

# Internal Support, Lifestyle, Knowledge And Attitudes Towards Prevent Covid-19 Practice In West Papua Province

Piere Kwando<sup>1</sup>, Alva Cherry Mustamu<sup>2</sup>, Nur Hafni Hasim<sup>3</sup>.  
Health Polytechnic of Health Ministry, Sorong, Indonesia

## **ABSTRACT**

**Background:** since its founded, sars-cov-2 (covid-19) has spread throughout the world including indonesia and west papua. When who calls for an international health emergency, efforts to prevent the spread of covid-19 must be based on personal activities supported by internal and external factors.

**Objective:** to determine the influence of knowledge, attitudes, family support and lifestyle factors related to mental health on covid-19 prevention behavior

**Methods:** this study was cross-sectional in design. The subjects consisted of a consecutive sampling of 159 respondents from all people in west papua who got research information, were able to use smartphones and the internet. The questionnaire was created using google form and distributed using the social media application whatsapp, instagram and facebook during april - may 2020. Logistic regression were used for data analysis.

**Results:** simultaneous family support, life style related mental health, level of knowledge, and attitudes did not affect the prevent covid-19 practice (f count 2.307). Sequentially, only attitudes (p-value = 0.038) which contributed to prevent covid-19 practice.

**Conclusion:** we suggest that if you want to reduce the incidence of covid-19 quickly, you need confirmation. Everyone in indonesia must become a social control to build positive narratives and change behavior because the behavior of new adaptation health protocols such as wearing masks, washing hands and maintaining distance, diligently exercising and consuming vitamins are healthy living behaviors.

**Keywords:** covid-19; family support, prevent covid-19 practice.

## **1. INTRODUCTION**

Coronavirus disease 2019 (abbreviated as “covid-19) is a contagious disease in the respiratory system that has infected 39,944,882 people and has caused 1,111,998 deaths worldwide (who, 2020b). Cases of this disease have increased since it was first discovered in december 2019 in wuhan, china.

the covid-19 epidemic is spreading rapidly and has infected 188 countries around the world. Indonesia ranks 18th with 365,240 cases and 12,617 deaths (covid-19, 2020). The total number of covid-19 cases in west papua province is 15,802 with 13,204 close contact cases and 2598 suspected cases of covid-19. (west papua health office, 2020).

Currently the world health organization (who) is calling for a health emergency and expects all countries to make efforts to prevent the spread of covid-19. Efforts to prevent the spread of covid-19 are based on personal activity behavior supported by internal and external factors.

Some of the actions taken by the indonesian government include large-scale social restrictions in several provinces including west papua. However, it was found that the prevalence of covid-19 cases such as horse saddles decreased at the beginning of large-scale social restrictions and then increased again.

This occurs because the process of transmission and treatment of covid-19 sufferers is not fully known. (cao et al., 2020). Currently there is still a polemic in the community due to

confusion and misunderstanding about how it is spread and its preventive measures. This situation is getting more difficult with the large amount of misinformation and disinformation being spread on social media that obscures people's understanding of covid-19.

Knowledge, attitudes and behavior play an important role in determining human awareness in taking action, in particular preventing the spread of covid-19. Several studies have proven this (azlan et al., 2020; m. Zhang et al., 2020), but we see that there are other factors that shape and simultaneously monitor personal behavior, namely family support and lifestyle related to mental health.

Lifestyle has an important influence on human physical and mental health (farhud, 2015). As a society that grows up in an eastern culture, west papua prioritizes families that shape behavior, attitudes and lifestyles (deda, 2014). In understanding lifestyle behavior about health, it is necessary to consider the support of family and parents because it is they who form strong children's health behavior. If family resources are reduced, it can have a negative impact on family health outcomes (rigles, 2019).

This study focuses on knowing the factors of knowledge, attitudes, family support and lifestyle related to mental health on covid-19 prevention behavior in west papua.

## **2. METHODS**

### *Study design*

This research is a survey study with a cross-sectional approach to determine the effect of knowledge, attitudes, family support and lifestyle related to mental health on COVID-19 prevention behavior in West Papua.

### *Setting*

This research was conducted in all districts and cities in the province of West Papua. The questionnaire was created using Google Form and distributed using the social media application WhatsApp, Instagram and Facebook during April - May 2020.

### *Sample*

The sampling technique used in this study is consecutive sampling with the sample criteria being all people in West Papua who get research information, are able to use smartphones and the internet.

### *Instrument*

The instrument used in this study was a questionnaire consisting of a questionnaire on knowledge, attitudes, family support, lifestyle related to mental health and COVID-19 prevention behavior. Family support and lifestyle instruments related to mental health were adopted from (Y. Zhang & Ma, 2020) and then translated into Indonesian. The results of the validity and reliability questionnaires on knowledge, attitudes, family support, lifestyle related to mental health and COVID-19 prevention behavior were respectively (Cronbach's alpha 0.770, 0.777, 0.804, 0.770, 0767).

### *Ethical consideration*

Before the conduct of the field work, the researchers sought permission from each administrator at all levels. Each study participant was asked to participate in the study after explaining the aim of the study and after assuring confidentiality of personal information using code numbers instead of names.

### *Data analysis*

the quantitative data were cleaned and entered into computer using SPSS version 17.

Univariate analysis was used to describe the findings. Bivariate and multivariate logistic regression analyses were conducted to analyze the associations that existed among constructs and identify the factors that most influence.

### 3. RESULTS

#### A. Characteristics of participants

There were 159 participants who gave their responses and participated in this study. Female is more of a participant in this study (67.3%). Most of the respondents were 22 years old (17.6%) as a student (74.2%) with a higher education level (78.6%), single (97.5%). Most of the respondents are Protestant (76.7%) who live in Sorong Selatan (35.8%).

Table 1  
 Sociodemographic characteristics of participants.

Variable	Number (N-159)	%
<b>Sex</b>		
Male	52	32,7
Female	107	67.03
<b>Age (Years)</b>		
15	3	1.09
16	2	1.03
17	7	4.04
18	8	5.00
19	19	11.09
20	26	16.04
21	20	12.06
22	28	17.06
23	18	11.03
24	9	5.07
25	6	3.08
26	3	1.09
27	2	1.03
28	2	1.03
30	1	0.6
31	1	0.6
32	1	0.6
35	1	0.6
41	2	1.03
<b>Education Levels</b>		
No School	1	0,6
Elementary School	2	1.03
Middle High School	31	19.05
University	125	78,6
<b>Marital Status</b>		
Married	4	2,5
Not Married Yet	155	97,5
<b>Occupation</b>		

Working	18	11.03
Not Working	23	14.05
Student	118	74.02
<b>Religion</b>		
Muslim	31	19.05
Christian	122	76.07
Catholic	5	3.01
Konghucu	1	0,6
<b>Area Of Residence</b>		
Kota Sorong	37	23.03
Kabupaten Sorong	9	5.07
Sorsel	57	35.08
Raja Ampat	10	0.03
Kabupaten Maybrat	11	6.09
Manokwari	7	4.04
Kaimana	6	3.08
Fakfak	8	5
Arfak	2	01.03
Teluk Bintuni	7	04.04
Tambraw	2	01.03
Teluk Wondama	1	0.6
Manokwari Selatan	2	01.03

**B. Demographics related factors prevent covid-19 practice**

The average score reflects high family support (97.05%) and has a positive mental health-related lifestyle (95.06%). Most of the respondents have high knowledge (94.03%), a positive attitude (96.09) and have positive behavior in preventing covid-19 (92.05%).

Table 2.  
Demographics related to prevent covid-19 practice factors

Variable	Number (n-159)	%
<b>Family support</b>		
Low	4	2.05
High	155	97.05
<b>Life style</b>		
NEGATIF	7	4.04
POSITIF	152	95.06
<b>knowledge level</b>		
low	9	5.07
high	150	94.03
<b>attitudes</b>		
Negative	5	03.01
Positive	154	96.09
<b>behavior</b>		
Negative	12	7.05
Positive	147	92.05

**C. Multivariable logistic regression analysis of factors involved in the prevent covid-19 practice**

the factors that most influence the prevent covid-19 practice are presented in table 3. in the multivariate analysis, simultaneous family support, lifestyle related mental health, level of knowledge, and attitudes did not affect the prevent covid-19 practice (f count 2,307). Sequentially, only attitudes (p-value = 0.038) which contributed to prevent covid-19 practice. Family support and lifestyle have a negative influence on prevent covid-19 practice. Meanwhile, knowledge and attitudes have a positive effect on prevent covid-19 practice. The effect of family support, lifestyle related mental health, level of knowledge, and attitudes on prevent covid-19 practice is 5.1% (r square = 0.057) and 94.9% is influenced by other variables not studied.

Table 3.  
multivariable logistic regression analysis of factors involved in the prevent covid-19 practice

Variabel	B	Std. Error	F	R Square	Beta	t	p-value
Family support	-.063	0,114	2.307		-.037	-.383	0,488
Life style	-.065	0,084			-.051	-.537	0,411
Level of knowledge	0.092	0,074		0.057	0.080	0,601	0,269
attitudes	0,194	0,092			0,128	2.093	0.038
<b>Constant</b>	1.449	0,252			-	3.993	0.000

#### 4. DISCUSSION

Coronavirus disease 2019 (COVID-19) has been recognized as a pandemic by the World Health Organization. Global efforts have been made to prevent the spread of disease through political decisions along with personal behavior, which depend on public awareness (Abdelhafiz et al., 2020). West Papua is one of the provinces in Indonesia that has the highest covid-19 cases. The number of deaths is related to the high risk of spread and death, especially among the elderly and people with chronic diseases. (COVID-19, 2020). Global efforts have been made to prevent the spread of the virus. These efforts include political efforts made by the government, accompanied by personal attitudes and behaviors that depend on wider public awareness of the disease.

In general, our participants have a high level of knowledge about the disease, its spread methods and prevention. However, this does not affect the disease prevention behavior. Currently in Indonesia, the government including the national disaster management agency is very active in disseminating information on the internet, social media, mobile messages and all product promotional advertisements. This is in line with research (Depoux et al., 2020) which found that people rely heavily on social media channels such as Facebook and Twitter for the latest news. However, one needs to be careful about the information presented in this and other sources

Although the government has provided a platform that can be accessed by the public, there is also a lot of false information that causes conspiracy and polemic in the community. The situation that arises in society is that the social stigma associated with Covid-19 is more severe than HIV because it involves negative beliefs, feelings and attitudes towards those suspected of Covid-19. This stigma arises from the fear of death.

In this study we found that our participants showed a positive attitude towards the prevention of Covid-19. This is shown by being willing to wash your hands. However, what is still difficult to do is the habit of maintaining a minimum distance of 1 meter and wearing a mask. In addition, the government's recommendation regarding the type of mask that changes has also become a polemic in the community. In fact, the government is the only information

that can be trusted by the Indonesian people (WHO, 2020a).

In this study we found that parental support did not affect the prevention of covid-19 in the children who were mostly our participants. In a study (Song et al., 2020), SARS-CoV-2 was transmitted rapidly in the form of family clusters. This means that the results of our study can guarantee that family support does not guarantee that someone is not infected or can even prevent the transmission of Covid-19.

Indeed, nowadays, parents become role models and advocates in the health of their children. Good parenting skills are essential when children are detained in their homes. Apart from paying attention to children's performance and behavior, parents must also respect their children's needs and protect them from harm. Changing perceptions is an important WHO goal to minimize COVID-19 in the entire population and especially in children. Therefore, surveying the knowledge, attitudes and beliefs of parents about COVID-19 is important (Abuhammad, 2020).

Widespread epidemics of infectious diseases, such as COVID-19, have been linked to psychological distress and symptoms of mental illness. As health workers, we must realize that mental health can occur due to this pandemic crisis. For example, the stigma that is built in society is due to fear of death threats. In addition, we must think about how to manage mental health (Bao et al., 2020; Rajkumar, 2020).

Indeed, in our study we did not find that mental health had an impact on Covid-19 prevention behavior. However, we found that a lifestyle related to mental health is the impact of the occurrence of Covid-19. Supposedly, the Indonesian government strives to raise public awareness about prevention and intervention strategies by providing daily updates on surveillance and active cases on websites and social media.

Psychologists and psychiatrists increasingly use the internet and social media to share strategies for coping with psychological stress. For example, giving six suggestions for people to deal with mental stress. These include assessing the accuracy of information disclosed, improving social support systems (for example, family and friends), removing stigma associated with the epidemic, maintaining normal life in safe conditions, and using psychosocial service systems, in particular telephone and internet-based counseling for health workers, patients, family members, and the community. Many mental hospitals, psychological counseling centers, and psychology departments within the university have launched special hotlines to provide psychological counseling services to people in need.

## 5. CONCLUSION

Currently, we are of the view that the Covid-19 pandemic in Indonesia will be over longer than other countries if there are no changes. Change must not only be about drugs and vaccines. Currently, various countries are experiencing economic problems, including the economy, which have an impact on the handling of Covid-in Indonesia. One of the adaptation habits is changing the culture into a healthy culture and that takes time. We suggest that if you want to reduce the number of covid-19 incidents quickly, affirmation is needed.

Everyone in Indonesia must become a social control to build positive narratives and change behavior because the behavior of new adaptation Health protocols such as wearing masks, washing hands and maintaining distance, diligently exercising and consuming vitamins are healthy living behaviors. Indonesia is different from neighboring countries that have been educated before because it has experienced a bird flu pandemic so that the speed of handling the Covid-19 pandemic has become very slow. We suggest that interventions that must be carried out first are personal, such as sports, taking vitamins, managing living and working spaces such as air ventilation, and using an air purifier.

## 6. REFERENCES

- [1] Abdelhafiz, A. S., Mohammed, Z., Ibrahim, M. E., Ziady, H. H., Alorabi, M., Ayyad, M., & Sultan, E. A. (2020). Knowledge, Perceptions, And Attitude Of Egyptians Towards The Novel Coronavirus Disease (Covid-19). *Journal Of Community Health*, 45(5), 881–890. <https://doi.org/10.1007/S10900-020-00827-7>
- [2] Abuhammad, S. (2020). Parents' Knowledge And Attitude Towards Covid-19 In Children: A Jordanian Study. *International Journal Of Clinical Practice*, N/A(N/A), E13671. <https://doi.org/10.1111/Ijcp.13671>
- [3] Azlan, A. A., Hamzah, M. R., Sern, T. J., Ayub, S. H., & Mohamad, E. (2020). Public Knowledge, Attitudes And Practices Towards Covid-19: A Cross-Sectional Study In Malaysia. *Plos One*, 15(5), E0233668. <https://doi.org/10.1371/Journal.Pone.0233668>
- [4] Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-Ncov Epidemic: Address Mental Health Care To Empower Society. *Lancet (London, England)*, 395(10224), E37–E38. [https://doi.org/10.1016/S0140-6736\(20\)30309-3](https://doi.org/10.1016/S0140-6736(20)30309-3)
- [5] Cao, J., Tu, W.-J., Cheng, W., Yu, L., Liu, Y.-K., Hu, X., & Liu, Q. (2020). Clinical Features And Short-Term Outcomes Of 102 Patients With Coronavirus Disease 2019 In Wuhan, China. *Clinical Infectious Diseases: An Official Publication Of The Infectious Diseases Society Of America*, 71(15), 748–755. <https://doi.org/10.1093/Cid/Ciaa243>
- [6] Covid-19, S. P. (2020). *Beranda | Satgas Penanganan Covid-19*. Covid19.Go.Id. <https://Covid19.Go.Id/>
- [7] Deda, A. J. (2014). *Masyarakat Hukum Adat Dan Hak Ulayat Di Provinsi Papua Barat Sebagai Orang Asli Papua Di Tinjau Dari Sisi Adat Dan Budaya; Sebuah Kajian Etnografi Kekinian*. 11, 12.
- [8] Depoux, A., Martin, S., Karafillakis, E., Preet, R., Wilder-Smith, A., & Larson, H. (2020). The Pandemic Of Social Media Panic Travels Faster Than The Covid-19 Outbreak. *Journal Of Travel Medicine*, 27(3). <https://doi.org/10.1093/Jtm/Taaa031>
- [9] Dinkes Papua Barat. (2020). *Situasi Terkini Perkembangan Covid 19 Di Papua Barat Tanggal 11 Mei 2020*. <https://Dinkes.Papuaratprov.Go.Id/>
- [10] Farhud, D. D. (2015). Impact Of Lifestyle On Health. *Iranian Journal Of Public Health*, 44(11), 1442–1444. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703222/>
- [11] Rajkumar, R. P. (2020). Covid-19 And Mental Health: A Review Of The Existing Literature. *Asian Journal Of Psychiatry*, 52, 102066. <https://doi.org/10.1016/J.Ajp.2020.102066>
- [12] Rigles, B. (2019). The Development Of Health Lifestyles In Families Experiencing Disability. *Journal Of Family Issues*, 40(7), 929–953. <https://doi.org/10.1177/0192513x19831410>
- [13] Song, R., Han, B., Song, M., Wang, L., Conlon, C. P., Dong, T., Tian, D., Zhang, W., Chen, Z., Zhang, F., Shi, M., & Li, X. (2020). Clinical And Epidemiological Features Of Covid-19 Family Clusters In Beijing, China. *The Journal Of Infection*, 81(2), E26–E30. <https://doi.org/10.1016/J.Jinf.2020.04.018>
- [14] Who. (2020a). Anjuran Mengenai Penggunaan Masker Dalam Konteks Covid-19. *World Health Organization*, 1–17. [https://www.who.int/docs/default-source/searo/indonesia/covid19/anjuran-mengenai-penggunaan-masker-dalam-konteks-covid-19-june-20.pdf?sfvrsn=D1327a85\\_2](https://www.who.int/docs/default-source/searo/indonesia/covid19/anjuran-mengenai-penggunaan-masker-dalam-konteks-covid-19-june-20.pdf?sfvrsn=D1327a85_2)
- [15] Who. (2020b). *Coronavirus*. <https://www.who.int/westernpacific/health-topics/coronavirus>

- [16] Zhang, M., Zhou, M., Tang, F., Wang, Y., Nie, H., Zhang, L., & You, G. (2020). Knowledge, Attitude, And Practice Regarding Covid-19 Among Healthcare Workers In Henan, China. *Journal Of Hospital Infection*, 105(2), 183–187. <https://doi.org/10.1016/j.jhin.2020.04.012>
- [17] Zhang, Y., & Ma, Z. F. (2020). Impact Of The Covid-19 Pandemic On Mental Health And Quality Of Life Among Local Residents In Liaoning Province, China: A Cross-Sectional Study. *International Journal Of Environmental Research And Public Health*, 17(7), 2381. <https://doi.org/10.3390/ijerph17072381>