

The Relationship Between Knowledge and Behavior Regarding COVID-19 Prevention among Elderly

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ABSTRACT

The process of getting old will continue to occur and cause various morphological changes that affect the function of the respiratory system. The respiratory system in the elderly shows a structural and functional decline, resulting in increased respiratory work compared to other young people. This is associated with a decreased ability when suffering from mother acute diseases such as heart defects, bacterial or viral infections, and blockages in the airway. The risk of complications from COVID-19 is higher in some vulnerable populations, especially the elderly and individuals who suffer from weakness or have some chronic conditions. The risk of death increases with age and is also higher in those with diabetes, heart disease, blood clotting problems, or who have shown signs of sepsis. The purpose of this study is to determine the relationship between Knowledge and COVID-19 Prevention Behavior in the Elderly. This type of research is quantitative research. The population is all elderly in the working area of Piru Health Centre, which consists of 123 people. The sample consisted of 94 people selected by simple random sampling. Research instruments are questionnaires of knowledge and behavior. Data analysis is performed univariately and bivariate using the chi-square test. The results showed a significant relationship between knowledge and COVID-19 prevention behavior in the elderly in the Piru Health Center Work Area. Knowledge influences the behavior of the elderly health, so it is hoped that the government can provide Health Education to improve the understanding of the elderly to improve COVID-19 prevention behavior.

Keywords: elderly, knowledge, COVID-19 prevention behavior

INTRODUCTION

Indonesia reported its first case on March 2, 2020, until July 9, 2020. The Ministry of Health reported 70,736 confirmed cases of COVID-19 with 3,417 deaths (CFR 4.8%) spread across 34 provinces. The most cases occur in the age range of 45-54 years and at least occur at the age of 0-5. The highest mortality rate was found in patients aged 55-64 (Ministry of Health, 2020; Yuliyanti, 2020). Based on data from the Ambon City Government, in 2020 in Ambon the number of positive people 5052 people, 91 were admitted to hospital, 75 died. Based on data from the West Seram Regency City Government in 2020, the city government reported the first characteristics in April and until December 31, 2020, the number of people who tested positive for COVID-19 was 70, 62 people were hospitalized and declared cured, while 8 died, and until now there has been an increase in the number of confirmed COVID-19 lives. Meanwhile, with age, functional disorders will increase with the presence of disability. It is reported that mild disability measured based on the ability to carry out daily living activities or Activity of Daily Living Gerontology Theory study and Approach to Care in the Elderly (ADL) experienced about 51% of the elderly, with a prevalence distribution of about 51% at the age of 55-64 years and 62 years at the age of 65 and above; severe disability experienced about 7% at the age of 55-64 years, 10% at the age of 65-74 years, and 22% at the age of 75 years and above.

Efforts to improve the health of the elderly (elderly) continue to be pursued with a promotive and preventive approach that can be done independently by the community (Novelia, Usman, & Pamungkas, 2021). To realize healthy, independent, qualified, and productive elderly must be done, health coaching as early as possible during the human life cycle until entering the elderly phase by paying attention to risk factors that must be avoided and productive factors that can be done to improve health. One form of change in healthy elderly can be carried out through the elderly integrated Health Centre (Posyandu) where the elderly Posyandu is a form of health service that prioritizes efforts to improve health

and prevention of disease. The activities carried out do not lead to treatment, but activities for routine health checks, providing education and information about disease prevention by inviting to implement a healthy lifestyle.

Corona Virus is a disease that easily attacks individuals who have low immunity so that children, pregnant women and the elderly are more susceptible to contracting the outbreak of this disease (Novelia, Lubis, Murniati & Carolin, 2021). The transmission of COVID-19 is influenced by various factors such as not applying the ethics of coughing and sneezing correctly, not using masks when going out of the house, rarely washing hands using soap and running water, and not keeping a distance from crowds. Facing the outbreak of non-natural disasters, COVID-19, the government carried out various policies in an effort to prevent the transmission of COVID-19, one of which was by implementing Large-Scale Social Restrictions (PSBB). This policy provides an understanding that maintaining a distance of at least 2 meters, reducing direct contact with others, and using masks can reduce and even break the chain of COVID-19 infection (Atmadja et al., 2020).

The risk of complications from COVID-19 is higher in some vulnerable populations, especially the elderly, individuals who suffer from weakness, or have some chronic conditions. The risk of death increases with age and is also higher in those with diabetes, heart disease, blood clotting problems, or who have shown signs of sepsis. With an average mortality rate of 1%, the death rate increases to 6% in people with cancer, suffering from hypertension, or chronic respiratory disease, 7% for diabetics, and 10% in people with heart disease. While the death rate among people aged 80 or over is at 15% higher risk (Pradana, Asman & Nuraini, 2020).

Prevention of transmission in individuals is done by several actions such as: cleaning hands regularly by washing hands with soap and water or using alcohol-based antiseptic liquids, avoid touching the eyes, nose, and mouth with unclean hands, use masks, maintain a distance of at least 1 meter with others, limit yourself to interactions/contact with others, apply a clean and healthy lifestyle, Traditional health use. they were managing mental health and psychosocial diseases. The elderly as a group at risk of being vulnerable to COVID-19 transmission are a concern for the government. From data from the West Seram Regency City Government, the city government reported the first confirmed COVID-19 on April 4, 2020. Until December 31, 2020, the number of people who tested positive for COVID-19 was 70, 62 people were treated in hospitals and declared cured, while 8 died, and until now there has been an increase. Related to this, the formulation of the problem in this study is whether there is a relationship between Knowledge and COVID-19 prevention behavior in the elderly.

METHOD

This type of research is quantitative research with a cross sectional approach. The population in this study is the elderly aged 60-70 in the work area of the Piru Health Center of West Seram Regency August-September 2021 which consisted of 123 elderlies. The sample in the study was the Elderly which consisted of 94 selected using simple random sampling techniques. Respondents with inclusion criteria are seniors who are willing to be 60-70 years old who are willing to be respondents, communicative and do not experience physical disability. The research was conducted in August-September 2021. Variable independent is knowledge and variable dependent is the prevention behavior of COVID-19. Research instruments are questionnaires created by researchers who have gone through validity and reliability tests. Data analysis is carried out univariate and bivariate using nonparametric statistics, a chi square test. There is no ethical problem because the research has received permission from the local government.

RESULT

Table 1. Distribution of Knowledge Level and COVID-19 Prevention Behavior

Variable	Frequency	Percentage
Level of Knowledge		
Good	67	71.3
Poor	27	28.7
COVID-19 Prevention Behavior		
Good	43	45.7
Poor	51	54.3

Based on Table 1. above, out of the 94 responses, the majority had good knowledge, consisting of 67 respondents and 27 respondents (28.7%) needed a better knowledge of regarding COVID-19 Prevention. Out of the 94 respondents,

the majority had poor behavior related to COVID-19 prevention, which consisted of 51 respondents (54.3%). A total of 43 respondents (45.7%) had good COVID-19 prevention behavior.

Table 2. Relationship between Knowledge and Behavior of COVID-19 Prevention

Knowledge	Behavior				Total		p-value
	Poor		Good		f	%	
	f	%	f	%	f	%	
Poor	21	77.8	6	22.2	27	100	0.004
Good	30	44.8	37	55.2	67	100	
Sum	43	45.7	51	54.3	94	100	

Based on Table 2, it can be concluded that out of 67 respondents with good knowledge, the majority (55.2%) had good behavior in COVID-prevention. In addition, out of 27 respondents with poor knowledge majority of them (77.8%) had poor behavior. The chi-square test found p p-value of 0.004, which means there was a significant relationship between knowledge and behavior regarding COVID-19 Prevention among the elderly.

DISCUSSION

Many factors influence respondents' knowledge of COVID-19 prevention. According to Notoatmodjo (2012), Knowledge is obtained not only from the level of education taken but also from information received, for example, from the media, newspapers, magazines, the internet, and television. Motivation also affects one's knowledge because it will increase curiosity towards something, which will motivate a person to look for sources of information. The death toll affected by COVID-19 every day has increased; this is a warning for the government to provide knowledge to the public about how to prevent COVID-19. The unavailability of vaccines and COVID-19 drugs is a driver for the community to have sufficient knowledge to prevent or break the chain of spread of COVID-19, such as maintaining physical distance, maintaining hand hygiene, and always using masks (Hairunnisa & Amalia, 2020). Providing health education is one of the steps to increase people's readiness to face problems during the pandemic; this will affect knowledge and attitudes. Knowledge will increase and encourage a positive attitude.

The results showed that of the 94 elderly respondents with good preventive behavior against COVID-19 infection, 43 respondents (45.7%). Good behavior can be an effort to prevent the transmission of COVID-19 (Wulan, Gurusinga, Munthe, Lubis & Markus, 2021). Many factors influence health behavior, including knowledge, perception, emotions, motivation, and the environment (Yanti, Priyanto, & Zulfikar, 2020; Supriatna, 2020). Public health behavior can be explored from various components, including perceptions of disease susceptibility, obstacles in prevention efforts, benefits, encouragement, and individual perceptions of the ability to make preventive efforts.

This study showed that the preventive behavior carried out by respondents could have been better (54.3%). Forms of behavior shown include lack of compliance in maintaining distance when outside the house, rarely washing hands with soap or hand sanitizer before entering the house, shops /minimarkets, ATM machines and other facilities, rarely use masks when traveling and contact or greetings with others. Research by Muhajiburrahman et al., (2020) on the relationship of knowledge and behavior of COVID-19 prevention obtained the results that respondents about COVID-19 prevention were mostly in the good category of 86 respondents (82.7%). The behavior of respondents in the prevention of COVID-19 is mostly in the category of sufficient which consisted of 53 respondents (51.0%). Forms of behavior shown include compliance in maintaining distance when outside the house, always washing hands with soap or hand sanitizer before entering the house, shops/minimarkets, atm and other facilities, obedient to use a mask when traveling and not touching or greeting with others. A person who already knows about certain information can decide how to deal with it. In other words, when someone has information about COVID-19, he can determine how he should behave towards COVID-19.

Researchers' assumption that the good knowledge of the elderly cannot necessarily influence behavior in guarding themselves from the COVID-19 pandemic is due to culture and habits that have been lived for a long time. Therefore, it is recommended to health workers who have work areas in the local area to more often demo about simple preventive behaviors such as washing hands and using masks. Based on the results of the study showed that the knowledge relationship with COVID-19 prevention behavior from 94 respondents, the highest number were respondents who behaved poorly in preventing COVID-19 which consisted of 21 respondents (77.8). Knowledge is the result of "knowing" and this happens after people have sensed a particular object. Knowing various ways to maintain health and avoid disease will increase public knowledge (Charpilova, 2020; Hakim, 2020; Jayanti & Rahmawati, 2021). Knowledge plays an important

role in determining complete behavior because knowledge will form a belief that is further in perceiving reality, providing the basis for decision-making and determining behavior towards a particular object so that it will influence a person's behavior. Researchers assume that knowledge determines each individual so that it will affect behavior. Still, for some cultures, it is difficult to eliminate because of habits that have long been lived, so new habits are difficult to adapt.

CONCLUSION

It can be concluded that most of the respondents had good knowledge (71,3%) and poor preventive behavior (58.3%). There was a significant relationship between knowledge regarding Covid-19 and prevention behavior ($p = 0.004$). Health Agencies need to hold counseling and demos about the COVID-19 pandemic and how to protect themselves so that the community, especially the elderly, can have more knowledge and insights about this virus. Further researchers are expected to conduct further research on this study by using or paying attention to other variables and different places to affect the knowledge and behavior of COVID-19 prevention.

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