrement. Fecal transmission was suggested by the fact that the virus replicated in the gastrointestinal tract, even in the first American case. In spite of this, there is no proof that consuming infected food leads to infection and transmission (Dinas Kesehatan Provinsi Sulawesi Utara 2022; Sumampouw & Pinontoan 2021).

Corona virus outbreak in early 2020 became a worldwide health concern that the community should be worried about. Effective January 30, 2020, the COVID-19 pandemic was designated as a PHEIC by the World Health Organization (WHO). The World Health Organization has issued six such declarations since the 2009 flu pandemic. "Public Health Emergencies of International Concert" (PHEIC) refers to exceptional situations that could endanger the health of other nations and necessitate coordination between them. The World Health Organization (WHO) proclaimed the COVID-19 pandemic on March 12, 2020 (Kementerian Kesehatan RI 2022b).

While the official incubation period for SARS-CoV-2 is 14 days following exposure, the majority of cases manifest themselves four or five days later. The SARS-CoV-2 virus can infect anyone at any age, although it primarily affects the

elderly and middle-aged. Pneumonia, severe pneumonia, Acute Respiratory Distress Syndrome (ARDS), sepsis, and sepsis shock are among the many possible clinical manifestations in COVID-19 patients. In a sample of patients, 80% had mild to moderate illness, 13.8 percent had severe illness, and 6.1 percent were in critical condition. Fever, dry cough, lethargy, sore throat, rhinorrhea, headache, conjunctivitis, myalgia, dyspnea, nausea, vomiting, and diarrhea are the possible symptoms. Thus, COVID-19, like other viral infections of the upper or lower respiratory tract, does not cause any distinctive clinical symptoms. Death, respiratory failure, and pneumonia are all possible outcomes of COVID-19 by the week's end. Sumampouw (2020), Sumampouw and Pinontoan (2021), Dinas Kesehatan Provinsi Sulawesi Utara (2022), Lasmita et al. (2021), and Hutomo et al. (2021) all agree that pneumonia is the most common severe sign of COVID-19. Symptoms of pneumonia include fever, dry cough, dyspnea, and bilateral infiltrates on thoracic photographic imaging.

Cases of SARS-CoV-2 can manifest in a wide variety of ways, from no symptoms at all to mild sickness, pneumonia, severe pneumonia, ARDS, sepsis, and even moderate to severe sepsis shock in some patients. Sumampouw (2020b), Sumampouw and Pinontoan (2021), and Dinas Kesehatan Provinsi Sulawesi Utara (2022) all state that compared to SARS-CoV and MERS-CoV, SARS-CoV-2 typically causes milder symptoms and a lower mortality rate in patients.

Acute upper respiratory tract infections that are not complicated often cause mild symptoms such as fever, exhaustion, coughing (with or without sputum), anorexia, malaise, sore throat, nasal congestion, headache, myalgia/arthralgia, chills, nausea, vomiting, diarrhea, abdominal pain, hemoptysis, conjunctival congestion, and severe fatigue. No additional oxygen is necessary for the patient. Irregular bowel movements and vomiting are also symptoms that patients may experience. Fever is one of the symptoms shared by patients with severe pneumonia caused by COVID-19. (1) breathing more than 30 times per minute; (2) experiencing acute respiratory distress; or (3) maintaining an oxygen saturation level of 93% without the use of oxygen substitutes. Atypical symptoms may manifest in elderly patients (Dinas Kesehatan Provinsi Sulawesi Utara 2022; Lasmita et al 2021; Hutomo et al 2022). Peak temperatures in over 40% of Covid-19 fever cases were between 38.1 and 39°C, and in 34% of cases, the fevers were higher than 39°C. An incubation period of 3–14 days (median 5 days) precedes the onset of illness symptoms. The patient is currently asymptomatic, and leukocytes and lymphocytes are either normal or slightly decreased. The next stage, known as initial symptoms, involves viral dissemination through the bloodstream, ostensibly primarily to organs like the heart, lungs, and gastrointestinal tract that express Angiotensin Converting Enzyme (ACE) 2. Fever, lethargy, muscular aches, dry cough, nausea, vomiting, and diarrhea are some of the milder symptoms that may manifest during this phase. The second episode usually happens between four and seven days after the first ones. Still running a temperature, the patient is experiencing tightness, the pulmonary lesions are getting worse, and the lymphocyte count is dropping. Symptoms of inflammation and hypercoagulation start to manifest. North Sulawesi Provincial Health Service (2022), Lasmita et al. (2021), and Hutomo et

al. (2022) all agree that if the inflammation isn't controlled, a cytokine storm will ensue, leading to complications like ARDS and sepsis.

Covid-19 symptoms include a high temperature, dry cough, lethargy, myalgia, tightness, congestion in the nose, headache, sore throat, runny nose, diarrhea, vomiting, and nasal congestion, according to research by Heng Li et al. Researchers Chaolin et al. looked at data from 41 COVID-19 patients in Wuhan, China. Atypical symptoms like sputum, headache, hemoptysis, and diarrhea are rare but can occur alongside the more typical fever, cough, myalgia, and exhaustion (Lasmita et al 2021). The following symptoms were observed in patients who tested positive for COVID-19: fever, cough, exhaustion, tightness in the chest, sore throat, headache, and diarrhea (Hutomo et al 2021).

The National Economic Recovery and Committee on Handling COVID-19 have determined that 3M and 3T are the most important factors in dealing with the virus. 3M has issued health protocols that the community must adhere to at all times. These protocols include wearing masks, keeping a safe distance, and washing hands with soap. However, with the backing of all segments of society, the government persists in implementing 3T (Tracing, Testing, Treatment) practices. The 3M and 3T initiatives work together as a unit to end the spread of the COVID-19 pandemic (Moghadas et al., 2021).

According to findings from the COVID-19 Handling Task Force, the probability of COVID-19 transmission could reach 100% in the absence of 3M behavior. Wearing a surgical mask reduces the risk of infection by up to 70%, washing hands reduces the risk by 35%, wearing a cloth mask reduces the risk to 45%, and adding a distance of 1 meter reduces the risk by up to 85%. The 3M health protocols, which include wearing a mask, washing hands, and keeping distance, are based on this effectiveness and are the main efforts made by the entire community. The community plays a significant role in the fight against the spread of the COVID-19 virus, which is why the government is constantly stressing the importance of following the 3M protocol (WHO 2021; Sumampouw et al 2019).

Data in January 2021 shows that there are 81 cities/districts (20%) that have a compliance rate for using masks of less than 60%. The results of this study also show that 12.34% of people do not wear masks in crowd locations such as restaurants, homes, public roads, public sports venues and places of worship. Furthermore, it was found that 66 cities/districts (16.30%) had a level of compliance with maintaining distance of less than 60%. As many as 12.78% of people were found not maintaining distance, especially in restaurants, homes, public sports venues, public roads and malls (Kemenkes RI 2022c).

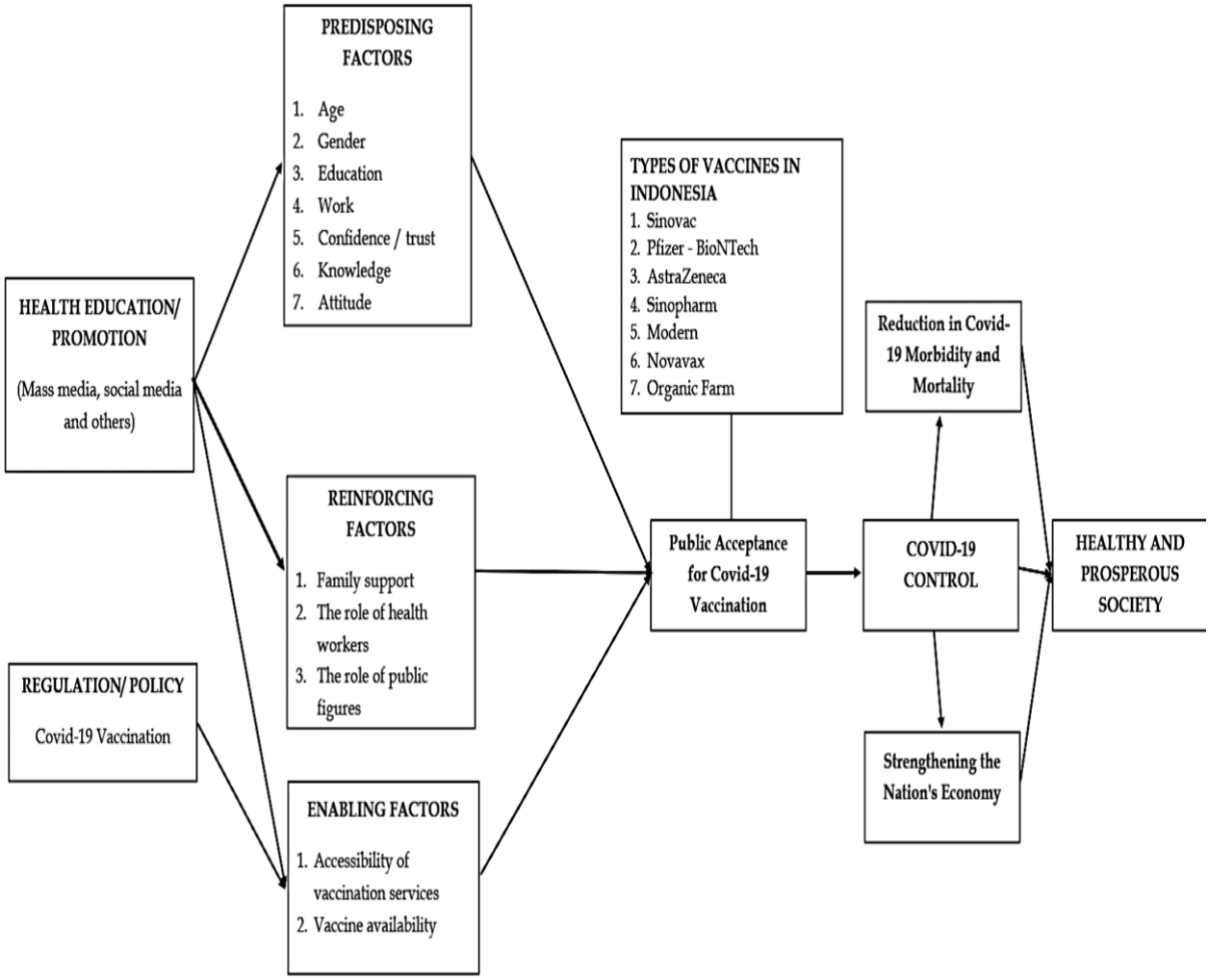

Figure 1. Conceptual Framework

METHODOLOGY

This research used a cross-sectional approach to observe a phenomenon. The months of February through August 2022 were used for this study in the Sangihe and Talaud Archipelago Regency. A total of 349 individuals participated in this research. Support from family members and willingness to vaccinate against COVID-19 are the factors being studied in this study. A validated and reliable questionnaire is utilized as the instrument. After validating the questions, we removed any that had an r-value less than 0.05 (347= 0.0922), bringing the total number of questions down from 18. In addition, a reliability value of 0.786 was achieved. Consequently, the questionnaire that was administered for this study consisted of 18 questions. This study used bivariate analysis with a squared khi test to analyze the data. A certificate of ethical eligibility, number 141/EC/KEPK-KANDOU/IX/2022, has already been issued for this study by the Health Research Ethics Commission of RSUP Prof. Dr. R.D. Kandou Manado.

RESULTS

The results of this study can be seen in the Table below.

Table 1. The Correlation Between Variables

Independent Variable	Category		Vaccination acceptance		Total	Sig.
			Incomplete	Complete		
Family support	Not good enough	n	48	185	233	0,025*
		%	20,6	79,4	100,0	
	Good	n	12	104	116	
		%	10,3	89,7	100,0	
	Total	n	60	289	349	
		%	17,2	82,8	100,0	

DISCUSSION

This study found a statistically significant correlation between having family members who are willing to vouch for you and actually getting the COVID-19 vaccine. When people are struggling to find solutions, the most crucial component is the support they receive from their families. A person's sense of self-worth, drive, and contentment in life can all be boosted by the encouragement and support of their loved ones. One of the things that might encourage someone to do something is to have the support of their family. Having family members who believe in you and cheer you on can do wonders for your confidence and self-esteem (Lasmita et al., 2021).

According to Friedman, family members can take action to improve their health when they receive support in the form of knowledge, evaluation, and emotional tools. Family members must provide specific information in order to receive the COVID-19 vaccine. Many people did not take the vaccine exactly as prescribed, even though the survey found that family support was the most frequently mentioned piece of information. When going to participate in vaccinations, family members need support. One way to help the elderly is to arrange for transportation so that they can get to immunization appointments easily; this can also be done with the help of family members (Hutomo et al., 2021).

The survey found that while 82.8% of participants had gotten a full dose of vaccine, 17.2% had gotten only a partial dose. According to these numbers, 17.2% of the population has not gotten a full round of vaccinations (two or three doses). Herd immunity, also known as herd / community immunity, affects around 70% of the population and develops more rapidly the earlier vaccination occurs. This indicates that the population in the vicinity of the West Kawangkoan Health Center has likely attained the stage where herd immunity can be established.

Several factors contribute to the underperformance of vaccination coverage. Distrust in the pharmaceutical industry, concerns about the safety and efficacy of the vaccine, questions about the duration of immunity and its ability to ward off new variations are among the reasons why some people choose not to get the COVID-19 vaccine. Actually, immunization can lessen the likelihood of severe or fatal COVID-19 symptoms (Moghadas et al 2021).

Moghadas et al. found that after 300 days of vaccination, the overall attack rate dropped to 4.6% compared to 4.6% without vaccination. People aged 65 and up showed the greatest relative decrease (54%-62%). Hospitalizations outside of intensive care units (ICUs), admissions to ICUs, and fatalities were all significantly reduced as a result of vaccination, with 63.5%, 65.6%, and 69.3% reductions, respectively, over the same time frame (Moghadas et al 2021). The importance of vaccination in preventing the spread of the COVID-19 pandemic is thus highlighted.

By bolstering the immune system, vaccines lessen the likelihood of contracting the disease. The immune system reacts when the body receives the vaccine. Here is what happens when the body reacts to the vaccine (WHO 2021):
a) See invaders like bacteria or viruses for what they are.
b) Generates antibodies. Proteins that the immune system makes on its own to combat illness are known as antibodies.
c) Keeping the illness and its treatment in mind. The immune system can swiftly eliminate germs before they cause illness if the body is exposed to them again.
As a result, vaccines are an intelligent and risk-free approach to stimulating the immune system. The memory of our immune system is built into its design. A person's immunity to a disease can last for decades, if not a lifetime, after receiving a vaccine. The efficacy of vaccines is attributed to this very reason (WHO 2021).

There is more than one way to develop a vaccine, but most of them revolve around the preparation of the antigens, the parts of the vaccine that actually cause the immune system to attack disease-causing microbes. The components of a vaccine can range from proteins or polysaccharides to nucleic acids (DNA or RNA), viral vectors, or live or inactivated viruses. Inactivated, protein-based, and/or protein-conjugated polysaccharide vaccine components are all possible in combination vaccines. The manufacturing process and the nature of the antigen determine the other ingredients in vaccines (Sumampouw et al 2019).
As part of its efforts to combat the COVID-19 pandemic, the Indonesian government has mandated vaccination as a whole through Regulation No. 10 of 2021, issued by the Minister of Health of the Republic of Indonesia (Permenkes RI). The third dose, or booster, of the COVID-19 vaccine is now available. According to Kemenceri Kesehatan RI (2022c), booster vaccinations are administered to individuals who have already received the first two doses of the COVID-19 vaccine in order to keep their immunity levels high and to prolong the duration of protection.

CONCLUSIONS AND RECOMMENDATIONS

People in the Indonesian Coastal Area were more likely to accept the COVID-19 vaccine if they had the support of their families. This means the public health center has to do more to get people vaccinated against COVID-19 by providing them with counseling and health education through various channels, including the media and social media.

FURTHER STUDY

Government policies and oversight, the function of health care providers, and other variables can all play a role in determining whether or not a community accepts the COVID-19 vaccine.

ACKNOWLEDGMENT

Our sincere appreciation goes out to everyone who participated in this study and to Sam Ratulangi University's Institute of Research and Community Service.

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