Analysis of Elderly Compliance on The Use of Mask in Reducing Covid-19 at West Aceh Working Area

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Abstract: The use of masks is a prevention and control measure that can limit the entry of viruses that attack through the respiratory tract. One of them is Covid-19, masks can be used to protect healthy people. The use of appropriate and correct masks requires the compliance of users, including the elderly who are the most vulnerable group and have a major impact on deaths due to Covid-19 transmission. The research design used is descriptive analytic with a cross sectional approach. The population in this study were the elderly, amounting to 47 people. The sampling technique in this study was a total sampling of 47 people. The results showed that knowledge with a significance value of 0.001 <0.05 and an attitude significance value of 0.004 <0.05, which means that there is a relationship between knowledge and attitude with adherence to the use of masks in the elderly. It can be concluded that most of the elderly do not have good knowledge and attitudes towards compliance with the use of masks in preventing the transmission of COVID-19.

Keywords: Knowledge, Attitude, Mask, Covid-19

Introduction

The Corona Virus Disease 2019 (Covid-19) pandemic for the first time appeared in Wuhan City, China in December 2019, this outbreak spread very quickly to several countries in the world, including Indonesia. The outbreak caused by the Novel Coronavirus (NCoV) has also been designated a global pandemic by the World Health Organization (WHO)[1]. In Indonesia, the Covid-19 pandemic has been designated as a type of disease that causes a Public Health Emergency on March 31, 2020, in accordance with Presidential Decree Number 11 of 2020 concerning the Determination of a Corona Virus Disease Public Health Emergency (COVID-19)[2].

With this stipulation, mitigation efforts must be carried out in accordance with statutory regulations during the emergency response period for handling Covid-19. WHO data in 2020 confirmed from 235 countries in the world reached 36,002,827 cases with a death toll of 1,049,810 cases[3]. Case data in Indonesia reached 315,714 events with a death rate of 11,472 cases. Data on mortality due to Covid-19 in Indonesia in the age range of 45-54 years is 8%, 55-64 years is 14%, and over 65 years is 22%.[4] This condition is due to the condition that the elderly

(elderly) generally have various comorbidities, for example: cardiovascular disease, diabetes mellitus/diabetes, chronic respiratory disease, hypertension and others.[5] The elderly (elderly) are one of the groups who are vulnerable and most at risk of death due to Covid-19 so that the government has set steps to prevent transmission of both individuals, families, and communities[6]. Preventive measures against the process of transmitting Covid-19 for the elderly include: staying at home, doing activities at home, keeping a distance from other people, maintaining cleanliness, wearing masks, and others[7].

The use of masks is a prevention and control measure that can limit the entry of viruses that attack through the respiratory tract. One of them is Covid-19, masks can be used to protect healthy people. Used to protect yourself when in physical contact with other people, whether infected or not infected with the virus. Or used by people infected with the virus when in physical contact / not with other people to prevent further transmission[8]. The use of appropriate and correct masks requires compliance from the users, but conditions in the field indicate that the use of masks is not optimal, especially in the elderly group. Based on these problems, the authors are interested in scientifically studying the behavior of the elderly towards compliance with the use of masks, covering the domains of knowledge, attitudes and actions

Methods

The research design used is descriptive analytic with a cross sectional approach.[9] This research was conducted in the work area of West Aceh Regency where there were Covid-19 cases, namely Johan Pahlawan District which consisted of 3 (three) villages (Field, Ujong Baroeh and Rundeng) and Meurebo sub-district consisting of one village, namely Gunong Kleng. The population in this study were the elderly, amounting to 47 people. The sampling technique in this study was a total sampling of 47 people, based on the consideration that the total population was less than 100, the entire population could be used as a research sample.

Results

1. Characteristics of Respondents

Table 1. Frequency Distribution of Elderly Characteristics

Characteristic	N	%
Gender		
Male	35	74,6 %
Female	12	25,5
Age		
60 - 74 years	33	70,2
79 - 80 years	14	29,7

Based on table 1.1 the frequency distribution of the characteristics of the elderly with male gender is 35 people (74.6%), more than respondents with female gender, namely 12 people (25.5%). Characteristics of the age of the elderly with an age range of 60-74 years more, namely 33 (70.2%) compared to the age of 79-80 years amounting to 14 people (29.7%).

2. Univariate Analysis

Table 2. Frequency Distribution of Knowledge, Attitudes, Actions and Obedience of the Elderly

Variabel	N	Persentase
Knowledge		
Good	8	17
Bad	39	82,9
Attitude		
Good	12	25,5
Bad	35	74,4

Based on Table 2. That the knowledge of the majority of the elderly is in the poor category, namely 39 people (82.9%) and the minority in the good category, namely 10 people (17%). The attitude of the majority of the elderly in the less category is 35 people (74.4%) and the minority in the good category is 12 people (25.5%).

3. Bivariate Analysis

Table 3. Crosstabulation distribution of the effect of knowledge on compliance with the use of masks in the elderly

Knowledge	**Compliance with the use of masks**				**Total**		**P- Value**
	Compliant		**In-Compliant**				
	N	**%**	**N**	**%**	**N**	**%**	
Good	7	14,8	1	2,1	8	17	
Bad	5	10,6	34	72,3	39	82,9	0,001
Total	12	25,4	35	74,4	47	100	

Based on table 3 shows that the elderly with less knowledge are 39 people (82.9) with a level of compliance with the use of masks 5 people (10.6) while the elderly who are not obedient are 34 people (72.3). Based on the results of the chis-guare test with a significance value of 0.001 <0.05, Ho is rejected and Ha is accepted, indicating that there is a relationship between elderly knowledge and adherence to the use of masks in the work area of the Johan Pahlawan and Meurebo Health Centers.

Table 4. Crosstabulation distribution of the influence of attitudes on compliance with the use of masks in the elderly

Attitude	Compliance with the use of masks				Total		P- Value
	Compliant		In-Compliant				
	N	%	N	%	N	%	
Good	10	21,2	2	4,2	12	25,5	
Bad	5	10.6	30	63,8	35	74,4	0,004
Total	15	31,8	32	68	47	100	

Based on table 4. It shows that the elderly who have a poor attitude are 35 (74.4) with the level of adherence to the use of masks amounting to 5 people (10.6) while those who do not comply are 30 people (63.8). Based on the results of the chis-guare test with a significance value of 0.004 <0.05, Ho is rejected and Ha is accepted, indicating that there is an influence of elderly attitudes on compliance with the use of masks in the work area of the Johan Pahlawan and Meurebo Health Centers.

Discussion

1. Effect of Elderly Knowledge on Prevention of Mask Compliance

The results showed that the knowledge factor was 39 people (82.9) with a level of compliance with the use of masks 5 people (10.6) while the elderly who did not comply were 34 people (72.3). Based on the results of the chi square test with a significance value of 0.001 < 0.05, Ho is rejected and Ha is accepted, indicating that there is an influence of elderly knowledge on the compliance of the use of masks in the work area of West Aceh district. In line with the results of research conducted by Devi on 62 respondents, it showed that knowledge had an effect on compliance with the use of masks in the community by 0.004 (P <0.05).[11] Knowledge about the benefits of using masks is an important factor that will affect the compliance of the elderly in using them. Knowledge is the result of someone's knowledge of the sensory system by seeing, hearing, smelling. feel and feel through the eyes, ears, nose, tongue, and hands on an object or an information. The majority of the elderly who do not use masks in preventing the transmission of COVID-19 are due to not getting proper information about masks.

According to Notoadtmodjo (2007) knowledge is a predisposing factor (inherent) that affects a person's behavior, so that it will give a positive response, accept, appreciate, influence or encourage others to the object that he already knows. The research assumption is that the better the knowledge of the elderly about the benefits of using masks, the more their compliance in using masks as a form of prevention against the transmission of COVID-19 will increase. Patients who have good knowledge are supported by higher education levels so that they understand correctly about the benefits of using masks.[12]

2. The Effect of Elderly Attitudes on the Prevention of Compliance with the Use of Masks

The results showed that the elderly who had poor attitudes were 35 (74.4) with the level of adherence to the use of masks amounted to 5 people (10.6) while those who did not comply were 30 people (63.8). Based on the results of the chis-guare test with a significance value of 0.004 <0.05, Ho is rejected and Ha is accepted, indicating that there is an influence of the elderly's attitude on compliance with the use of masks in the work area of the Johan Pahlawan and Meurebo Health Centers. This research is supported by Mushidah's research (2020) where the attitude variable has a relationship with the level of compliance with the use of masks by MSME traders as an effort to prevent covid-19, with a p-value of 0.000 (p <0.05)[13].

Soeripto (2016), said that attitude is awareness and tendency to act, as a closed response from a person to a certain stimulus or object that involves opinion and emotion factors, for example happy or not happy, agreeing or disagreeing, good or not good. Someone who has a good attitude has the awareness to do good and vice versa if someone who has a bad attitude can be interpreted as a person who does not have the awareness to do good. From this attitude, it can develop into behavior that will become a habit to always pay attention to their health, including preventing the transmission of COVID through the use of masks[14]. The results of this study are also in line with the results of Sumekar's (2015) research entitled "Analysis of knowledge, attitudes and compliance with the use of personal protective equipment (PPE) in silver craftsmen in the Yogyakarta silver industry in 2015" knowledge is indicated by the p value = 0.036 (p value 0.036). < 0.05), then there is a relationship between knowledge of silver craftsmen and compliance with the use of PPE in silver craftsmen.[15]

Notoadmojo theory, Attitude is a person's reaction or response to a stimulus or object, an attitude about compliance with the use of masks is very important to achieve optimal health. Achieving a bad attitude to be good or even very good requires several stages on a person. Attitudes consist of various levels, namely accepting, responding, appreciating and being responsible. The better a person's attitude, the more obedient in the use of masks, and vice versa the worse the attitude of a person the more disobedient in the use of masks.

Conclusion

Based on the results of the study, it showed that most of the elderly did not have good knowledge and attitudes towards compliance with the use of masks in preventing the transmission of COVID-19.

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References

Ariana Sumekar (2015). Analisis Sikap Dan Perilaku Penggunaan APD Pada Pengrajin Perak Indusri Perak "X" Yogyakarta. http://jurnal.stikeswirahusada.ac.id/jkm/article/view/279

Data Sebaran Covid Indonesia, Update 29 Agustus 2020. Satuan Tugas Penanganan Covid -19. https://covid19.go.id/

Devi Pramita Sari, Nabila Sholihah, Atiqoh (2020) Hubungan Antara Pengetahuan Masyarakat Dengan Kepatuhan Penggunaan Masker Sebagai Upaya Pencegahan Penyakit Covid-19 Di Ngronggah. https://ojs.udb.ac.id/index.php/infokes/article/view/850

Kementerian Kesehatan RI. (2020). Panduan Pelayanan Kesehatan Lanjut Usia pada Era Pandemi Covid-19. In Kementerian Kesehatan RI. Direktorat Jenderal Kesehatan Masyarakat(Issue Mei). Kementerian Kesehatan RI

Kepmenkes, 2020. Pedoman Pencegahan Dan Pengendalian Coronavirus Disease (Covid-19). Kementerian Kesehatan Ri. Juli 2020. file:///C:/Users/HP/Downloads/Documents/REV-05_Pedoman_P2_COVID-19_13_Juli_2020.pdf

Keputusan Presiden Republik Indonesia (2020). Penetapan Bencana Nonalam Penyebaran Corona Wrus D/Sease 2019 (Ccovid 19) Sebagai Bencana Nasional. Kementerian Sekretariat Negara Republik Indonesia.

Medika, J. M. (2020). Hubungan Pengetahuan Dan Sikap Masyarakat Terhadap Covid-19: A Literature Review. Jurnal MenaraMedikaHttps://Jurnal.Umsb.Ac.Id/Index.Php/Menaramedika/Index Jmm 2020 P-Issn 2622- 657x, E-Issn 2723-6862.

Murshidah, Ratna Muliawati. Pengetahuan dan Sikap Dengan Kepatuhan Penggunaan Masker Sebagai Upaya Pencegahan Covid-19 Pada Pedagang UMKM.

Notoatmodjo, S. 2007. Perilaku kesehatan dan ilmu perilaku, Jakarta: PT Rineke Cipta.

Pedoman Umum Menghadapi Pandemi Covid-19 Bagi Pemerintah Daerah, Pencegahan, Pengendalian, Diagnosis Dan Manajemen. Kemendagri, 2020. file:///C:/Users/HP/Downloads/Documents/BUKU_PEDOMAN_COVID19_KEMENDAGRI.pdf. https://apps.who.int/iris/browse

Permenkes RI. (2017). Penyelenggaraan Pelayanan Kesehatan Lanjut Usia Di Pusat Kesehatan Masyarakat. In Kementrian Kesehatan Indonesia. Kementerian Kesehatan RI. http://kesga.kemkes.go.id/images/pedoman/Permenkes 67 2015 Yankes Lansia Puskesmas.pd

Sugiyono. 2013. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung : Penerbit Alfabeta

Vincent Chi.C.C, Shuk.C.Wong, et al, 2020, The role of community-wide wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2, Contents lists available at ScienceDirect Journal of Infection journal homepage: www.elsevier.com/locate/jinf

WHO. (2020). WHO Director-General's remarks at the media briefing on 2019-nCoV, https://www.who.int/health-topics/coronavirus

World Health Organization. (2019). *Coronavirus*. Retrieved from World Health Organization: https://www.who.int/health-topics/coronavirus