ISSN 2354-7642 (Print), ISSN 2503-1856 (Online)
Jurnal Ners dan Kebidanan Indonesia
Indonesian Journal of Nursing and Midwifery
Tersedia *online* pada:
http://ejournal.almaata.ac.id/index.php/JNKI

JURNAL NERS DAN KEBIDANAN INDONESIA
INDONESIAN JOURNAL OF NURSING AND MIDWIFERY

New normal behavior toward the Covid 19 transmission

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ABSTRAK

Latar Belakang: *Tingginya tingkat pengetahuan, sikap postif dan perilaku masyarakat dalam memutus mata rantai penularan Covid 19 menjadi landasan untuk menghentikan wabah penyakit Covid 19 di Jawa Timur Indonesian hal tersebut menunjukkan tingginya angka infeksi Middle East Respiratory Syndrome-Coronavirus (MERS-CoV) akibat dari penyakit covid 19 tersebut. Masyarakat masih belum memahami tentang penyakit Covid 19, virus corona, rantai persebaran virus corona, dan pemutusan mata rantai penyebaran dan penularan virus corona.*

Tujuan penelitian*: penelitian melakukan analisis perubahan perilaku baru terhadap penyebaran covid 19.*

Metode penelitian: *Kajian analisis dilakukan dengan pendekatan crossectional, pada populasi yang dilakukan secara seleksi acak 250 peserta di tiga lokasi (kota Sidoarjo, Kota Surabaya dan Kota Mojokerto). Pengukuran perubahan perilaku meliputi pengetahuan, sikap dan Tindakan. Pengumpulan data melalui kuesioner yang diedarkan dengan google form lewat group whats-app. Pengolahan data melalui analisis statistic yaitu uji diskriptif dan uji statistic. Uji statistik dilakukan dengan regresi linier.*

Hasil penelitian : *Berdasarkan hasil ujistatistik regresi liner, hasil penelitian menunjukan sociodemografi terhadap pengetahuan; usia > 0.01; jenis kelamin. >0.01; pekerjaan , <0.01; Pendidikan <0.01, hal tersebut menunjukan bahwa usia dan jenis kelamin tidak berhubungan pengetahuan terkait dengan covid 19. Hasil uji statistic sociodemografi dengan sikap menunjukan; usia > 0.01; jenis kelamin. >0.01; pekerjaan , <0.01; Pendidikan <0.01. Hasil uji statistic ini menunjukan bahwa sociodemografi usia dan jenis kelamin tidak berhubungan dengan pengetahuan dalam memahami penyebaran penyakit covid 19. Hasil uji statistic sociodemografi dengan tindakan practice: usia > 0.01; jenis kelamin. ,0.01; pekerjaan , <0.01; Pendidikan <0.01. Hasil uji statistic ini menunjukan bahwa sociodemoigrafi usia tidak berhungan dengan pengetahuan dalam memahami penyebaran dan pemutusan mata rantai covid 19.*

Kesimpulan: *Studi ini mencerminkan pentingnya pendidikan kesehatan sebagai elemen landasan dalam meningkatkan KAP terhadap infeksi Covid 19 dalam mencegah penyebaran virus dan wabah penyakit.*

KATA KUNCI: *sikap; covid 19; pengetahuan; wabah; praktik*

ABSTRACT

Background: *The high level of knowledge, postive attitude and community behavior in breaking the chain of transmission of Covid 19 became the foundation to stop the Covid 19 disease outbreak in East Java, Indonesia, showing the high rate of Middle East Respiratory Syndrome-Coronavirus (MERS-CoV) infection due to the Covid 19 disease. The public still*

does not understand about Covid 19 disease, corona virus, corona virus distribution chain, and breaking the chain of spread and transmission of the corona virus.
The purpose of the study: *the study conducted an analysis of new behavioral changes to the spread of covid 19.*
Research method: *The analysis study was conducted with a crossectional approach, in a population conducted in a random selection of 250 participants in three locations (Sidoarjo city, Surabaya City and Mojokerto City). Measurement of behavior change includes knowledge, attitudes and actions. Data collection through questionnaires distributed with google form through whats-app group. Data processing through statistical analysis is a cryptic test and a statistical test. Statistical tests are conducted with linear regression.*
Research results: *Based on the results of the liner regression test, the results of the study show sociodemographic to knowledge; age > 0.01; gender. >0.01; employment, <0.01; Education <0.01, it shows that age and gender are not related to knowledge related to covid 19. Sociodemography statistics test results with attitudes show; age > 0.01; gender. >0.01; employment, <0.01; Education <0.01. The results of this statistical test show that sociodeography of age and gender is not related to knowledge in understanding the spread of covid 19 disease. Sociodemography statistical test results with practice actions: age > 0.01; gender. ,0.01; occupation, <0.01; Education <0.01. The results of this statistical test showed that sociodemoigraphy age is not connected with knowledge in understanding the spread and disconnection of the covid 19 chain.*
Conclusion: *This study reflects the importance of health education as a cornerstone element in improving KAP against Covid 19 infection in preventing the spread of viruses and disease outbreaks. in improving KAP against Covid 19 infection in preventing the spread of viruses and disease outbreaks.*

KEYWORD : *attitude; covid 19; knowledge; outbreak; practice*

Article Info :
Article submitted on August 28, 2021
Article revised on November 11, 2021
Article received on December 06, 2021
DOI: http://dx.doi.org/10.21927/jnki.2021.9(4).241-248

INTRODUCTION

Globalhealth and CNN collected data from 44 countries to see the percentage of corona virus patients and deaths from Covid 19 (1,2,3). The data was taken from the respective state government updates from March 17 to April 8, 2020 (4,5). In a number of countries, more male patients are infected and die from corona, In some countries, more male patients are infected and died of corona. Like in Italy, the ratio of male and female infections 53 to 47 percent (6). While the death rate is 68 compared to 32 percent. In China, there were also more positive cases of corona male patients, which was 51 percent compared to female patients, which was 49 percent (7, 8). The death rate of male patients due to corona virus in China is also higher, 64 percent, compared to 36 percent of female patients. Iran was similar, 57 percent of men and 43 women. While the death rate is 59 percent compared to 41 percent (9, 7). Proportion of men who are more exposed and dead is also reported in Greece, Peru, Ecuador, Japan, Pakistan, the Philippines and Thailand. In Indonesia the number of positive cases of corona every day continues to increase by almost 32.6% (9).

The community weren't understood about Covid 19, the corona virus, the distribution chain of corona virus, the management of the corona virus distribution chain termination (10, 11). The

morbidity and mortality rate in Indonesia was increased every day up to 25-35%, while in East Java the figure has increased to 32.5%. The community panic was increased, however the community still does not care about the spread of Covid 19 transmission. The research aims to assesss and improve knowledge, attitude and practice (KAP) of community toward Covid 19, at East Java Indonesia.

The Indonesian government was trying to break the chain of transmission of Covid 19. but the community was not yet taken on a clean and healthy lifestyle (hand washing with soap or hand zanitiser, using masks, and so on). The percentage of proper hand washing in the community during the Covid-19 pandemic has reached 89%. The percentage of students who apply personal hygiene during the Covid 19 pandemic is 53.41%. Children who have used to wash their hands before eating and have moved are quite a lot. Based on the results of *systematic review* can be concluded the percentage of Clean and Healthy Living Behavior (PHBS) during the Covid-19 pandemic in the community which is as much as 52% - 77.5%. The percentage of Clean and Healthy Living Behavior (PHBS) during the Covid-19 pandemic in students was 49.2% – 53.1%. Percentage of Clean and Healthy Living Behaviors in children's age is as much as 50% - 86.49% (12).

The general research objective was to Correlation of knowledge, attitudes and actions towards the Covid 19 transmission chain of community at East Java. Research on knowledge, attitudes and practices towards the termination of the chain of the spread of covid 19 is very necessary, because a person will make changes in clean and healthy living behavior if they know the risks received if the clean living behavior is ignored (13).

MATERIALS AND METHODS

This crossectional study conducted during the January 10 to March 10,2020. At East Java Indonesia. The sample zise was calculated as 230 respondents, which was increased to 260 to overcome droped out or invalid responses. They were selected by a systematic random sampling technique from every third person. Only 250 partisipant complete the study. The data collection method is closed-ended East Java which designed to collect information about: (A) Karateristik Data, e.g., age, sex, and so on; (B) Knowledge toward Covid 19, e.g., causative agent, mode of transmission and so on; (C) attitude, e.g if he is worried from getting infection, afraid from complications, and so on; (D) Practice regarding infection control as regard washing hands, covering nose and mouth during coughing or sneezing, and so on. To assess measured knowledge, attitute and practice with likert scale (score total knowledge was compared score criteria: agree, disagree, doubtful; score total attitute was compared score criteria: strongly agree, agree, disagree, strongly disagree; and score total practice was compared score criteria: strongly agree, agree, disagree, strongly disagree). Hasil uji validitas dan reliebilitas dari kuesioner menunjukan bahwa **Cronbach's Alpha**> 0,70. The result were collected editing, coding, scoring, transfering dan tabulating and statistically analyzed by a personal computer using Statistical Program for Social Science (SPSS) software version 21, for windows XP. Quantitative data were expressed as number and percentage). To assess the differences in frequencies on the dichotomized qualitative variable (scored present or absent), α was used with 0,5% level of significance. Odds ratio using logistic regression analysis described the probability that people who are exposed to a certain factor will have high KAP compared to people who are not exposed to that factor.

RESULT AND DISCUSSION

Table 1. Sociodemographic characteristics of the participants (N= 250)

	N	%
Age (mean ± SD), years : 40.49 ± 16.97		
Sex		
Male	113	45,2
Female	117	46,8
Education		
Primary school	25	10
Secondary school	55	22
Upper school	123	49,2
College	47	18,8
Work activity		
Private	67	26,8
Entrepreneur	79	31,6
Professional	54	21,6
PNS/TNI Polri	50	20

DISCUSSION

Regarding the knowledge of the participant, it was satisfactory only 39.2 %. Logistic regression analysis of the sociodemographic criteria and knowledge score of the participants showed that age and type of job exhibited the most toward their knowledge, where 47.95% in of participants >40 years old showed saticfactory knowledge compared with 52.05% in of participant <40 years old. However, the sex of participant did not significant affect their knowledge; it was almost as it was 42.11% and 57.89% in both (Table 3).

Table 2. Knowledge, attitude and practice (KAP) score of partisipants (N = 250)

KAP Score	N	%
Knowledge :		
Satisfactory	98	39,2
Unsatisfactory	152	60,8
Attitude :		
Positive	114	57,6
Negative	136	54,4
Practice		
Good	87	34,8
Poor	163	65,2

The attitude of participants, it was positive only 57,02%. Result of the logistic regression analysis of the sociodemographic criteria and attitude score of participant showed the age and sex the most on their attitude, where 57,02 % in of paticipants >40 years old showed attitude positive. However, the sex of participant did not significant toward their attitude, it was half as it was 47,79 and 53,21 in both (Table 4).

Regarding the practice of the participant, it was good only 34.8%. Logistic regression analysis of the sociodemographic criteria and practice score of participant showed the age more than on their praticipants, where 71,26 % in of participant >40 years old showed good practice. However, the age of participants did not significant toward the practice, it was more than as it was 71,26% and 28,74 in both (Table 5).

Table 3. Logistic regression analysis between sociodemographic criteria and knowledge score of partisipants

Sociodemographic criteria	Knowledge				*p*	Odds rasio	
	Satisfactory (N = 98)		Unsatisfactory (N =152)			Value	99 % CI
	N	%	N	%			
Age							
≥40 years (129)	47	47,95	82	53,94	>0.01	0.97	0.68 - 1.38
<40 years (121)	51	52,05	70	46,06			
Sex							
Male (113)	44	54,89	69	45,39	>0.01	0.68	0.57 – 1.42
Female (117)	34	45,11	83	54,61			
Type of job							
Occupational (146)	53	54,08	93	65,18	<0.01	0.73	0.43 – 0.78
Professional (104)	48	48,97	56	34,82			
Previous education							
High education (80)	31	31,63	49	32,23	<0.01	0.83	0.54 – 0.87
Low education (170)	69	70,40	101	67,77			

Table 4 . Logistic regression analysis between sociodemographic criteria and attitude score of partisipants

Sociodemographic criteria	Attitude				*P*	Odds rasio	
	Positive (N = 114)		Negative (N =136)			Value	99 % CI
	N	%	N	%			
Age							
≥40 years (129)	65	57,02	64	47,06	>0.01	1.43	0.95 – 1.42
<40 years (121)	49	42,98	72	52,94			
Sex							
Male (113)	48	42,11	65	47,79	>0.01	1.23	0.72 – 1.23
Female (117)	66	57,89	71	53,21			
Type of job							
Occupational (146)	53	46,49	93	68,38	<0.01	0.67	0.41 – 0.75
Professional (104)	61	53,51	43	31,62			
Previous education							
High education (80)	37	32,45	43	31,61	<0.01	0.76	0.43 – 0.81
Low education (170)	77	67,54	93	68,38			

Table 5. Logistic regression analysis between sociodemographic criteria practice score of partisipants

Sociodemographic criteria	Practice				*P*	Odds rasio	
	Good (N = 87)		Poor (N =163)			Value	99 % CI
	N	%	N	%			
Age							
≥40 years (129)	62	71,26	67	41,11	>0.01	1.36	0.92 – 1.46
<40 years (121)	25	28,74	96	58,89			
Sex							
Male (113)	59	67,81	54	35,13	<0.01	0.45	0.34 – 0.67
Female (117)	28	32,19	89	64,87			
Type of job							
Occupational (146)	64	73,56	82	50,31	<0.01	0.43	0.38 – 0.65
Professional (104)	23	26,44	81	49,69			
Previous education							
High education (80)	31	35,63	49	30,06	<0.01	0.34	0.32 – 0.62
Low education (170)	56	64,36	114	69,94			

The delivery of information and educating people needs to consider geographical locations, But the majority of respondents rely on information technology, so everyone easily gets information about the spread of covid 19 through social media (10).

This study adrressesa major health problem among East Java Indonesia. The fanding of this study was compared with a cross-sectional study conducted on 250 in local community at East Java Indonesia. In this study, the majority of participants were aware of the presence of ongoing cases in East Java Indonesia, which is approximated with a study designed to assess the knowledge about Covid 19, the majority of participant were aware of an ongoing Covid 19 epidemic at East Java Indonesia and many participant revealed low knowledge regarding the periode of communicability (40.8%), incubation periode (35.8%), and unavailability of vaccine (25,5%). The participants at East Java Indonesia, 30% answered wrong when asked about the availability of the vaccine. Compared with this study, only 37,6 % answered that there was no vaccine. This study showed a higher level of proper hygienic practices among participants. Ninety-four percent of the participants East Java Indonesia reported washing hands regularly, and more than 90% reported using respiratory etiquette measures with significant increase

in hygiene awareness after the international program. Hand hygiene is the main step to reduce the spread of infection due to covid 19. The simplest action is hand washing compliance, lack of compliance will cause health problems around the world as it happens today. Research on the aspects that affect hand hygiene compliance and the best promotional strategies proves a new approach to changing behavior vefectively (14).

In a study aimed to examine the KAP toward the use of facemasks among at East Java Indonesia, where facemasks and respirators were consideed as an effective approach of preventing respiratory infection, most participants described facemasks/respiratorys as the only and the best protective method available to protect from tranmission Covid 19 (12). In our study regarding to self care and safety measures during pandemic, the majority agreed tha wearing a face mask is crucial (34,8%).

Logistic regression analysis identified that age of participants and their educational level were the most predictors of knowledge. A study that targeted the knowledge and attitude of physicians toward influenza found that older and more revealed higher rate of knowledge and awareness, which correlates with this study. In the study gender and age were the two domographic variables significantly associated with the mean score of knowledge and attitude, because gender was the only significant predictor of concern and knowledge (15, 16).

A study of KAP of professional participants regarding Covid 19 showed that 75 ,3% of professional participants were not sure that the standard surgical mask would protect them, 31,9% did not believe that whasing hands with water and soap is protective, and 57,4 % were undecided. These findings showed that there is a significantlack of knowledge among the professional participants even at the level of basic protection and infection control measures (17, 18). To remedy this lack of knowledge, more education and practical applications are needed (19, 20). These results correlates with this study that there is a gap of knowledge among participants (21, 22). There is opportunity for more education and awareness without causing panic among public (23, 24). Establishing professional and occupational programs among paricipants is crucial to level up their KAP (20, 25). Periodeic educational interventions using locally adjusted methods could contribute to preventing poor practice and lack of knowledge (25, 26). A stepwise approach should be conducted to raise the KAP of participants by implementing well structured interventional programs (27, 28).

CONCLUSION AND RECOMMENDATION

The study reflects the importance of health education as a basic element in improving knowledge of attitudes and actions towards the prevention and breaking of the chain of spread of Covid 19 infectious diseases. , shows a clean and healthy lifestyle in accordance with the Covid 19 protocol. Community concern and willingness are the thoughts of future research

REFERENCES

1. S. Tasnim, A. Rahman, and F. M. A. Hoque, “Patient’s knowledge and attitude towards tuberculosis in an urban setting,” *Pulm. Med.*, vol. 2012, pp. 1–5, 2012, doi: 10.1155/2012/352850.
2. Z. Hu, Z. Yang, Q. Li, and Y. Huang, “Naming the 2019 Coronavirus eLetters Naming the 2019 Coronavirus,” no. February, pp. 2018–2021, 2020.
3. T. F. S. Disclosure *et al.*, “Active or latent tuberculosis increases susceptibility to COVID-19 and disease severity,” vol. 21, no. 1, pp. 1–9, 2020.
4. A. O. Hassan *et al.*, “Knowledge about Tuberculosis: A Precursor to Effective TB Control—Findings from a Follow-Up National KAP Study on Tuberculosis among

Nigerians," *Tuberc. Res. Treat.*, vol. 2017, pp. 1–8, 2017, doi: 10.1155/2017/6309092.
5. F. Leal, "Response of Adaptive Complex Systems Science to Pandemic Risk for a New Coronavirus," no. February, pp. 0–5, 2020.
6. F. Y. Alqahtani *et al.*, "Prevalence of comorbidities in cases of Middle East respiratory syndrome coronavirus: A retrospective study," *Epidemiol. Infect.*, vol. 147, 2019, doi: 10.1017/S0950268818002923.
7. M. A. Sultan and M. F. Afzal, "Coronaviruses and The Current Pandemic - Editorial," *Asia Pac J. Paediatr. Child Helath*, vol. 3, no. Januari, pp. 4–6, 2020.
8. A. Altamimi, R. Abu-Saris, A. El-Metwally, T. Alaifan, and A. Alamri, "Demographic Variations of MERS-CoV Infection among Suspected and Confirmed Cases: An Epidemiological Analysis of Laboratory-Based Data from Riyadh Regional Laboratory," *Biomed Res. Int.*, vol. 2020, 2020, doi: 10.1155/2020/9629747.
9. J. Shaman and M. Galanti, "Direct Measurement of Rates of Asymptomatic Infection and Clinical Care-Seeking for Seasonal Coronavirus," *medRxiv*, no. October 2016, p. 2020.01.30.20019612, 2020, doi: 10.1101/2020.01.30.20019612.
10. N. ALdowyan, A. S. Abdallah, and R. El-Gharabawy, "Knowledge, Attitude and Practice (KAP) Study about Middle East Respiratory Syndrome Coronavirus (MERS-CoV) among Population in Saudi Arabia," *Int. Arch. Med.*, vol. 10, pp. 1–12, 2017, doi: 10.3823/2524.
11. S. Cantore and A. Ballini, "Coronavirus Disease 2019 (COVID-19) Pandemic Burst and Its Relevant Consequences in Dental Practice," pp. 111–112, 2020, doi: 10.2174/187421060201401.
12. S. G. Purnama and D. Susanna, "Hygiene and sanitation challenge for covid-19 prevention in Indonesia," *Kesmas*, vol. 15, no. 2, pp. 6–13, 2020, doi: 10.21109/KESMAS.V15I2.3932.
13. C. Juwita, R. N.-I. J. of M. and, and undefined 2021, "Hygiene And Healthy Living Behavior And Stress During The Covid-19 Pandemic," *Repository.Uki.Ac.Id*, vol. 7, no. 3, pp. 1041–1048, 2021, doi: 10.36678/IJMAES.2021.V07I03.002.
14. J. J. Rolison and Y. Hanoch, "Knowledge and risk perceptions of the Ebola virus in the United States," *Prev. Med. Reports*, vol. 2, pp. 262–264, 2015, doi: 10.1016/j.pmedr.2015.04.005.
15. F. S. Alhamlan *et al.*, "Case characteristics among Middle East respiratory syndrome coronavirus outbreak and non-outbreak cases in Saudi Arabia from 2012 to 2015," *BMJ Open*, vol. 7, no. 1, pp. 1–7, 2017, doi: 10.1136/bmjopen-2016-011865.
16. I. Fahmi, "#Covid19 Coronavirus Disease 2019Fahmi, I. (2020). #Covid19 Coronavirus Disease 2019. DroneEmprit, 2019(March), 1–19. https://pers.droneemprit.id/covid19/," *DroneEmprit*, vol. 2019, no. March, pp. 1–19, 2020, [Online]. Available: https://pers.droneemprit.id/covid19/.
17. E. L. Wong, "This paper was submitted to the Bulletin of the World Health Organization and was posted to the COVID-19 open site, according to the protocol for public health emergencies for international concern as described in Vasee Moorthy et al . (http://dx.doi.or," vol. 8772, no. March, 2020.
18. Y. Huang, L. Yang, H. Dai, F. Tian, and K. Chen, "Bull World Health Organ. E-pub: 16," 2020, doi: 10.2471/BLT.20.251561.
19. J. Garssen and A. D. Kraneveld, "This paper was submitted to the Bulletin of the World Health Organization and was posted to the COVID-19 open site , according to the protocol for public health emergencies for international concern as described in Vasee Moorthy et al . The information he," 2020.
20. C. Dye, K. Bartolomeos, V. Moorthy, and M. P. Kieny, "Data sharing in public health

emergencies: A call to researchers," *Bull. World Health Organ.*, vol. 94, no. 3, p. 158, 2016, doi: 10.2471/BLT.16.170860.

21. S. Bernard-Stoecklin *et al.*, "Comparative Analysis of Eleven Healthcare-Associated Outbreaks of Middle East Respiratory Syndrome Coronavirus (Mers-Cov) from 2015 to 2017," *Sci. Rep.*, vol. 9, no. 1, pp. 1–9, 2019, doi: 10.1038/s41598-019-43586-9.
22. S. Mahfuz, A. Hasan, J. Saulam, K. Kanda, and T. Hirao, "This paper was submitted to the Bulletin of the World Health Organization and was posted to the COVID-19 open site , according to the protocol for public health emergencies for international concern as described in Vasee Moorthy et al . The information he," vol. 26, pp. 1–20, 2020.
23. [P. Srichan *et al.*, "Knowledge, Attitude and Preparedness to Respond to the 2019 Novel Coronavirus (COVID-19) Among the Bordered Population of Northern Thailand in the Early Period of the Outbreak: A Cross-Sectional Study," *SSRN Electron. J.*, 2020, doi: 10.2139/ssrn.3546046.
24. B.-L. Zhong *et al.*, "Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey," *Int. J. Biol. Sci.*, vol. 16, no. 10, pp. 1745–1752, 2020, doi: 10.7150/ijbs.45221.
25. K. Modjarrad, V. S. Moorthy, P. Millett, P. S. Gsell, C. Roth, and M. P. Kieny, "Developing Global Norms for Sharing Data and Results during Public Health Emergencies," *PLoS Med.*, vol. 13, no. 1, pp. 1–5, 2016, doi: 10.1371/journal.pmed.1001935.
26. S. Tanaka *et al.*, "Impact of travel restrictions on importation of novel coronavirus infection : An effective distance approach," no. March, pp. 3–6, 2020.
27. A. Bawazir, E. Al-mazroo, H. Jradi, A. Ahmed, and M. Badri, "Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ' s public news and information ," no. January, 2020.
28. M. D. Goni *et al.*, "Assessment of knowledge, attitude and practice towards prevention of respiratory tract infections among hajj and umrah pilgrims from Malaysia in 2018," *Int. J. Environ. Res. Public Health*, vol. 16, no. 22, pp. 1–11, 2019, doi: 10.3390/ijerph16224569.