The relationship of knowledge and prevention efforts covid-19 in outpatient patients at Advent Hospital Medan

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A B S T R A C T

Coronavirus Disease 2019 (COVID-19) is a serious health problem for all countries that is global in nature and causes a fairly high death rate. Efforts to prevent COVID-19 by applying the term 5M, namely washing hands, wearing masks, keeping a distance, staying away from crowds, limiting mobility and interaction have not become social behavior. Masks are used only in places where there are regulations that require wearing a mask, the wrong way to wear a mask, such as: the mask only covers the chin or is hung around the neck. Likewise, washing hands is still not a habit in society. This study aims to analyze the relationship between knowledge and efforts to prevent COVID-19 in outpatients at the Medan Adventist Hospital. This type of research is descriptive correlative. The population in this study were all outpatients at Medan Adventist Hospital, totaling 195 patients who came every day. The number of samples in this study were 66 people with the sampling technique using accidental sampling. Data analysis used the chi-square test with $\alpha < 0.05$. Univariate analysis showed that the majority of respondents with good knowledge were 64 people (97%) and those who had sufficient knowledge were 2 people (3.0%). Based on prevention efforts, the majority of respondents made prevention efforts as many as 63 people (95.5%). Bivariate analysis obtained p = 0.002 (p <0.05). The conclusion from the results of this study is that there is a relationship between knowledge and efforts to prevent COVID-19 in outpatients at Medan Adventist Hospital.

Kata kunci:

COVID-19
Pengetahuan
Upaya Pencegahan

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DOI: 10.30604/jika.v7i4.1911
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A B S T R A K

Penyakit Coronavirus Disease 2019 (COVID-19) menjadi permasalahan kesehatan yang serius bagi seluruh negara yang bersifat global serta menyebabkan angka kematian yang cukup tinggi. Upaya Pencegahan COVID-19 dengan menerapkan istilah 5 M yaitu, mencuci tangan, memakai masker, menjaga jarak, menjauhi kerumunan, membatasi mobilitas dan interaksi belum menjadi perilaku masyarakat. Masker digunakan hanya di tempat yang ada peraturan untuk mengharuskan memakai masker, cara pemakaian masker yang salah seperti: masker hanya menutupi bagian dagu atau digantung di leher. Begitu juga dengan mencuci tangan masih belum menjadi kebiasaan di masyarakat. Penelitian ini bertujuan untuk menganalisis Hubungan Pengetahuan Dengan Upaya Pencegahan COVID-19 Pada Pasien Rawat Jalan di Rumah Sakit Advent Medan. Jenis penelitian ini adalah descriptive korelatif. Populasi dalam penelitian ini adalah seluruh pasien rawat jalan Rumah Sakit Advent Medan yang berjumlah 195 pasien yang datang setiap harinya. Jumlah sampel dalam penelitian ini sebanyak 66 orang dengan teknik pengambilan sampel menggunakan accidental sampling. Analisa data menggunakan uji chi square dengan $\alpha < 0,05$. Analisis univariat menunjukkan bahwa mayoritas responden berpengetahuan baik sebanyak 64 orang (97%) dan yang berpengetahuan cukup sebanyak 2 orang (3,0%). Berdasarkan upaya pencegahan, mayoritas responden melakukan upaya pencegahan yaitu sebanyak 63 orang (95,5%). Analisa bivariat didapatkan nilai p=0,002 (p<0,05). Kesimpulan

dari hasil penelitian ini adalah ada hubungan Pengetahuan Dengan Upaya Pencegahan COVID-19 Pada Pasien Rawat Jalan di Rumah Sakit Advent Medan. Saran bagi masyarakat agar selalu menerapkan protokol kesehatan dan bagi pihak Rumah Sakit Advent Medan diharapkan selalu memberikan pendidikan kesehatan mengenai COVID-19 dan memberikan informasi terbaru terkait perkembangan COVID-19 dan juga pencegahannya.

INTRODUCTION

Coronavirus Disease 2019 (COVID-19) is currently a serious health problem for all countries in the world with the number of cases always showing an increase every day. This disease was first discovered at the end of December 2019 during a mysterious pneumonia outbreak at the Huanan seafood wholesale fruit market in Wuhan, Hubei Province, China. Pneumonia outbreaks with symptoms of cough, fever, shortness of breath and some experienced gastrointestinal disorders were experienced by the majority of staff there so that the market was closed on January 1 2020 after the announcement from the Chinese health authorities regarding the disease epidemiology warning (Rothan et al., 2020).

COVID-19 is a new phenomenon for the world community today, especially in Indonesia. The World Health Organization (WHO) declared this outbreak a world emergency or global outbreak on January 30, 2020 after receiving reports of new cases and deaths outside China. COVID-19 is spreading very rapidly to various countries. So that on March 12, 2020 WHO officially declared COVID-19 a pandemic. WHO later named this viral infectious disease as COVID-19 (World Health Organization, 2020).

As of March 5 2021, positive confirmed cases of COVID-19 have reached 116,208,090 people with a death rate of 2,580,800 people and 91,878,324 recovered cases (Worldometer, 2021). Indonesia first confirmed a case of COVID-19 on March 2, 2020, when two Indonesian citizens contracted it from a Japanese national who visited Jakarta. This case continues to spread to all provinces in Indonesia and always shows an increase in cases every day. So that on March 5 2021, positive confirmed cases of COVID-19 in Indonesia reached 1,368,069 people, death cases reached 37,026 people and recovered cases totaled 1,182,687 people. North Sumatra Province until March 5 2021 has reported 25,164 positive cases of COVID-19 and a death rate of 851 people,

Transmission of COVID-19 can spread from human to human by direct contact and also indirectly through droplets/sneezes from coughs and sneezes from infected people. Indirect transmission can also occur, namely when touching an object or a surface that has been contaminated with the virus and then not washing your hands before touching the mouth, nose and eyes. (World Health Organization, 2020).

Specific treatment or drugs that are truly effective in dealing with COVID-19 have not been found so far. But a vaccine for COVID-19 has been found. Therefore, prevention of transmission of COVID-19 is still very important, especially in the community and community. Some prevention efforts that can be done are washing hands with soap, implementing physical distancing, wearing a mask when leaving the house, staying away from crowds, limiting mobilization and interaction and implementing a clean and healthy lifestyle (PHBS) such as consuming healthy food, getting enough rest, exercising , and stop smoking and consuming alcohol (RI Ministry of Health, 2020).

The phenomenon that occurs in today's society, most people have made prevention efforts but there are still those who ignore it. One of them is the use of masks, a small number of people are still disobedient in using masks and there are also those who only cover their chin or hang them around their necks. This is in accordance with research conducted by Mushidah and Muliawati (2021) regarding knowledge and attitudes towards complying with the use of masks as an effort to prevent the spread of COVID-19 to MSME traders in Kutoarjo square, Kaliwungu sub-district. The results of this study indicate that there are still many MSME traders who do not use masks when selling. Some of them wear it but only use it as a necklace around their neck and some even doubt the existence of COVID-19.

The results of the same research were also carried out by Moudy and Syakurah (2020) regarding knowledge related to efforts to prevent COVID-19. The results of this study indicate that there is a significant relationship between knowledge and attitude (p=0.000) and knowledge and action (p=0.000). The conclusion of this study is that individuals with bad knowledge are at risk of having negative attitudes compared to individuals with good knowledge. Likewise, individuals who are not well-informed will have the risk of having bad actions. The results of this study are also in line with research conducted by Santoso and Setyowati (2020) concerning the Relationship between Community Knowledge Levels and COVID-19 Preventive Measures. The results of this study indicate that there is a significant relationship between knowledge of COVID-19 prevention measures and a value (p=0.001). So it can be concluded that good knowledge can encourage someone to have good attitudes and behavior.

The results of observations made by the author of 5 patients who were seeking outpatient treatment at the Medan Adventist Hospital, 3 of them said that COVID-19 was a respiratory disease and 2 of them looked confused. Meanwhile, in its prevention efforts, 3 of them took precautions such as wearing masks, washing their hands and 2 of them using masks only covering their mouths. Based on the description of the background above, the authors are interested in conducting research on "Relationship of Knowledge with Efforts to Prevent COVID-19 in Outpatient Patients at Medan Adventist Hospital".

METHODS

Types of research

The type of research used in this study was descriptive correlative with a cross sectional approach with the aim of analyzing the relationship between the independent variable

(knowledge about COVID-19) and the dependent variable (prevention of COVID-19).

Location and Time of Research

The research was conducted in the Outpatient Room of Medan Adventist Hospital, Jl. Gatot Subroto No. Km 4, Sei Sikambing D, Kec. Medan Petisah, Medan City. The research was carried out from March to July 2021.

Population and Sample

According to Notoatmodjo (2018), the population is the entire object of research or the object under study. The population in this study were all outpatients at Medan Adventist Hospital. The number of patients who visited in February 2021, there were 6,615 patients and an average of 195 patients per day.

According to Notoatmodjo (2018), the sample is the object being studied and is considered to represent the entire population. The size of the sample is determined using Slovin's calculations (Suharsaputra, 2018), with the following formula:

$$n=\frac{N}{1+N(d)2}$$

information:
n: Number of Samples
N: Total Population
d: Level of Confidence

Based on the predetermined population size, the sample size can be determined as follows:

$$n=\frac{195}{1+195(0,1)2}$$
$$n= =66\frac{195}{2,95}$$

The number of samples in this study were 66 people. The sampling technique in this study was Non-probability Sampling with Accidental Sampling, namely taking respondents as a sample based on coincidence with the researcher and meeting predetermined criteria. The inclusion criteria for the group are as follows: a) Patients aged 18-60 years; b) Willing to be a respondent in research and fill out a questionnaire to completion.

Data Analysis

Univariate analysis is used only to obtain an overview of the frequency distribution of each variable that has been studied, both the dependent variable and the independent variable (Notoatmodjo, 2018).

Bivariate Analysis is used to analyze the relationship between two variables, namely the dependent and independent variables, both of which are categorical variables. The test used in this analysis is the Chi Square statistical test with a value of $\alpha = 0.05$ (Notoatmodjo, 2018). If p.value≤ 0.05 ($\alpha \leq 0.05$), Hα is accepted, meaning that there is a significant relationship between the independent variable (knowledge about COVID-19) and the dependent variable (efforts to prevent COVID-19). If p.value > 0.05 ($\alpha > 0.05$), H0 is accepted, meaning that there is no significant relationship between the independent variable (knowledge about COVID-19) and the dependent variable (efforts to prevent COVID-19).

RESULT AND DISCUSSION

Table 1
Frequency Distribution of Outpatient Characteristics of Respondents at Medan Adventist Hospital (N=66)

Characteristics	Frequency (f)	Percentage (%)
Age		
18-32	35	53.0
33-47	20	30,3
48-60	11	16,7
Gender		
Man	30	45.5
Woman	36	54.5
Education		
SMA/SMK	37	56,1
D3	6	9,1
S1	20	30,3
S2/s3	3	4,5
Work		
Student/Student	12	18,2
Private sector employee	16	24,2
Housewife (IRT)	8	12,1
civil servant	3	4,5
Self-employed	27	41.0

From Table 1 it can be seen that the majority of respondents were 18-32 years old (53.0%), the sex of the majority of respondents was female (54.5%), the education of the majority of respondents was SMA/SMK (56.1%), and the majority respondent's occupation is Entrepreneur (40.9%).

Table 2
Frequency Distribution of Patient Knowledge About COVID-19 at Medan Adventist Hospital

Knowledge	Frequency (f)	Percentage (%)
Good	64	97.0
Enough	2	3.0
Total	**66**	**100**

Based on the results of table 2 regarding the frequency distribution of patient knowledge about COVID-19, the majority of patients have good knowledge, namely 64 patients (97.0%), 2 patients who have sufficient knowledge (3.0%), and those who have less knowledge do not have (0%).

Table 2.
Frequency Distribution of COVID-19 Prevention Efforts in Outpatient Patients at Medan Adventist Hospital.

Prevention	Frequency (f)	Percentage (%)
Do	63	95.5
Do not do	3	4,5
Total	**66**	**100**

Based on Table 2, regarding the frequency distribution of COVID-19 prevention efforts in outpatients at Medan Adventist Hospital, it was found that the majority of patients made prevention efforts, namely 63 patients (95.5%), and 3 patients who did not take preventive measures. (4.5%).

From table 3, the results can be obtained from 64 respondents (97.0%) who have good knowledge, there are 62 respondents (93.9%) who take preventive measures and 2

respondents (3.0%) who do not take preventive measures. Of the 2 respondents (3.0%) who had sufficient knowledge, there was 1 respondent (1.2%) who took preventive measures and 1 respondent (1.5%) who did not. While there are no respondents who are less knowledgeable (0%).

The results of the test on the relationship between knowledge and efforts to prevent COVID-19 in outpatients at the Adventist Hospital in Medan showed that the results of the chi-square statistical test obtained a p.value of 0.002 (p <0.05). This means that there is a relationship between knowledge and efforts to prevent COVID-19 in outpatients at the Medan Adventist Hospital.

Table 3.
Relationship between knowledge and efforts to prevent COVID-19 in outpatients at the Adventist Hospital in Medan.

Knowledge	Preventive measure				Total		p. value
	Do		Do not do				
	F	%	F	%	f	%	
Good	62	93.9	2	3.0	64	97.0	0.002
Enough	1	1.5	1	1.5	2	3.0	
Total	63	95.5	3	4,5	66	100.0	

DISCUSSION

Knowledge of COVID-19 Prevention Efforts in Outpatient Patients at Medan Adventist Hospital

Based on the results of the study of 66 respondents, it can be seen that the majority of respondents had good knowledge, namely as many as 64 people (97.0%), while those who had sufficient knowledge were 2 people (3.0%), and there were no respondents who had less knowledge. Based on the results obtained, it clearly shows that the level of knowledge of outpatients at the Medan Adventist Hospital regarding COVID-19 is quite good. However, this result is contrary to the results of a previous research survey where out of the 5 patients interviewed, 2 people still did not understand COVID-19 and did not take preventive measures. This can happen because of the time gap between the results of the preliminary survey and the results of the research. So that in that time span, more and more information about COVID-19 has been obtained by the public. This research is in line with research conducted by Moudy and Syakurah (2020), knowledge related to efforts to prevent COVID-19 in Indonesia with the results of respondents in the good category as many as 843 people (76.9%) and in the bad category as many as 253 people (23.1 %). This is due to the ease with which the public can obtain information about COVID-19 and its prevention through social media or print media as well as from health workers.

Based on the research results that have been presented, there are still variations in the level of respondents' knowledge of COVID-19. The question item with the lowest percentage is found in question number 18 which is about the correct steps to wash hands according to WHO.The percentage of this question item was of a total of 66 respondents (100%), there were 48 respondents (72.5%) who answered correctly, namely washing hands with 6 steps and who answered incorrectly as many as 18 respondents (27.5%). While the question items with the highest percentage are in question number 1 regarding the epidemiology of COVID-19. Based on this, the researchers considered that it was necessary to make efforts to increase public knowledge, especially about the steps to wash hands properly and correctly. Efforts can be made in various ways, such as by counseling by health workers or by spreading pictorial content through posters or social media about the steps to wash hands properly and correctly according to WHO recommendations.

Public knowledge about COVID-19 is a very important aspect during the current pandemic. Both include knowledge about the causes of COVID-19 and the characteristics of the virus, signs and symptoms, terms related to COVID-19, necessary examinations and efforts to prevent the disease. High public knowledge about COVID-19 affects the occurrence and prevention of COVID-19 disease and supports the government's efforts to break the chain of transmission of COVID-19. Good knowledge can be supported by receiving information circulating in the community about COVID-19 (Sulistyaningtyas, 2020).

Efforts to Prevent COVID-19 in Outpatient Patients at Medan Adventist Hospital

Based on the results of research conducted on 66 respondents, it can be seen that the number of respondents who took preventive measures was 63 people (95.5%), and those who did not were as many as 3 people (4.5%). Based on the results of this study, it can be seen that there were more respondents who made prevention efforts than those who did not. Prevention efforts are certainly related to knowledge, the better a person's knowledge, the efforts to make efforts to prevent COVID-19 will also be better. The results of this study are in line with research conducted by Santoso and Setyowati (2020) regarding the relationship between the level of public knowledge and preventive actions for COVID-19 with the results showing that 82 respondents (91%) took precautions and 8 respondents (9%) did not take precautions. Good COVID-19 prevention results are influenced by respondents' knowledge about COVID-19. The source of information also influences how good the respondent's knowledge of COVID-19 is. From the results of the questionnaire about knowledge and prevention of COVID-19, the majority of respondents received information about COVID-19 either through social media, health services or print media. Social media is a source of information that is more widely accepted by the public, where through social media information can be quickly and easily obtained. This is what encourages good knowledge about COVID-19 and makes efforts to prevent COVID-19. From the results of the questionnaire about knowledge and prevention of COVID-19, the majority of respondents received information about COVID-19 either through social media, health services or print media. Social media is a source of information that is more widely accepted by the public, where through social media information can be quickly and easily obtained. This is what encourages good knowledge about COVID-19 and makes efforts to prevent COVID-19. From the

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Relationship between knowledge and efforts to prevent COVID-19 in outpatients at Medan Adventist Hospital

Based on the results of the chi square statistical test, a p.value of 0.002 (p <0.05) was obtained which indicated that statistically there was a relationship between knowledge and efforts to prevent COVID-19 in outpatients at the Medan Adventist Hospital. The results showed that the majority of respondents had good knowledge of 64 people (97%) and the majority of respondents made prevention efforts as many as 63 people (95.5%). This research is in line with research conducted by Moudy and Syakurah (2020) regarding knowledge related to efforts to prevent COVID-19 in Indonesia, saying that good knowledge will encourage someone to take action to prevent COVID-19. It can be seen from the results of research conducted that the percentage of respondents who have good knowledge is 843 people (76,

Sari and Atiqoh (2020) in their research on the relationship between knowledge and adherence to wearing masks, said that knowledge greatly influenced people's compliance with wearing masks as an effort to prevent COVID-19 with statistical test results p = 0.004 (<0.005). The results of research conducted by Prihati also concluded that good knowledge is closely related to good behavior in preventing COVID-19 as evidenced by data showing that 50 people (100%) have a good level of knowledge and the majority have good prevention behavior too (Prihati et al. .al., 2020).

Research conducted by Natalia (2020) also shows that there is a significant relationship between knowledge and preparedness (p=.006) in a positive direction (r=269), that the higher the knowledge, the higher the level of prevention or preparedness behavior. Research by Zhong et al (2020) in Chinese society concluded that better knowledge could be a protective factor for prevention efforts in dealing with COVID-19. This also supports the adaptation theory which states that a good level of knowledge can encourage a person to have good preventive behavior (Silalahi et al, 2013).

The results of research from Moudy and Syakurah (2020) regarding knowledge related to efforts to prevent COVID-19 in Indonesia, out of a total of 1096 respondents (100%) there were 843 respondents (76.9%) who had good knowledge, and 253 respondents (23.1%) not well knowledgeable. This means that the majority of people are well-informed about COVID-19. Although the results of the study show that there is a relationship between knowledge and efforts to prevent COVID-19 in outpatients at the Medan Adventist Hospital, overall the data shows that there are still 2 people (3%) who are knowledgeable enough, 1 of whom takes preventive measures and 1 does not. take preventive measures. When viewed from the results of the questionnaire, the respondent still did not know about the transmission of COVID-19 and about the correct steps for washing hands. Likewise, there were 3 people (4.5%) who did not take preventive measures, 2 of them had good knowledge and 1 respondent had sufficient knowledge. When viewed from the answers to the questionnaire, the 3 respondents answered the choice Sometimes for prevention efforts such as wearing a mask

properly, namely covering the mouth and nose, washing hands properly, maintaining distance, and folding the elbows when coughing or sneezing.

This means that further action is needed both from the awareness of the respondents themselves and with related agencies to be able to increase knowledge and prevention of COVID-19. Efforts to increase knowledge and prevention of COVID-19 can be carried out in various ways, for example by counseling by health workers or disseminating knowledge content about this disease using various social media platforms because it is easier for the majority of people to get information through social media. This is also not only the responsibility of the health workers completely.

CONCLUSION AND SUGGESTION

From the results of the study entitled "Relationship of Knowledge with COVID-19 Prevention Efforts in Outpatient Patients at Medan Adventist Hospital", it can be concluded that the majority of patients have good knowledge and take precautions. The results of the chi square statistical test show that there is a relationship between knowledge and efforts to prevent COVID-19 in outpatients at the Medan Adventist Hospital, with a p.value = 0.002 < (0.05).

Funding Statement.

Conflict of Interest Statement

We declare no conflicts of interest.

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