

COVID-19 Prevention Behavior Analysis In The Elderly In Jakarta, Tasikmalaya, dan Yogyakarta

Hariyani Sulistyoningih¹, Santi Susanti¹, Tri Budi W. Rahardjo², Yeny Sulistyowati², Tri Suratmi², Dini Agustin², Lili Indrawati², Yeni Ariestanti², Nurapriyan², Rodyah,³ Ashish Goel, Ashish Jindal⁴, Alpana Raizada⁵, Maw Pin Tan⁶, George Rebok⁷

¹Respati College of Health Sciences, ²Respati Indonesia University, ³Respati University Yogyakarta, ⁴Ambedkar Institute of Medical Sciences Mohali, ⁵University College of Medical Sciences, ⁶Division of Geriatric Medicine, University of Malaya, ⁷Johns Hopkins University Bloomberg School of Public Health

tri.budi.wr@gmail.com,yeny.sulistyowati@urindo.ac.id,hariyani5677@gmail.com

ABSTRACT

Background. Covid-19 is a virus that can affect all age groups, including the elderly. The World Health Organization or WHO concluded that this virus is very risky in those aged over 65 years due to a weakened immune system. In addition, the elderly have a higher risk of experiencing a more severe impact than other groups due to degenerative diseases commonly experienced by the elderly. Implementing clean and healthy living behavior as a prevention effort is the main thing to break the chain of transmission of Covid-19. This study aims to determine the prevention behavior of Covid-19 in the elderly and the factors associated with it. **Methods.** The research design was cross sectional. The sample consisted of men and women aged 60 years or more as many as 135 people. The instrument used is a questionnaire distributed through social media. The data obtained were analyzed by univariate and bivariate using chi square test. **results.** There is a relationship between age and education with Covid-19 prevention behavior in the elderly with *p* values of 0.038 and 0.001 respectively. **Conclusion.** Age and education are related to Covid-19 prevention behavior in the elderly.

Keyword : COVID-19, Behavior, Degenerative Disease

BACKGROUND

Coronavirus 19 is an infectious disease caused by an infection with Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV-2) which was found in Wuhan City, China on December 31, 2019. Covid -19 can be transmitted from a person infected with the coronavirus to other people who are in close proximity through saliva splashes. Transmission of this disease can also occur through indirect contact with surfaces or objects that contain droplets from an infected person. Symptoms that arise due to the Covid-19 disease are acute respiratory disorders such as fever, cough, and shortness of breath. Meanwhile, in severe cases, it can cause pneumonia, acute respiratory syndrome, kidney failure, and even death. However, there are confirmed cases that are asymptomatic or called asymptomatic (Kemenkes RI, 2020).

Covid-19 transmission can occur in all age groups, young and old, teenagers and also children. Vulnerable groups with severe symptoms are at risk of death from being infected with Covid-19, namely people with comorbidities and also the elderly. The presence of degenerative diseases that often occur in the elderly will exacerbate the symptoms that arise. The elderly are more at risk of experiencing more serious COVID-19 symptoms and require hospitalization and require intensive care (Turana Yuda, et al. 2021).

Based on research conducted by the Chinese CDC, it is known that the most cases of Covid-19 occurred in men (51.4%) and occurred at the age of 30-79 years and the least occurred at the age of <10 years (1%) (Ministry of Health RI, 2014). 2020). According to WHO, more than 95% of deaths occur in people over 60 years of age or older, and more than 50% in those aged

80 years or older. As many as 8 out of 10 deaths occur in individuals with at least one comorbidity, with cardiovascular disease, hypertension and diabetes, but also with various other chronic conditions (Ministry of WUA, 2020). Until the end of 2021, the number of Covid cases in Indonesia reached 6 million cases with deaths due to Covid-19 as many as 157,000 cases. The highest Covid-19 death rate in Indonesia was found in the age group 60 years (49.4%), then in the age group 46-59 years old (35.5%) (Covid-19 Handling Task Force, 2022).

The most effective way to prevent the spread of Covid-19 is to break the chain of transmission of Covid-19. The transmission of Covid-19 infection mainly occurs through physical contact so that the prevention of Covid-19 is focused on forming community behavior patterns in the form of maintaining personal hygiene, healthy food, wearing masks, and maintaining distance (Ministry of Health of the Republic of Indonesia, 2020). In accordance with government recommendations, the elderly as a group of people who are vulnerable to being infected with Covid-19 need to be encouraged to take preventive measures by getting used to washing their hands, using soap and running water or using hand sanitizers, using masks, limiting crowds, maintaining distance, and cleaning furniture regularly. using a disinfectant (Kemenkes, 2020).

The results survey on Social Protection for the Elderly During the Covid-19 Pandemic showed that health workers found obstacles to health protocols applied by the elderly, including the use of masks for reasons of 41.86 %) and keeping a distance (30.23%) (Mukhtar, et al. 2020).

METHOD

The study was conducted using a cross sectional design. The samples in this study were men and women aged 60 years or older who lived in the areas of Jakarta, Tasikmalaya, and Yogyakarta. Samples were invited through links distributed through social media, and 135 people were obtained. The instrument used is a questionnaire distributed to respondents using a google form link. The independent variables in this study included age, gender, marital status, place of residence, finances, education, and family type. The dependent variable being

measured is Covid-19 prevention behavior in the elderly. Univariate analysis was carried out in the form of a frequency distribution for all variables measured by, while bivariate analysis was carried out by using the chi square test to see the relationship between each independent variable studied with Covid-19 prevention behavior in the elderly.

RESULT

The results of the univariate analysis showed that as many as 95 respondents (70.4%) had an age above or equal to 65 years, with female sex more than male, namely 83 people (61.5%). The most marital status was married status, namely 91 people (67.4%). Some of the respondents lived with their children or spouse, as many as 119 people (88.1%). Respondents who have financial independence are 79 people (58.5%) and only 16 people (11.9%) are completely dependent on other family members. A total of 100 respondents (78.9%) had advanced education (high school, diploma or bachelor's degree), and the rest took basic education as many as 35 people (21.1%). Respondents' data regarding the type of family are grouped into two, namely nuclear family and extended family. The nuclear family is a family that only consists of parents and children, while the extended family is a family where there are other family members other than the nuclear family who live together. A total of 114 respondents (84.4%) are nuclear families and the remaining 21 respondents (15.6%) are extended families.

Covid-19 prevention behavior is known based on respondents' answers regarding the habit of washing hands using soap and running water, efforts to avoid wiping the limbs of the face area, using *hand sanitizer* when not washing hands with soap, avoiding social activities/crowds, working from home, using masks in public places, maintain distance, and routinely clean furniture using disinfectants. Based on the scores obtained, respondents are grouped into 2, namely respondents who have good and bad preventive behavior. A total of 70 respondents (51.9%) had good preventive behavior, and the remaining 65 respondents (48.1%) had poor preventive behavior. The results of the univariate analysis in detail can be seen in the following table.

Table 1: Univariate Analysis Results of the Variables studied.

No	Variable	n	%
Age			
1.	< 65 years	40	29.6
2.	65 years	95	70.4
Gender			
1.	Male	52	38.5
2.	Female	83	61.5
status Marital			
1.	Married	91	67.4
2.	Single/widow/widow er	44	32.6
Place of residence			
1.	Alone	16	11.9
2.	With children/spouse	119	88.1
Finance			
1.	Independent	79	58.5
2.	dependent Partially	40	29.6
3.	dependent Totally	16	11.9
Education			
1.	Elementary	35	21.5
2.	High school, Diploma, undergraduate	100	78.5
Type of family			
1.	Core	114	84.4
2.	Large	21	15.6
Covid-19 prevention behavior			
1.	Good	70	51.9
2T he	Less	65	48.1
	Total	35	100

results of the bivariate analysis using the chi square test showed that there was a relationship between age (0.030) and education (0.001) with the Covid-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Yogyakarta. As for gender (0.990) , marital status (0.301), financial

(0.165), place of residence (0.536), and family type (0.673), did not show any relationship with Covid-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Yogyakarta. The results of the complete bivariate analysis can be seen in the following table.

Table 2: Results of Bivariate Analysis

No	Variable	Not		Good		Value p
		f	%	f	%	
Age						
1.	< 65 years	25	62.5	15	37.5	0.030
2.	65 years	40	42.1	55	57.9	
Gender						
1.	Male	25	48.1	27	51.9	0.990

2.	Female	40	48.2	43	51.8	
1.	Married	41	45.1	50	54.9	0.301
2.	Single/widow/widower	24	54.4	20	45.5	
Residence						
1.	Alone	9	56.2	7	43.8	
2.	With children/spouse	56	47.1	63	52.9	0.536
Finance						
1.	Independent	34	43.0	45	57.0	
2.	dependent Partially	20	50.0	20	50.0	0.165
3.	dependent Fully	11	68.8	5	31.2	
Education						
1.	Elementary	28	80.0	7	20.0	
2.	High school, Diploma, bachelor	37	37.0	63	63.0	0.001
Type family						
Nucleus	of	54	47.4	60	52,6	0.673
2.	Large	11	52.4	10	47.6	

DISCUSSION

Based on the results of the hypothesis test, significant results were obtained, that there were differences in the behavior of preventing Covid-19 in the elderly in Jakarta, Tasikmalaya, and Surabaya in the age group below 65 years and the age group above 65 years. This result is supported by the cell value which shows that the proportion of the elderly under 65 years who have good preventive behavior (57.9%) is higher than the proportion of the elderly group under 65 years who have good preventive behavior (37.5%). This is in line with Afrianti's research (2021) which shows that adults will have good behavior compared to teenagers, so that good individual behavior will increase as the individual ages. Another similar study was also obtained from the research of Riyadi and Larasati Putri (2021) which showed that there was a tendency that young people were more indifferent to the implementation of health protocols with a relatively lower average score of adherence compared to older people. Increasing age makes a person more mature and has an increased sense of responsibility and concern, especially for himself.

The results of this study also show that there is no significant relationship between gender and Covid-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Surabaya. This result is supported by the cell value which

shows that the proportion of males who have good preventive behavior (51.9%) is not much different from the proportion of females who have good preventive behavior (51.8%). This means that a person who is male or female may have poor COVID-19 prevention behavior. The results of the research conducted are in accordance with the results of research by Abduet al (2021) which shows that there is no significant relationship between gender and Covid-19 prevention behavior. However, the results of this study are not in line with the research conducted by Aprilianingtyas. D (2022) which shows that there is a relationship between gender and Covid-19 prevention behavior where the male gender has a 1.37 times greater risk of having poor preventive behavior. This is because men do more activities outside the home and men tend to have unfavorable behavior such as traveling without a mask when going to crowded places compared to women.

The results of this study also showed that there was no significant relationship between marital status and COVID-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Surabaya. This result is supported by the cell value which shows that the proportion of elderly people with married status (51.9%) is not much different from the proportion of elderly people who are widowed/widowed/single (51.8%) in the sample group who have good preventive

behavior. The results obtained are not in accordance with research conducted by Riyadi and Putri Larasaty (2021) which shows that respondents who live alone without a partner, whether they are still unmarried or widowed/widowed have a relatively lower level of compliance score than respondents who live with spouse or married status. This is probably because respondents who already have a partner do not want to be exposed to Covid-19 and or transmit it to their partner.

The results of statistical tests show that there is no significant relationship between residence and COVID-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Surabaya. This result is supported by the cell value which shows that the elderly group who lives alone or with a partner, or with children has a similar proportion in terms of preventing Covid-19. There are several patterns of residence for the elderly in Indonesia, the majority with three generations (40.64%), with family (27.30%) and only living with their partner, amounting to 20.03%. While those who live alone are 9.38% (Seftiani, 2020). The elderly, with whomever they live, actually have a fairly high vulnerability to being exposed to Covid-19, due to their physical condition. This very vulnerable elderly certainly needs protection.

The results of statistical tests also show that there is no significant relationship between finances and Covid-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Surabaya. This result is supported by the cell value which shows that the proportion of preventive behavior that is good in the elderly group with independent finance (57.0%) or partially dependent (40.0%) is not much different, and in the fully dependent elderly group the proportion is smaller (31.2%). This study contradicts the results of research by Dani et al (2022) where economic conditions are the most influential variable on preventive efforts against COVID-19 with an odds ratio (OR) of 5.7 and has a regression coefficient value of 0.63 meaning someone who has a good economic condition. has a high probability of carrying out preventive efforts of 63%. not directly from health problems. One's occupation can measure one's socioeconomic status as well as health issues and the conditions in which one works.¹⁹

The Covid-19 pandemic has had a negative impact on the ASEAN economy and the rest of the world, key sectors have been affected, especially tourism, retail, services, business, employment and currency sectors. livelihood. Special attention is given to vulnerable groups who are most affected, such as informal workers or daily workers, industrial workers, the poor, and the elderly. Lockdown contributes to the global economy.

Along with the economic impact, the increasing morbidity and mortality due to COVID-19 is experiencing the greatest setbacks in various countries.¹⁷ The covid pandemic causes lower living standards due to economic pressures which can lead to poorer nutrition, which has the potential to reduce immunity due to high levels of stress. higher.²⁰ With the closure of public services and the collapse of industries that have a negative impact on the economy, many people end up with financial losses and the risk of unemployment, which further intensifies the negative emotions experienced by individuals.² COVID-19 is associated with a significant burden of psychological distress and socioeconomic status, due to both the direct impact of the infection and the stringent measures required to reduce its spread. Work also determines the amount of income received by a person. People with low incomes often have difficulty getting good health services.

The results of statistical tests on education show significant results so that there is a relationship between education and Covid-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Surabaya. This result is supported by the cell value which shows that in the elderly group who have good preventive behavior, the proportion of the elderly with advanced education (63.0%) is almost twice as high as the elderly group with basic education (20.0%). The results of this study are supported by research by Aprilianingtyas and Indarjo (2022) who found there was a relationship between education level and COVID-19 prevention behavior in the elderly. The results show that someone with high school education status has the possibility of increasing COVID-19 prevention behavior 0.43 times when compared to someone with low education (not in school,

elementary, junior high). This is because someone with higher education is more likely to know and learn about healthy living behaviors and is better able to understand health needs, follow instructions, and communicate effectively with healthcare providers. The formal education that a person has will have an effect on a person's health behavior. The level of education will affect a person in digesting information which will then be used as the basis for behavior. Likewise, research by Reza and Ruqayyah (2021) shows that someone with higher education tends to be more obedient to Covid-19 prevention policies and adheres to health protocols, and the elderly who only have a basic education level are more likely to not comply with health protocols. Someone who has a higher education supported by good knowledge and attitude tends to be more obedient to Covid-19 policies. This can be used as an effort to increase public compliance with the Covid-19 health protocol.

Next, the results of statistical tests show that there is no significant relationship between family type and Covid-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Surabaya. This result is supported by the cell value which shows that the proportion of nuclear families who have good preventive behavior (52.6%) is not much different from the proportion of extended families who have good preventive behavior (47.6%). This means that the number of family members living together in a family does not affect the behavior of preventing Covid-19 in the elderly. The results obtained are in line with the research of Riyadi and Putri Larasaty (2021) which shows that the number of household members does not significantly affect the level of community compliance in the application of health protocols.

CONCLUSIONS

The proportion of elderly people aged 65 years and over who have COVID-19 prevention behaviors is more than the elderly under the age of 65 years. Good Covid-19 prevention behavior is mostly carried out by the elderly with advanced education levels (high school diploma, or bachelor's degree). There is a relationship

between age and education with Covid-19 prevention behavior in the elderly, but there is no relationship between gender, marital status, finances, place of residence, and type of family with Covid-19 prevention behavior in the elderly in Jakarta, Tasikmalaya, and Yogyakarta.

SUGGESTION

Elderly people who have a basic education background (not in school, graduated from elementary school or only graduated from junior high school) need to get assistance and encouragement from family members or health workers around them so that they can implement Covid-19 prevention behaviors properly. Health workers need to provide Counseling, Information and Education (KIE) regarding the prevention of Covid-19, especially to the elderly who have basic education.

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