

Determinants of COVID-19 Prevention Equipment Readiness in Families during Pandemic in Indonesia

(Penentu Kesediaan Peralatan Pencegahan COVID-19 dalam Keluarga semasa Pandemik di Indonesia)

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ABSTRACT

Indonesia was the country with the second-highest case of COVID-19 in the South East Asia Region (SEAR) of the World Health Organization (WHO) data until August 1, 2021. As an infectious disease, the high level of COVID-19 rate transmission requires everyone always to prepare a prevention tools kit to minimize the risk of coronavirus exposure. This study aimed to analyze the determinant factors of readiness of the COVID-19 prevention tools kit. This study used a cross-sectional design with a mix-method technique because data collection and analysis combine quantitative and qualitative approaches in several phases of the research process. Data collected from 18 representative provinces in Indonesia with a total of respondents involved were 2,196 people. The Binary Logistic Regression tests were used to analyze the variable correlation. The multivariable analytic showed that the determinant factors with a significant correlation which affected the readiness of COVID-19 prevention tools kit in each family during pandemic in Indonesia were age 37-46 years old ($p=0.000$; odds ratio=8.039), female gender ($p=0.000$; odds ratio=8.653), self-employed jobs ($p=0.028$; odds ratio=2.239), income > 5 million per month ($p=0.000$; odds ratio=7.267), good knowledge ($p=0.000$; odds ratio=3.311), and good perception ($p=0.001$; odds ratio=2.015). The supply of tools and medicines to prevent COVID-19 is indispensable during the pandemic to protect against COVID-19 infection. Masks and hand sanitizers become the main kits most individuals have, especially when doing outside home activities. At the same time, the oximeter becomes the least kit in the family. This preparation also teaches citizens to practice a healthy lifestyle. Cross-sector coordination is needed to improve public awareness of COVID-19 prevention equipment.

Keywords: COVID-19 prevention kit; family readiness; infectious diseases; mix-method

ABSTRAK

Indonesia adalah negara dengan kes COVID-19 tertinggi kedua di Wilayah Asia Tenggara (SEAR) mengikut data oleh Pertubuhan Kesihatan Sedunia (WHO) sehingga 1 Ogos 2021. Sebagai penyakit berjangkit, tahap jangkitan tinggi COVID-19 memerlukan setiap orang untuk selalu menyediakan alat pencegahan untuk mengurangkan risiko pendedahan coronavirus. Kajian ini bertujuan untuk menganalisis faktor penentu kesediaan kit alat pencegahan COVID-19. Kajian ini menggunakan reka bentuk keratan rentas dengan teknik kaedah campuran. Data yang dikumpulkan daripada 18 wilayah perwakilan di Indonesia dengan jumlah responden yang terlibat adalah 2,196 orang. Ujian Regresi Logistik Binari digunakan untuk menganalisis korelasi pemboleh ubah. Statistik analitik menunjukkan faktor penentu dengan korelasi yang signifikan yang mempengaruhi kesediaan kit alat pencegahan COVID-19 dalam setiap keluarga semasa pandemik di Indonesia berumur 37-46 tahun ($p = 0.000$; odds ratio = 8.039), jantina wanita ($p = 0.000$; odds ratio = 8.653), pekerjaan mandiri ($p = 0.028$; odds ratio = 2.239), pendapatan > 5 juta sebulan ($p = 0.000$; odds ratio = 7.267), pengetahuan yang

baik ($p = 0.000$; odds ratio = 3.311) dan persepsi yang baik ($p = 0.001$; odds ratio = 2.015). Pembekalan alat dan ubat-ubatan untuk mencegah COVID-19 sangat diperlukan semasa pandemik untuk melindungi daripada jangkitan COVID-19. Penutup muka dan pembersih tangan menjadi alat utama yang dimiliki kebanyakan individu, terutama ketika melakukan aktiviti di luar rumah. Pada masa yang sama, oksimeter menjadi kit paling sedikit dalam keluarga. Persediaan ini juga mengajar warga untuk mengamalkan gaya hidup sihat. Penyelarasan rentas sektor diperlukan untuk meningkatkan kesediaan orang ramai daripada segi peralatan pencegahan COVID-19.

Kata kunci: Kaedah campuran; kesediaan keluarga; kit pencegahan COVID-19; penyakit berjangkit

INTRODUCTION

The SARS-CoV-2 was first detected in December 2019 and very quickly caused the global outbreak of coronavirus disease 2019 (COVID-19). The World Health Organization (WHO) officially announced it be a pandemic, and it will be predicted to threaten global public health systems for a long time (Zhan et al. 2020). The South-East Asian Region (SEAR) became the third most affected WHO region with 38.4 million cases of COVID-19. Indonesia has the second-highest cases in the SEAR region until August 1, 2021 (WHO 2020a). The WHO stated that from January 3, 2020, to August 11, 2021, there were 3,749,446 confirmed cases of COVID-19 in Indonesia, with 112,198 deaths (WHO 2021).

Coronavirus can be transmitted through airborne droplets with direct contact between the suspect and healthy people or indirect contact through touch on objects affected by the droplet virus (Manigandan et al. 2020). The spread of the COVID-19 virus can occur through close contact between people, usually within a short distance of one meter. Infection can occur when aerosols or droplets containing the virus are inhaled or in direct contact with the eyes, nose, or mouth (WHO 2020b). Transmission by droplets generally occurs at a diameter of $> 5 \mu\text{m}$ that can quickly settle gravitationally on the surface (1-2 m). Fine particles and ultrafine can last ≥ 2 hours to be transported further (e.g. up to 8 m via simple diffusion and convection mechanism) (Delikhooon et al. 2021). The spread of droplets is influenced by fluid viscoelasticity, ventilation, evaporation rate, exhalations, sneeze, or cough. So with such circumstances, the preventive distance for physical distancing contamination prevention has required a distance of 1-2 m (Córdova & Latasa 2020). The successful transmission of the virus is influenced by its viability factor when heading to the susceptible host (Castro-Sánchez et al. 2021). So preventive measures are needed to avoid exposure to droplets because currently, there is no effective antiviral drug that protects the public when exposed to the virus

(Manigandan et al. 2020; Pradhan et al. 2020), and the presence of contagion factors from asymptomatic individuals that account for 59% of all COVID-19 transmission (Johansson et al. 2021). Preventive measures that can be done include masks, maintaining distance, and hand hygiene, such as hand sanitizer (Johansson et al. 2021; Pradhan et al. 2020).

Preventive measures that need to be taken for the general public to prevent the COVID-19 virus at home include nutrition intake, behavior, and COVID-19 prevention equipment. Physically, nutritious food intake and physical fitness behavior are required by exercising. According to WHO, the completeness of equipment needed to prevent COVID-19 is the availability of soap and water or alcohol-based hand rub and mask. People who are self-isolation at home need to equip themselves with body condition monitoring equipment. Examples are oximeters to monitor oxygen saturation and painkillers or fever relievers such as paracetamol (NHS 2021; WHO-SEAR 2021). The same information was expressed by the CDC and The Indonesian Task Force on Handling COVID-19, equipment that can prevent COVID-19 is using masks, often washing hands with water and soap or using hand sanitizer, monitor health conditions every day. Another way to prevent infection is by consuming multivitamin supplements to maintain endurance and preparing tableware and drinking, worship equipment, tissues, and tote bags for shopping (CDC 2021; The Indonesian Task Force on Handling COVID-19 2021).

Indonesia is the fourth most populous country globally, struggling with COVID-19 (Djalante et al. 2020; Muhyiddin & Nugroho 2021). Readiness from the government, health services, and the public are needed to overcome the pandemic (Setiati & Azwar 2020). The government's provision of personal protective equipment is one of the essential things in reducing the spread of SARS-CoV-2 (Alshammari et al. 2020; Setiati & Azwar 2020). The provision of COVID-19 prevention tools needs to be considered both at the national, regional,

and community levels directly. COVID-19 prevention equipment is required for the community, at least at the household level, to prevent and monitor early health conditions of family members. Some previous research discussed knowledge, attitude, and practice in each individual. No one has discussed it on a family scale. Therefore, every family must have good resilience in terms of knowledge and the availability of COVID-19 transmission prevention kits. Families can be the key to maintaining the compliance of each individual to implement the COVID-19 prevention protocol wherever they are. This study aims to analyze the determinants of sociodemography that affect the readiness of families in ownership of COVID-19 prevention kits in families during the pandemic in Indonesia. The determinants consist of availability of masks, hand sanitizer, pulse oximeters, fever and painkiller (paracetamol), availability of mouthwash, vitamin C and vitamin B. Cross-sector coordination is needed to improve community readiness in terms of COVID-19 prevention equipment.

MATERIALS AND METHODS

This study is a cross-sectional study with primary data retrieval from October to December 2020. The population of this study is 34 provinces in the territory of Indonesia (Central Bureau of Statistics 2019). Based on the consideration of the spread of active cases of COVID-19 in Indonesia, data collection is carried out in 18 provinces. It represents three-time areas of Indonesia, namely West Indonesia, Central Indonesia, and Eastern Indonesia (Keputusan Presiden Republik Indonesia

1987). West Indonesia is represented by East Java, Central Java, West Java, Yogyakarta, Banten, Jakarta, Riau, South Sumatra, Bangka Belitung Islands, and Central Kalimantan. Central Indonesia is represented by Bali, East Kalimantan, South Kalimantan, West Sulawesi, South Sulawesi, Central Sulawesi, West Nusa Tenggara and East Nusa Tenggara. Maluku represents eastern Indonesia.

This study uses the mixed method survey method. Research data was taken using online-offline techniques. Online questionnaires by filling in links questions from Google Form were distributed through WhatsApp and Telegram Application. One deputy researcher will distribute the questionnaire online in the area. The use of online media refers to previous online survey research methods (Amato et al. 2018; Muslih et al. 2021; Van Gelder et.al 2010). Offline data collection is done in several regencies/cities in East Java Province. Based on the results of the questionnaire dissemination obtained, the total number of respondents in this study is as many as 2,196 respondents.

The questionnaire used in this study contains independent variables: age, gender, occupation, area of residence, income, education, knowledge, and perception. The readiness COVID-19 prevention kit variable as a dependent variable has two categories: good and bad. These categories are composite variables from the seven main variables of COVID-19 prevention. The composition of the assessment based on the results of the study of the research team together with public health experts then decided as in Table 1:

TABLE 1. Composite variables COVID-19 prevention kit readiness

No.	Question
1	Do you have an inventory of analgesic drugs, fever, and pain relievers (Yes/No)
2	Do you have a supply of mouthwash (Yes/No)
3	Do you have a supply of vitamin C for one family (Yes/No)
4	Do you have a supply of vitamin B Complex for one family (Yes/No)
5	Do you have an oximeter supply, and it works fine (Yes/No)
6	Do you have a hand sanitizer supply and always carry (Yes/No)
7	Do you have a supply of masks for one family (Yes/No)

The data was analyzed using SPSS 25 software. There are two kinds of analysis used: descriptive and bivariate. The analysis descriptively describes the distribution of 7 variable constituent variables composite readiness kit COVID-19 and cross-distribution of free variables and dependent variables. Furthermore, a multivariable analysis uses binary logistic regression tests between dependent and all free variables.

RESULTS AND DISCUSSION

A total of 2,192 respondents representing families participated in this study from October to December 2020. The ownership of the family prevention kit used as the basis for measuring the readiness category of the COVID-19 prevention kit can be seen in Figure 1.

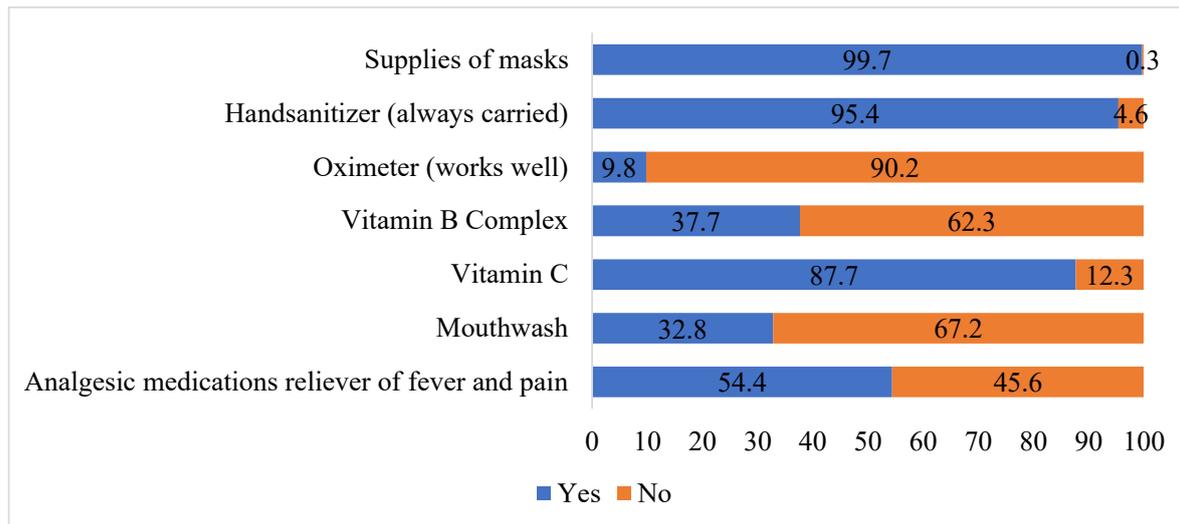


FIGURE 1. Distribution of 7 composite variable constituent variables readiness COVID-19 prevention kit in percent units

The availability of COVID-19 prevention kits is one of the things to note during pandemics because the equipment can support a person in maintaining or monitoring his condition as early as possible. Based on Figure 1, it can be seen that in the top 3, many families have not provided these kits such as oximeter (90.2%), mouthwash (67.2%), and Vitamin B Complex (62.3%). Based on the calculation of composite variables, the results of community prevention kit readiness in the good category as many as 2,046 respondents (93.2%) and 150 fewer respondents (6.8%).

COVID-19 transmission is spread through human-to-human transmission, droplets, coughs, and contaminated surfaces. Prevention of this transmission can be reduced by the behavior of washing hands with soap or using alcohol-based sanitizer (Pradhan et al. 2020). Sanitizer in small sizes, such as hand sanitizer, has the advantage of being carried everywhere by people if the activity is in a place that is vulnerable to exposure to viruses. So that if there is no water to wash, we can use a hand sanitizer as an alternative to clean the hands.

In addition to washing hands using a sanitizer, masks are one of the essential components in the COVID-19 outbreak. Masks can filter particulates, droplets, and bacteria (Pradhan et al. 2020). The use of masks is required by all governments globally when in conditions requiring contact with others and is inevitable, especially in transportation facilities (Abboah-Offei et al. 2021). Currently, there are some people with COVID-19 who have no symptoms, so the use of masks in public places is beneficial for people to prevent each other (MacIntyre & Chughtai 2020). Especially in Indonesia, with a warm climate and dense population, the spread of covid is speedy (Azizah et al. 2021). So, every individual must consciously maintain his immune system. Intake of macro and micronutrients that enter the body needs to be considered to prevent COVID-19. The availability of Vitamin C needs to be considered in the prevention of COVID-19 because vitamin C has an excellent immunomodulatory effect in the face of infectious diseases. Vitamin C supplementation is one of the options that can support immunity in the prevention of COVID-19

(Shakoor et al. 2020a). In addition to Vitamin C, other vitamins are sold freely. They can be used to increase endurance, such as B vitamins. This B vitamin can boost immunity by lowering pro-inflammatory cytokines and inflammation, reducing breathing difficulties, and potentially reducing hospital stays for COVID-19 patients (Shakoor et al. 2020b). However, in our study, most people do not have a supply of Vitamin B complex (62.3%). It is similar to research on students in Manado; most students have less intake of B vitamins (Vitamin B1, B2, and B6) during this pandemic. Vitamin C and B are water-soluble vitamins that need to be consumed in the body to meet the adequacy in the body so that if there is no supplement of such vitamins can be consumed foods containing these vitamins, examples of food sources for B vitamins are liver, eggs, nuts, meat, tuna, and fruit (Clarisa et al. 2021).

Fever-lowering analgesic drugs can be used as a preparation for fever relief. Based on the Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/Menkes/413/2020 concerning Guidelines for Prevention and Control of Coronavirus Disease 2019 (COVID-19), for patients with mild symptoms and self-isolation at home, symptomatic treatments such as paracetamol can be given in case of fever. More than half of our respondents stated that they had paracetamol (54.4%).

There are various opinions on the use of mouthwash in the prevention of COVID-19. Research indicated the use of mouthwash could be beneficial to the actions of dentists to reduce the risk of transmission of the virus through aerosols and saliva before dental procedures are performed on patients because antiviral mouthwashes can play an important role in reducing the viral load of viruses in saliva (Moosavi et al. 2020). However, there is no sufficient evidence to support the recommendations for the use of mouthwash in dental treatment procedures (Cavalcante-Leão et al. 2021). So the lack of clear guidance can contribute to people having low mouthwash equipment in preventing COVID-19.

The most common equipment that the public did not have in this study was a well-functioning oximeter. An oximeter is one of the tools that can be used to monitor the body's condition related to COVID-19, especially in terms of knowing the condition of oxygen saturation. This oxygen saturation monitoring condition is important because there are conditions in COVID-19 patients with no symptoms, but the oxygen saturation is abnormal (silent hypoxia) (Berlin et al. 2020; Starr et al. 2020). During this pandemic, oximeters are urgently needed to detect patients who need oxygen and hospitalization

(Michard et al. 2021). So by looking at the importance of oximeter benefits, it is necessary to educate the public to complete the oximeter to prevent COVID-19.

The final result of the composite variable grouping of prevention kits showed the readiness of community prevention kits in the good category of 2046 respondents (93.2%) and the category of less as many as 150 respondents (6.8%). Research on the readiness of COVID-19 prevention kits in Indonesia is one of the first studies to describe the community's readiness for preventive equipment. In this study, results of categorizing the readiness of COVID-19 prevention kits in families in the good and bad categories were then incorporated into a cross-tabulation analysis with independent variables. The results of the analysis can be seen in Table 2.

In this study, the multiple test results stated that six variables have a p-value of < 0.05 , which influences the readiness of COVID-19 prevention equipment in the family during the pandemic in Indonesia. These variables are age, gender, occupation, residence, income, education, knowledge, and perception. While the variables that do not influence the readiness of COVID-19 prevention kits with a value of p-value > 0.05 are housing variables and educational variables as follows in Table 3.

The age variable compares the age category 57-66 years. Respondents with the age category 27-36 years will have good preventive equipment readiness as much as 4.853 times greater than respondents with 57-66 years. Respondents with the age category 37-46 years will have good preventive equipment readiness as much as 8.039 times greater than respondents with 57-66 years. Respondents with the age category 47-56 years will have good preventive equipment readiness as much as 4.095 times greater than respondents with 57-66 years.

Our findings show that the category of respondents with the largest odds ratio was respondents with the age category 37-46 years with OR 8,039 compared to the comparison category of 57-66 years. This has similarities to research in Nigeria with subjects on health workers. The majority of health workers in the 20-49 age category have concerns about the risk of COVID-19 compared to the elderly group (50-59 years). This category of 20-49-year-olds is estimated to have the highest risk of infection due to their exposure and more active condition than the elderly group (Ejeh et al. 2021). This concern can contribute to a person's making preventive efforts. In addition, there are different knowledge access factors about COVID-19 between the younger generation and the elderly; Older people tend to have insufficient knowledge of COVID-19 because there is no access to gadgets and the internet (Reuben et al. 2021).

TABLE 2. Cross-tabulation of free variables and dependent variables

Free variables	COVID-19 prevention kits readiness				Sum	
	Good (n=)		Less(n=)		(n=2,196)	
	Freq	%	Freq	%	Freq	%
<i>Age (years)</i>						
17-26	230	89%	29	11%	259	100%
27-36	1,007	93%	72	7%	1,079	100%
37-46	526	97%	19	3%	545	100%
47-56	225	93%	17	7%	242	100%
57-66	58	82%	13	18%	71	100%
<i>Gender</i>						
Male	654	86%	108	14%	762	100%
Female	1,392	97%	42	3%	1,434	100%
<i>Work</i>						
State Civil Apparatus	513	95%	25	5%	538	100%
Company Employees	436	91%	42	9%	478	100%
Entrepreneurial	431	93%	31	7%	462	100%
Self employed	404	96%	18	4%	422	100%
Not Working	262	89%	34	11%	296	100%
<i>Living Area</i>						
Rural	1,112	93%	83	7%	1,195	100%
Urban/city	934	93%	67	7%	1,001	100%
<i>Income</i>						
< 1 million	222	85%	38	15%	260	100%
1-3 million	577	94%	39	6%	616	100%
3-5 million	726	93%	55	7%	781	100%
> 5 million	521	97%	18	3%	539	100%
<i>Education</i>						
Elementary School	211	91%	21	9%	232	100%
Senior High School	1,102	93%	78	7%	1,180	100%
Higher Education	733	93%	51	7%	38	100%
<i>Knowledge</i>						
Good	1,569	94%	93	6%	1,662	100%
Enough	409	91%	41	9%	450	100%
Less	68	81%	16	19%	84	100%
<i>Perception</i>						
Good	1,711	95%	99	5%	1,810	100%
Bad	335	87%	51	13%	386	100%

*p-value < 0.05

TABLE 3. Multiple linear regression analysis of COVID-19 prevention kits readiness

Variable	Coef	S.E.	Wald	p-value	Odds ratio	95% Confidence interval	
						Lower bound	Upper bound
<i>Age</i>							
17-26	0.379	0.455	0.696	0.404	1.461	0.599	3.563
27-36	1.580	0.387	16.696	0.000*	4.853	2.275	10.353
37-46	2.084	0.436	22.855	0.000*	8.039	3.421	18.895
47-56	1.410	0.445	10.036	0.002*	4.095	1.712	9.794
<i>Gender</i>							
Female	2.158	0.232	86.636	0.000*	8.653	5.493	13.631
<i>Work</i>							
Civil servants	0.645	0.387	2.770	0.096	1.905	0.892	4.071
Company Employees	-0.049	0.349	0.020	0.888	0.952	0.481	1.886
Entrepreneurial	0.624	0.348	3.226	0.072	1.867	0.945	3.689
Self employed	0.806	0.366	4.846	0.028*	2.239	1.092	4.589
<i>Residence</i>							
City	-0.220	0.189	1.351	0.245	0.803	0.554	1.163
<i>Income</i>							
1-3 million	1.049	0.315	11.094	0.001*	2.854	1.540	5.290
3-5 million	0.826	0.320	6.674	0.010*	2.285	1.221	4.276
>5 million	1.983	0.382	26.913	0.000*	7.267	3.435	15.373
<i>Education</i>							
Elementary School	-0.352	0.324	1.176	0.278	0.703	0.372	1.329
Senior High School	0.092	0.214	0.185	0.667	1.097	0.721	1.668
<i>Knowledge</i>							
Good	1.197	0.331	13.090	0.000*	3.311	1.731	6.334
Enough	0.848	0.358	5.617	0.018*	2.335	1.158	4.710
<i>Perception</i>							
Good	0.701	0.206	11.564	0.001*	2.015	1.346	3.018

*p-value < 0.05

Next, the gender variable showed that respondents with the female gender category will have good prevention equipment readiness as much as 8.653 times greater than respondents with the male gender category. Research conducted in Bangladesh states that women have more knowledge than men about COVID-19 prevention (Hossain et al. 2020). In addition, in Ethiopia, women have better preventive COVID-19 practices than men (Amsalu et al. 2021). Studies of gender-based knowledge in Pakistan suggest women have better risk

management and better prevention practices compared to men in the face of the COVID-19 pandemic. It can be a basis for suggestions for more education on prevention to the group of men in the face of the COVID-19 pandemic (Rana et al. 2021).

Respondents with the self-employed category will have good prevention equipment readiness as much as 2.239 times greater when compared to respondents who do not work. It is in accordance with a research in Ethiopia; respondents who are not working have

poor practice and knowledge in preventing COVID-19 compared to working respondents. This can be due to low monthly income because a person cannot change his behavior and condition, so he cannot carry out preventive care as recommended (Adhena & Hidru 2020).

In this study, variable housing with rural and urban categories did not influence the readiness of COVID-19 prevention equipment. In contrast to research conducted in China, villagers take fewer precautions and have poorer information assessments than urban residents (Chen & Chen 2020). Another research in the USA states that rural residents are significantly smaller in implementing COVID-19 preventive behavior (Callaghan et al. 2021). This is possible because other variables can contribute to the good or bad readiness of COVID-19 prevention, such as good knowledge and good attitude in this study, affect the readiness of COVID-19 prevention. The income variable analysis showed that respondents with income category >5 million will have good prevention equipment readiness as much as 7.267 times greater than respondents with income category <1 million. A person's income can be a factor in a person's behavior to purchase COVID-19 prevention equipment related to COVID-19 prevention behavior. People from low-income families have the potential to have less awareness of health practices. Research in Ethiopia states that respondents with less than 100 Birr incomes have poor knowledge and practice in preventing and controlling COVID-19 compared to respondents with more than 1,000 Birr (Adhena & Hidru 2020). In addition, another study in Ethiopia stated that respondents with monthly income greater than 10,000 have a 7.33 times greater chance of implementing COVID-19 prevention than families with incomes less than 5,000 (Amsalu et al. 2021).

The educational variables in this study did not affect the readiness of preventive equipment. This is in contrast to research conducted in Ethiopia; high-risk age groups without formal education significantly have poor knowledge and COVID-19 prevention practices (Adhena & Hidru 2020). This difference is possible because respondents in this study had an education level between elementary, high school, and college, different from the study that used the group not attending school as a comparison group.

Respondents with a good knowledge category will have good prevention equipment readiness as 3.311 times greater than respondents with less knowledge. Respondents with enough knowledge will have good prevention equipment readiness as much as 2.335 times greater than respondents with less knowledge. Knowledge variables influence the readiness of preventive equipment.

A person with good knowledge can have good COVID-19 prevention practices compared to someone with bad knowledge (Amsalu et al. 2021). Knowledge factors in individuals encourage the intention to take precautions, such as knowledge of how to transmit, the level of transmission, social distancing, and handwashing (Ahmad et al. 2020). Research in Indonesia states that respondents with good knowledge about the transmission and prevention of COVID-19 will have good self-protection awareness (Fakhira et al. 2021). So with this knowledge, one can know the COVID-19 prevention equipment they need and the priority of fulfillment.

Variable perception has a category of comparison to poor perception. Respondents with a good perception category will have good prevention equipment readiness as much as 2.015 times greater than respondents with a poor perception category. Risk perception in individuals can positively affect the formation of individual intentions to take preventive measures (Ahmad et al. 2020). The level of risk perception in public health emergencies should be monitored. This can help guide the community in responding and preparing when facing the COVID-19 situation (He et al. 2020).

In general, the condition of family readiness in Indonesia regarding ownership of COVID-19 prevention kits is in a good category. However, several things need to be considered: the availability of oximeters in families and the lack of knowledge and poor perception of COVID-19. This indicates the need for education to the community and families so that COVID-19 prevention measures can be carried out to the maximum. This study requires a broader range of respondents. Moreover, various new variance mutase COVID-19 will certainly cause the dynamics of the availability of COVID-19 prevention kits in individuals and families.

CONCLUSION

Based on descriptive analysis, it is known that most families in Indonesia have COVID-19 prevention kits readiness, with a good category of 2,046 respondents (93.2%). Most respondents had an inventory of hot and painkilling analgesic drugs, vitamin C, hand sanitizer (which is always carried), and supplies of masks for families. At the same time, the equipment that most respondents do not have is mouthwash, B-complex vitamins, and the availability of oximeters in the family. Determinants that affect COVID-19 prevention kits in families in Indonesia based on the results of tests are age (27-36 years, 37-46 years, 47-56 years compared to the comparison category of age 57-66), gender (women

versus male comparison category), employment (self-employed compared to the comparison category of non-working, income (1-3 million, 3-5 million, and >5 million compared to the income comparison category <1 million), knowledge (good versus the category of less comparison) and perception (good versus bad comparison category). Education is needed to improve knowledge and instill good perception to increase the readiness of COVID-19 prevention kits to support the improvement of COVID-19 preventive measures.

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