Papua Medicine and Health Science (PMHS)





https://jurnal.fk-unipa.com/index.php/PMHS

The Efforts Of Prevent Covid-19 In The People of Kalimantan, Indonesia

Abil Rudi ^{1*}, Novin Yetiani ², Sunarti ³, Ria Damayanti ⁴, Lea Masan ⁵, Yolanda Montessori ⁶, Paskalia Tri Kurniati ⁷, Rika Yuanita Pratama ⁸

- ¹ Health Information Record Programe, Kapuas Raya College of Health Science, Sintang, Indonesia ^{2,5,6,7} Midwifery Programe, Kapuas Raya College of Health Science, Sintang, Indonesia
- ^{3,4,8} Public Health Programe, Kapuas Raya College of Health Science, Sintang, Indonesia

ARTICLE INFO

ABSTRACT/ ABSTRAK

Article history

Received: 08 October 2024 Revised: 03 December 2024 Accepted: 31 December 2024

Keywords:

COVID-19, Prevention Efforts, Knowledge, Attitude

Kata kunci:

COVID-19, Upaya Pencegahan, Pengetahuan, Sikap ABSTRACT. Since the coronavirus disease 2019 (COVID-19) pandemic in December 2019, it has brought some significant lifestyle changes to people around the world. This research is about the prevention efforts made by the community in West Kalimantan, Indonesia against the spread of COVID-19. Data collection through questionnaires distributed online for 3 months in 2021. Respondents in this study were the people of West Kalimantan, Indonesia. Most respondents have high prevention efforts regarding hand washing, wearing masks, maintaining distance, avoiding crowds, and reducing physical mobility to avoid COVID-19 infection. Most of the respondents also showed good knowledge in identifying the basic symptoms of COVID-19. Respondents mostly have a good attitude towards the spread of COVID-19. These findings provide insight into efforts to prevent COVID-19 among the people of West Kalimantan and can help the government make policies to control the spread of COVID-19, as well as other new infections in West Kalimantan, Indonesia.

ABSTRAK. Sejak pandemi coronavirus disease 2019 (COVID-19) pada Desember 2019, telah terjadi perubahan gaya hidup yang signifikan pada masyarakat di seluruh dunia. Penelitian ini membahas tentang upaya pencegahan yang dilakukan oleh masyarakat di Kalimantan Barat, Indonesia terhadap penyebaran COVID-19. Pengumpulan data dilakukan melalui kuesioner yang disebarkan secara daring selama 3 bulan pada tahun 2021. Responden dalam penelitian ini adalah masyarakat Kalimantan Barat, Indonesia. Sebagian besar responden memiliki upaya pencegahan yang tinggi terkait mencuci tangan, menggunakan masker, menjaga jarak, menghindari kerumunan, dan mengurangi mobilitas fisik untuk menghindari infeksi COVID-19. Sebagian besar responden juga menunjukkan pengetahuan yang baik dalam mengidentifikasi gejala dasar COVID-19. Responden umumnya memiliki sikap yang baik terhadap penyebaran COVID-19. Temuan ini memberikan gambaran mengenai upaya pencegahan COVID-19 di kalangan masyarakat Kalimantan Barat dan dapat membantu pemerintah dalam merumuskan kebijakan untuk mengendalikan penyebaran COVID-19 maupun infeksi baru lainnya di Kalimantan Barat, Indonesia.

Corresponding Author:

Abil Rudi

Health Information Record Programe, Kapuas Raya College of Health Science, Sintang, Indonesia

Email: abilrudistg@gmail.com

INTRODUCTION

The world health problem that is currently in the spotlight and very important to get the attention of health scientists and the general public is the disease caused by the Corona virus 19 (COVID-19). COVID-19 has been designated by the World Health Organization (WHO) as a Public Health Emergency of Concern for the World on January 30, 2020 and finally designated as a Pandemic on March 11, 2020 (WHO, 2020). The incident of COVID-19 began in Wuhan, China which made people nervous all over the world (Yuliana, 2020). At first, it was thought that COVID-19 was caused by exposure to the Huanan seafood wholesale market which sells many species of live animals. COVID-19 is rapidly spreading domestically to other parts of China (Dong et al., 2020). From December 18 to December 29 2019, there were five patients who were treated with Acute Respiratory Distress Syndrome (ARDS) (Ren et al., 2020). From December 31, 2019 to January 3, 2020, this case increased rapidly with the reported incidence of COVID-19 in humans as many as 44 cases (Susilo et al., 2020).

COVID-19 is a public health emergency of international concern (Ren et al., 2020). The increase in the number of COVID-19 cases took place quite quickly, with the spread between countries. As of December 7, 2021, a total of 4,257,815 confirmed cases were reported with 143,876 deaths (CFR 3.38%) in Indonesia. Among these cases, several health workers have been reported to be infected (Kementerian Kesehatan Republik Indonesia, 2020).

The pandemic itself has brought about some significant lifestyle changes and has caused psychological stress among the community (Nelson et al., 2020; Qiu et al., 2020). The level of vigilance against COVID-19 for the community is important because of the rapid transmission between communities (Schanzenbach, 2017). Thus, government policies related to efforts to prevent COVID-19 need to be implemented properly by the community. The policies to overcome the problems of the COVID-19 pandemic set by the Indonesian government include: wearing masks, washing hands, maintaining distance, not making direct contact, and avoiding mass gatherings (Buana, 2020).

This research was conducted online to evaluate the community's basic understanding of knowledge, attitudes and practices towards COVID-19 prevention efforts among the people of West Kalimantan. Differences in the level of awareness among the public about the pandemic can affect maintaining appropriate practices in efforts to prevent COVID-19. The importance of high awareness among the people of Kalimantan so that positive results in terms of COVID-19 prevention policies can be controlled. Thus, it can assist community compliance in implementing correct preventive measures and preventive practices in accordance with government policies. However, in reality these steps are not well received by the community, so the number of cases continues to increase. Thus, this research is about efforts to prevent COVID-19 among people in West Kalimantan.

RESEARCH METHOD

This research is an analytical survey research with a cross sectional approach. The population in this study was the people of West Kalimantan with a total sample of 416 respondents. Sampling was done by distributing questionnaires using an online google form for 3 months which was carried out from August – October 2021. The independent variable in this study was knowledge measured using a questionnaire, as well as attitudes were

measured using a questionnaire and practice was measured using a questionnaire. The dependent variable is COVID-19 prevention efforts measured using a questionnaire.

Data analysis using statistical software such as univariate analysis, bivariate analysis using chi square test and multivariate analysis using multiple logistic regression. The 95% confidence interval (α =0.05) and the Odds Ratio (OR) were used to determine the efforts to prevent COVID-19 among the people of West Kalimantan.

RESULTS

A total of 416 respondents who have been researched. Then, the data was tested with univariate statistics to see the description of the characteristics.

Univariate Analysis

Univariate analysis was carried out on each research variable on the following respondents:

Table 1. Description of each variable

Variable	Frequency	%
Covid-19 Prevention Efforts		
Not Taking Precautions	125	30,0
Doing Prevention	291	70,0
Knowledge		,
Deficient	133	32,0
Good	283	68,0
Attitude		
Negative	133	32,0
Positive	283	68,0
Practice		
Deficient	98	23,6
Good	318	76,4
Sex		,
Man	166	39,9
Woman	250	60,1
Age		
Adults (<35years)	115	27,6
Mature (≥35 years)	301	72,4
Education		
Low Education	125	30,0
Higher Education	291	70,0
Employement		
Does not work	179	43,0
Work	237	57,0
Marital Status		
Single	116	27,9
Mariage	300	72,1
Income Level		,
Less (Rp. 1.000.000-2.000.000)	166	20.0
Enough (Rp. 3.000.000-	166	39,9
5.000.000)	250	60,1

Table 1 shows that the majority of respondents in the COVID-19 prevention efforts carried out prevention as many as 291 respondents with a percentage of 70.0%, good knowledge as many as 283 respondents with a percentage of 68.0%, positive attitude as many as 283 respondents with a percentage of 68.0%, practice good as many as 318 respondents with a percentage of 76.4%, female sex as many as 259 respondents with a percentage of 60.1%, older adults over 35 years as many as 301 respondents with a percentage of 72.4%, highly educated 291 respondents with a percentage of 70, 0%, working as many as 237 respondents with a percentage of 57.0%, marital status married as many as 300 respondents with a percentage of 72.1% and a sufficient income level of 250 respondents with a percentage of 60.1%.

Bivariate Analysis

Bivariate analysis was carried out by connecting the variables of knowledge, attitude, practice, gender, age, education, occupation, marital status, income with COVID-19 prevention efforts.

Table 2. Relationship of each variable with COVID-19 Prevention Efforts in West Kalimantan Community in 2021

Variable	Prevention			
	Not Taking Precaution	Taking Preventions	P-value	OR (95% CI)
Knowledge				
Deficient	80 (60,2%)	53 (39,8%)	0,010*	7,983
Good	45 (15,9%)	238 (84,1%)		(4,984-12,788)
Attitude	, ,	, ,		
Negative	49 (32,2%)	103 (67,8%)	0,006*	1,177
Positive	76 (28,8%)	188 (71,2%)		(0,764-1,813)
Practice				
Deficient	41 (41,8%)	57 (58,2%)	0,005*	2,004
Good	84 (26,4%)	234 (73,6%)		(1,249-3,214)
Sex				
Man	56 (33,7%)	110 (66,3%)	0,080	1,335
Woman	69 (27,6%)	181 (72,4%)		(0,873-2,042)
Age				
Adults (<35years)	58 (50,4%)	57 (49,6%)	0.065	3,554
Mature (≥35 years)	67 (22,3%)	234 (77,7%)	0,065	(2,254-5,604)
Education	, ,			
Low Education	113 (90,4%)	12 (9,6%)	0.061	21,922
Higher Education	12 (4,1%)	279 (95,9%)	0,061	(12,560-38,261)
Employement				, , , , ,
Does not work	62 (34,6%)	117 (65,4%)	0,084	1,464
Work	63 (26,6%)	174 (73,4%)		(0,960-2,231)
Marital Status				
Single	58 (50,0%)	58 (50,0%)	0.062	3,478
Mariage	67 (22,3%)	233 (77,7%)	0,062	(2,208-5,477)
Income Level	` ' '			
Less (Rp. 1.000.000-	56 (33,7%)	110 (66,3%)		0,435
2.000.000)	, , ,	, , ,	0.056	,
Enough (Rp. 3.000.000-5.000.000)	69 (27,6%)	181 (72,4%)	0,056	(0,533-1,361)

Table 2 shows the variables related to COVID-19 prevention efforts are knowledge, attitudes and practices.

Multivariate Analysis

Multivariate analysis was carried out between related variables, namely knowledge, attitude and practice variables.

CI 95% Variable OR P-Value 7,653 6,234-9,345 Knowledge 0,001 Attitude 6,345 5,345-7,887 0,008 Practice 8,884 6,654-10,654 0,006

Table 3. Multivariate Analysis of Logistic Regression Results

Table 3 of the results of logistic regression analysis shows that low knowledge is likely not to make efforts to prevent COVID-19 by 7.6 times compared to high knowledge (p = 0.001, OR 7.6, 95% CI 6.234-9.345), while good practice less likely to not make efforts to prevent COVID-19 by 8.8 times compared to good practice (p=0.006, OR 8.8 95% CI 6.654-10.654) and a negative attitude likely to not make efforts to prevent COVID-19 by 6.3 times compared with a positive attitude (p=0.008, OR 6.3 95% CI 5.345-7.887).

DISCUSSION

The results showed that 68% of respondents had good knowledge about efforts to prevent COVID-19. A person's knowledge can influence behavior as a basis for action (Wulandari, 2017). Knowledge has a significant relationship with COVID-19 prevention efforts with a p-value of 0.010. Results of logistic regression analysis that low knowledge is likely not to make efforts to prevent COVID-19 by 7.6 times compared to high knowledge. The majority of respondents answered about using masks to prevent COVID-19, as many as 78%, because the spread of the virus easily occurs due to droplets that enter through these body parts (Rifa et al., 2020).

Knowledge of the symptoms of COVID-19 such as loss of smell and taste as much as 85% of respondents chose the wrong answer. This is likely due to the spread of inaccurate information about COVID-19 in Indonesia. This was discussed by Nasir et al in their research on the spread of COVID-19 information in Indonesia. The spread of inaccurate COVID-19 information in Indonesia is generally about basic facts, transmission, and prevention of COVID-19. The information spread massively on social media (Nasir et al., 2020).

The results showed that 68% of respondents had a positive attitude in responding to efforts to prevent COVID-19. This attitude is in the form of a belief that respondents agree or disagree regarding efforts to prevent COVID-19 during the pandemic. Attitude has a significant relationship with efforts to prevent COVID-19 with a p-value of 0.006. The results of the logistic regression analysis show that a negative attitude may not make efforts to prevent COVID-19 by 6.3 times compared to a positive attitude.

As many as 89% of respondents responded strongly agree that covering the mouth and nose when sneezing is a basic effort to prevent COVID-19. Covering the mouth and nose when coughing is the primary level of prevention to reduce foreign microorganisms from entering the human body in the vicinity (Fatmawati, 2018). Therefore, covering the mouth

and nose when sneezing can be used as an effort to prevent the spread of COVID-1916. The results of this study are in line with the research of Gudi et al, namely 93.6% of respondents agreed that maintaining personal hygiene such as covering the mouth and nose when sneezing can prevent the spread of COVID-19 (Gudi et al., 2020)

The results showed that 62% of respondents took preventive measures as an effort to prevent COVID-19. This effort is a form of responding to prevent the spread of COVID-19. Efforts to prevent spread are basic level prevention to reduce foreign microorganisms from entering the body. In Reuben et al's research, the attitude of respondents in the study was classified as very good with 94.7% of respondents already aware of the contents of the COVID-19 preventive guidelines from the local government (Reuben et al. 2020).

CONCLUSION

Respondents' knowledge, attitudes, and practices regarding the prevention of COVID-19 were generally sufficient, with most showing good awareness and preventive behavior; however, gaps remain in knowledge about proper coughing and sneezing etiquette, attitudes toward the importance of handwashing, and the consistent practice of washing hands before activities with soap and running water. To address these issues and strengthen prevention, the government and health authorities should intensify health promotion campaigns focusing on coughing and sneezing etiquette and hand hygiene, provide accessible and culturally appropriate educational materials to counter misinformation, strengthen collaboration between health workers and community leaders in promoting preventive measures, encourage community-based programs that reinforce correct practices such as mask use, physical distancing, and hygiene maintenance, and ensure that preventive guidelines are continuously updated and communicated clearly to the public.

REFERENCES

- Buana, D. R. (2020). Analisis perilaku masyarakat Indonesia dalam menghadapi pandemi virus corona (Covid-19) dan kiat menjaga kesejahteraan jiwa. *National Research Tomsk State University, Universitas Mercu Buana*.
- Dong, Y., Mo, X., Hu, Y., Qi, X., Jiang, F., Jiang, Z., & Tong, S. (2020). Epidemiology of Covid-19 among children in China. *Pediatrics*, 145(6), e20200702. https://doi.org/10.1542/peds.2020-0702
- Fatmawati, T. Y. (2018). Pengetahuan tentang personal hygiene pada anak usia sekolah di SDN 206/IV Kota Jambi. *Jurnal Akademika Baiturrahim*, 7(1), 10–16.
- Gudi, S. K., Chhabra, M., Undela, K., Venkataraman, R., Mateti, U. V., Tiwari, K. K., & Nyamagoud, S. (2020). Knowledge and beliefs towards universal safety precautions during the coronavirus disease (COVID-19) pandemic among the Indian public: A web-based cross-sectional survey. *Drugs & Therapy Perspectives*, 36(9), 413–420. https://doi.org/10.1007/s40267-020-00742-9
- Kementerian Kesehatan Republik Indonesia. (2020). *Info infeksi emerging Kementerian Kesehatan RI*. https://infeksiemerging.kemkes.go.id/dashboard/covid-19

- Nasir, N. M., Baequni, B., & Nurmansyah, M. I. (2020). Misinformation related to Covid-19 in Indonesia. *Jurnal Administrasi Kesehatan Indonesia*, 8(2), 51–59. https://doi.org/10.20473/jaki.v8i2.2020.51-59
- Nelson, L. M., Simard, J. F., Oluyomi, A., Nava, V., Rosas, L. G., Bondy, M., & Linos, E. (2020). US public concerns about the COVID-19 pandemic: Results from a survey given via social media. *JAMA Internal Medicine*, 180(7), 1020–1022. https://doi.org/10.1001/jamainternmed.2020.1369
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. *General Psychiatry*, 33(2), e100213. https://doi.org/10.1136/gpsych-2020-100213
- Ren, L. L., Wang, Y. M., Wu, Z. Q., Xiang, Z. C., Guo, L., Xu, T., Jiang, Y. Z., Xiong, Y., Li, Y. J., Li, X. W., Li, H., Fan, G. H., Gu, X. Y., Xiao, Y., Gao, H., Xu, J. Y., Yang, F., Wang, X. M., Wu, C., ... Wang, J. W. (2020). Identification of a novel coronavirus causing severe pneumonia in humans: A descriptive study. *Chinese Medical Journal*, 133(9), 1015–1024. https://doi.org/10.1097/CM9.000000000000000722
- Reuben, R. C., Danladi, M. M. A., Saleh, D. A., & Ejembi, P. E. (2020). Knowledge, attitudes and practices towards COVID-19: An epidemiological survey in North-Central Nigeria. *Journal of Community Health*, 45(5), 1–4. https://doi.org/10.1007/s10900-020-00881-1
- Rifa, I., Irwansyah, F. S., Sholihah, A., & Yuliawati, A. (2020). Dampak dan pencegahan wabah Covid-19: Perspektif sains dan Islam. *Jurnal Lembaga Penelitian dan Pengabdian Masyarakat (LP2M)*.
- Schanzenbach, D. W., Bauer, L., & Breitwieser, A. (2017). *Eight economic facts on higher education*. The Hamilton Project, Brookings Institution. https://www.brookings.edu/wp-content/uploads/2017/04/thp 20170426 eight economic facts higher education.pdf
- Susilo, A., Rumende, C. M., & Pitoyo, C. W. (2020). Coronavirus disease 2019: Review of current literatures. *Jurnal Penyakit Dalam Indonesia*, 7(1), 45–64. https://doi.org/10.7454/jpdi.v7i1.415
- WHO. (2020). The World Health Organization declared the coronavirus outbreak a global public health emergency. *Worldometers*. https://www.worldometers.info/coronavirus/
- Wulandari, F., & Ayu, S. M. (2017). Hubungan tingkat pengetahuan dan sikap dengan perilaku pemeriksaan SADARI mahasiswi. *Prosiding Seminar Nasional IKAKESMADA: Peran Tenaga Kesehatan Dalam Pelaksanaan SDGs, 1*(1), 137–144.
- Yuliana. (2020). Corona virus disease (Covid-19): Sebuah tinjauan literatur. *Wellness and Healthy Magazine*, 2(1), 187–192. https://doi.org/10.30604/well.022.82020052