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Knowledge, Attitudes and Practices of Health Personnel in Responding to the COVID-19 Outbreak in Indonesia

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Abstract

The COVID-19 outbreak, originating from China, has spreading worldwide including Indonesia. Until now, the growth rate has been gradually increasing and cases have been found in all 34 provinces of Indonesia. This cross-sectional study aimed to investigate the knowledge, attitudes and practices (KAP) of health personnel in public health centers toward COVID-19 using online

self-report questionnaires. Totally of 440 respondents contributed in this online survey. The level of average knowledge, attitude, and practice were 7.7 out of 10.0; 14.3 out of 15.0; 31.9 out of 36.0, respectively. There was no significant association of respondents' characteristics and their KAP. However, some misunderstood characteristics of COVID-19 such as transmission from human to human, need to be addressed by regular health education programs or campaigns for health personnel. It can be concluded that the level of KAP was good even though the respondent's characteristics had no association with KAP.

Keywords: COVID-19, Health Personnel, Indonesia, Knowledge distribution

Introduction

The original coronavirus emerged in Wuhan, China at the end of 2019, was called COVID-19.[1–4] Just after that the virus had spreading to more than 200 countries, then the World Health Organization declared the disease a global pandemic.[5,6] Until now, July 2021 the new variant of virus has been spreading rapidly to all countries. It has negatively impacted to society in terms of the economy, public health and our normal activities of daily life, and many people have become unemployed. By July 10, 2021, globally the number of accumulated COVID-19 confirmed cases totaled 185 million. [7] At the same date, in Indonesia the total confirmed cases were 2,455,912 with 64,631 total death. Recovered cases totaled 53,945.[7] The test cases for the whole country totaled 1,310,924 or equal to 4,790 cases per 1 million population. The World0meter reported that infected cases reached 349 per one million population, and deaths totaled 17 per 1 million population. As indicated by Saeida S, the growth rate of cases in Indonesia sharply increased gradually from the first reported case 2 March 2020, to 95,418 accumulated cases on July 24.

The first case in Indonesia was reported in Jakarta, the capital city of Indonesia. The front-line officer including health personnel and workers is taking care of patients. COVID-19 has also disrupted public health measures and systems in many countries. Many health personnel was passed away due to the lack of Personal Protective Equipment (PPE), unawareness of the harmful nature of the disease, unintentional operations and other factors.[8] To control the spreading of COVID-19, public health personnel need to be strengthened.[9] Some might be carriers and others are Person under Investigation (PUI). Knowledge, attitudes and practices (KAP) constitute important components for health personnel to care for patients with COVID-19 and PUI groups. They need to understand the changing situation and adjust their normal behaviors to stem the COVID-19 outbreak.

The sufficient protection and prevention may prevent the spreading of the virus. Providing facilities is also the key role to use interventions and mitigation measures according to appropriate guidelines and manner. The COVID-19 pandemic is spreading unpredictable, due to many influencing factors. It continues to cause morbidity, mortality, normal life disturbance and also a burden on health systems.[10,11] This survey constitutes an overall assessment of general information that could represent the Indonesian experience in responding to the COVID-19 outbreak. Assessing the KAP related to COVID-19 among health personnel would benefit governments or involved organizations in performing any intervention according to the obtained results. Moreover, recommendations from health personnel would be important information to strengthen the COVID-19 response. The aim of this study is to know the knowledge, attitude, and practice (KAP) of health personnel responding to the COVID-19 outbreak in Indonesia.

Method

Study design

A community-based cross-sectional study was conducted among health personnel in all provinces in Indonesia. The data were collected in May 2020 after obtaining ethics approval from the Health Research Ethics Committee, National Institute of Health Research and Development (Certificate of Approval No. LB.02.01/KE.330/2020). Data were collected online using a self-reported questionnaire (Google form) developed by the author team and distributed to respondents with a consent form. The first page of the questionnaire informed all respondents about the background, objectives and consent form according to the ethical issues concerned. Respondents could withdraw anytime without providing reasons if they did not wish to participate. Completing the questionnaire would have no effect to their job, all data were kept confidential and the results were presented in general terms.

Research tool

A self-report questionnaire was used to collect the data based on the own respondent's experiences, knowledge, attitude, and practice. The respondent answered the questions in the Google Form. The validity and reliability have been tested to 30 volunteers in Yogyakarta. The values of Cronbach's Alpha for the knowledge and attitude items were 0.890 and 0.823, respectively.

Target population

The target population consisted of health personnel in public health centers in each province of Indonesia. The inclusion criteria comprised 1) working in a Public Health Center (PHC) and 2) achieving the minimum standard of professional in a public health center from the Ministry of Health Indonesia, including doctor or primary care doctor, dentist, nurse, midwife,

public health worker, sanitarian, medical laboratory technology expert, nutritionist and pharmacist. The self-report questionnaire consisted of four sections, namely, general characteristics of respondents (sex, age, marital status, education and position), knowledge, attitudes and practices on COVID-19 disease.

Based on data from the Indonesian Ministry of Health, the number of health workers in public health centers totals 400,908. The following equation was used to estimate the sample size (n).

$$n = \frac{z_{1-\alpha/2}^2 p(1-p)N}{d^2(N-1) + z_{1-\alpha/2}^2 P(1-p)}$$

The equation indicated a sample size of 384 was needed. Adding 10%, the sample size totaled 422. Consequently, we received more than expected, after checking and cleaning the completed questionnaires. Totally 440 respondents were eligible to this study which was distributed by social media. The sample has been selected by proportional random sampling with observed the province of origin to ensure the nationally proportioned.

Data analysis

The data have been checked and cleaned for the missing data before analyzed using statistical tests. The questionnaire consisted of general characteristics, questions about level of knowledge (LK), level of attitude (A), and level of practice; using PPE (UP) and personal hygiene (PH). Each questionnaire was grouped by the province. The eligible questionnaires were collected online and the cross-sectional surveys were tabulated, analyzed and statistically interpreted. Descriptive statistics and correlation analysis were employed to determine the frequencies of each questions under the variables level of knowledge, attitudes and practices of health personnel towards COVID-19 in respect to demographic variables. The Pearson Correlation was tested to analyze the direction and magnitude of correlation between each variable (level of knowledge,

level of attitude, and level of practice). The mean scores for each variable (LK, A, UP, PH) obtained with reference to their characteristics were analyzed and compared using the independent sample t-test, one-way analysis of variance (ANOVA) to identify the difference between categorical independent variable and numeric dependent variable. In detail, the t-test aimed to see the differences between sex (male and female) and mean of KAP; and the ANOVA test aimed to see the differences between marital status (single, married, and divorce) and mean of KAP; and ANOVA test also aimed to see the differences between age group (20-29, 30-39, 40-49, and 50-59) and mean of KAP. The statistical software SPSS of Mahidol University, licensed version-18 was used to analyze the data.

Results

General characteristics of participants

A total of 440 eligible samples were analyzed in this study. The average age was 30.4 years with standard deviation of 5.7. Minimum age was 22 and maximum age was 57 years. The majority of respondents were female (69.8%), with 55% married status, 41.4% single and 2.3% divorced. Most graduated at Diploma III level (51.8%), the second rank was senior high school or Diploma I and II (25.7%) as detailed in Table 1.

Table 1. General characteristics of respondents (N = 440)

Items	n (Frequency)	Percent (%)
Sex		
Male	127	28.9
Female	307	69.8
No identification	6	1.4
Total	440	100.0
Age (year), n=421		
Mean± SD (Min-Max)	30.4 ± 5.7 (22-57)	
Marital status		
Single	182	41.4
Married	242	55.0
Divorced	10	2.3
No identification	6	1.4
Total	440	100.0
Education		

Senior high school / Diploma I / Diploma II / or Equivalent	113	25.7
Diploma III	228	51.8
Bachelor degree	91	20.6
Master degree or higher	2	0.5
No identification	6	1.4
Total	440	100.0

142

143 **Level of knowledge**

144 Ten questions related to COVID-19 disease were asked; the average score was 7.7 of 10
145 with minimum and maximum scores of 4 and 10, respectively. The respondents provided more
146 than 50%, correct answers. However, some respondents provided wrong answers, namely, they
147 did not know COVID-19 could spread from human to human (36.1%), and knowledge about the
148 common methods to prevent the spread like washing hands regularly (45.5%). Health workers who
149 checked, provided care, delivered, and cleaned the ward of COVID-19 cases without any standard
150 PPE could be included in the "PUI group" even without symptoms (44.8%). One interesting issue
151 involved the emergency cases; most respondents (81.1%) indicated that they should help patients
152 without any PPE implementation. Health workers were not required to apply "5 moments of hand
153 hygiene" in handling patients with COVID-19 because they experienced an emergency condition.
154 The 5 moments of hand hygiene were procedures guided by the Ministry of Health, Indonesia.
155 Other issues raised in Table 3 were at good levels (percentage of correct answers higher than 90%).
156 Participants achieved a knowledge mean score of 55%.

157 **Table 2. Knowledge and attitude of respondents in each question**

Statement level of knowledge		Correct (n)	%
LK1	COVID-19 is a new disease which yet to be confirmed among humans.	403	91.6
LK2	COVID-19 can spread from human to human though droplets and airborne vector.	281	63.9
LK3	The riskiest people to spread this disease are those who intimately contact patients with COVID-19 including health workers taking care of patients with COVID-19.	428	97.3
LK4	The standard recommendation to prevent the spread of infection is by washing hands regularly with clean running water.	240	54.5
LK5	Health worker who check, take care, deliver and clean the ward of COVID-19 cases without any standard PPE can be included in the "PUI group" even without showing symptoms.	243	55.2

LK6	Limiting the number of health workers in the ward when one has no direct concerns is one step of prevention.	428	97.3
LK7	Before taking specimens from patients with COVID-19, health workers must take universal precautions.	416	94.5
LK8	Health workers must use full PPE and standard masks when taking specimens of patients with COVID-19.	407	92.5
LK9	Before using PPE, coveralls, removing jewelry and watches is required.	428	97.3
LK10	Health workers are not required to apply "5 moments of hand hygiene" in handling patients with COVID-19 because they are in an emergency condition	83	18.9
Statement Level of Attitude		Agree	%
A1	Health workers must avoid touching/rubbing the eyes, nose or mouth with potentially contaminated gloves or bare hands.	431	98.0
A2	Due to PPE limitations, health workers are allowed to handle patients with COVID-19 without using PPE due to their responsibility.	51	11.6
A3	In urgent conditions, gloves that have been used are allowed to be re-used.	59	13.4
A4	Surgical masks can be re-used until they break.	21	4.8
A5	When working in the COVID-19 ward, gloves must be changed for each patient,	409	93.0

Note: LK (level of knowledge), A (level of attitude)

Level of Attitude

Participants of this research project were asked to respond to five attitude statements. About 98% agreed with avoid any touching/rubbing the eyes, nose or mouth with potentially contaminated gloves or bare hands. Regarding the three negative attitudes in this questionnaire, the respondents had a good attitude toward responding to COVID-19 preventive measures, namely, about 88% disagreed with working with patients of COVID-19 without PPE, 86.6% disagreed with re-using gloves for the next activity even in urgent or emergency cases, and 95.2% disagreed with re-using surgical disposal masks. However, most had positive attitude towards COVID-19 mitigation measures or prevention approaches as presented in Table 2. Most health personnel had positive attitudes towards mitigating COVID-19 (more than 85%).

Level of Practice

Twelve statements were used to assess health personnel practices as presented in Table 3. Health personnel did not perform many activities a good manner; they did not wear standard masks

when providing services at the PHC (10.3%), did not wear a gown (21.9%), did not wear eyeglasses or protect their eyes when providing health services at the PHC (23.4%) and did not wear boots (25.9%). These manners would induce the transmission of the disease to others at the PHC or even among their family members.

Table 3. The practice of using PPE and personal hygiene (PH) of respondents in Public Health Centres

Using PPE Practice (UP)							
Statements		Always	%	Sometimes	%	Never	%
UP1	I follow the standards of prevention and control of COVID-19 infections.	376	85.5	39	8.9	25	5.7
UP2	If patients are isolated, I follow transmission-based precautions, e.g., contact precautions or droplets.	389	88.4	24	5.5	27	6.2
UP3	I wash my hands before and after providing health services at the PHC.	410	93.2	21	4.8	9	2.1
UP4	I wash my hands before and after using gloves.	375	85.2	57	13.0	8	1.9
UP5	I wear gloves every time when I provide health services at the PHC.	376	85.5	50	11.4	14	3.2
UP6	I wear standard acceptable mask when I do health services at the PHC.	345	78.4	50	11.4	45	10.3
UP7	I wear a gown when I provide health services at the PHC.	260	59.1	84	19.1	96	21.9
UP8	I wear glasses or eye protection when I provide health services at the PHC.	244	55.5	93	21.1	103	23.4
UP9	I wear boots (rubber) when I provide health services at the PHC.	234	53.2	92	20.9	114	25.9
UP10	I take off my boots (rubber) without touching them with my hands.	294	66.8	86	19.5	60	13.7
UP11	I take off my eye protection by pulling the rope from the back of my head.	317	72.0	61	13.9	62	14.1
UP12	I remove the mask from the back of my head, first removing the lower strap from the top of my head, then removing the upper strap from the back of the head.	310	70.5	106	24.1	24	5.5
The facilities supporting COVID-19 work							
Questions						Yes	%
PH1	Are hand sanitizers/hand rubs available at your work place during this outbreak?					414	94.1
PH2	Do you easily wash your hands with running water and soap during this outbreak?					425	96.6
PH3	Do you have hand sanitizers/hand rubs and hand washing facilities in your home during this outbreak?					387	88.0
PH4	Do you have hand washing guides/posters in your work place/home during this outbreak?					405	92.0
PH5	Is PPE available for handling COVID-19?					311	70.7

Note: UP (Using PPE), PH (Personal Hygiene)

Providing Personal Hygiene Equipment in facilities

Five questions were asked to all participants; the first question concerned the availability of hand sanitizers in the workplace during the COVID-19 outbreak. It was found 5.9% of respondents indicated that they were unavailable. The accessibility to water and soap for hand washing in the workplace was 96.6%, preparing hand sanitizers and hand washing at home was 88%, providing guidelines of hand washing in the workplace or home was 92% and 70.7% of respondents indicated that PPE was unavailable during the COVID-19 outbreak. Details PPE issues are presented in Table 3.

The correlation studies

The Pearson Correlation was tested to understand the correlation of each variables (ratio or interval scale only). It was found that the coefficient correlation between knowledge and attitude was -0.303 which mean higher level of knowledge will affect to lower attitude with the weak correlation (*based on the Pearson coefficient interval*). The coefficient correlation between knowledge and practice was -0.051 which mean the higher knowledge the lower practice with the very low correlation. The coefficient correlation between attitude and practice was 0.025 which mean the higher knowledge, the higher practice as well with the very low correlation. However, there was no significance correlation found for both between knowledge and practice; and attitude and practice.

Table 4. The Pearson correlation coefficient of knowledge, attitude, and practice

Variable	Knowledge score	Attitude score	Practice score
Knowledge score	1	-0.303**	-0.051
Attitude score		1	0.025
Practice score			1

The comparison studies

No association of respondent characteristics (sex, marital status, age group) with KAP (Knowledge, Attitude, and Practice) was found. This result indicated that they had similar knowledge levels, attitudes and practices in responding to COVID-19. The mean KAP score for each category did not significantly differ as shown in Table 5.

Table 5. Comparison of general characteristics of respondents and mean KAP

Variable	N	%	Knowledge			Attitude			Practice		
			Mean	SD	P value	Mean	SD	P value	Mean	SD	P value
t-test result											
Sex											
Male	127	29.3	7.85	1.33	0.26	14.02	1.83	0.06	32.13	4.65	0.43
Female	307	70.7	7.69	1.41		14.36	1.29		31.76	4.16	
ANOVA test results											
Marital status											
Single	182	42.1	7.74	1.26	0.97	13.29	2.43	0.60	31.73	4.31	0.87
Married	242	56.0	7.72	1.49		13.25	2.25		31,94	4.34	
Divorced	8	1.9	7.63	0.91		15.00	0.00		32.00	3.38	
Age group											
20-29	265	63.8	7.65	1.36	0.283	14.31	1.44	0.49	32.05	4.06	0.14
30-39	117	28.2	7.81	1.50		14.20	1.55		31.09	4.80	
40-49	26	6.3	7.96	1.43		14.62	0.98		32.50	4.23	
50-59	7	1.7	7.00	0.82		14.71	0.76		33.29	3.64	

The respondents reported that the most important needed PPE were hazmat suits (44.3%), surgical or medical grade masks (43.9%), boots (27.5%), goggles (26.3%), and other small proportions such as nurse cups (3.9%), face shields (5.9%), and aprons 2.3%). Fifteen percent indicated that they received proper and sufficient PPE.

Discussion

Knowledge

As COVID-19 has just emerged, constituting a relatively new disease, has caused devastating effects to human life. The publication of disease information and its transmission remains limited and more scientific support is needed similar to the study in Malaysia [12,13] or other

areas such as China, north and central Nigeria, Bangladesh and northwest Ethiopia.[13–15] Most respondents had a good level knowledge about COVID-19 according to the average score; however, some question might need further consideration because many indicated wrong answers. Some misunderstood COVID-19 transmission (human to human), so this requires education and knowledge dissemination about COVID-19 features. Because the outbreak of this disease remains currently active, responsible organizations might promote campaigns of COVID-19 to all PHCs.[15] Common methods to prevent the disease from spreading such as washing hands regularly, and the awareness of PPE use for everyone in the health center need further promotion.

Knowledge of COVID-19 among HCWs (Healthcare Workers) is important. The study in India found that the HCWs is the important assets for the capacity building and preparedness strategies to control the COVID-19.[16] For any strategies for eradicate COVID-19 will be effective if the HCWs have the sufficient knowledge of that virus. The study in Malaysia found the low level of knowledge of HCWs and the insufficient PPE, so the mortality rate remains high.[17] Regarding to KAP, knowledge is the most important variable that also can affect to attitude and practice based on the study in Saudi Arabia.[18] However, even though the level of knowledge has been high but the level of anxiety remains high in Saudi Arabia.[19]

Attitude

The respondents had good attitudes towards reducing COVID-19 disease with the average score of 14.3 and minimum and maximum scores of 5 and 15, respectively. A few were unaware and unconcerned with the disease transmission that might stem from the limitation of available PPE in some health centers. They were concerned and had awareness on using PPE whenever taking care of patients and on the job duty. That indicated a good point of health personnel'

perceptions indicating the awareness, promotion and campaigns launched by central and locally involved organizations. In addition, networking and social media were easily accessed and might be factors for personnel to perceive the globally critical situation, ease of transmission and harmfulness of this disease.[20] Presently, vaccines are unavailable so the prevention measures are the best approach.[4,21] This may imply much participation in the preventive measures stipulated by the Indonesian government and WHO guidelines. The attitude in terms of motivation, discipline, and leadership leaded the good performance of midwives during the COVID-19 pandemic in Indonesia.[22]

Practice

Health personnel did not perform in a good manner regarding many activities. They did not wear standard masks when providing services at the PHC (10.3%), did not wear a gown (21.9%), did not wear eyeglasses or eye protection when providing health services at the PHC (23.4%) and did not wear boots (25.9%). Their manners would induce the transmission of disease to others at the PHC or even among their family members. It indicated that some require a greater awareness of COVID-19, so more health education level and health campaigns should be regularly implemented.[21] The average score of practice was 31.9 with the minimum of 19 and maximum of 36, indicating many health personnel did not perform properly for COVID-19. The reasons might involve facing emergency cases, limitation of available PPE or others. This finding was important for local and central governments to consider because health personnel should serve as a role model for the general population as reported by the study conducted in Nigeria.[20]

There was no association of knowledge and practices, attitudes and practices among the respondents classified by their characteristics. This might be the equivalent of knowledge according to the governmental training, self-learning from social media and the guidelines

recommended by the Indonesian government and other organizations. Interestingly a negative association was found among the respondent's knowledge level and their attitudes towards the COVID-19. One important aspect was the mindset of health personnel that need to focus in more details. Therefore, awareness campaigns should be regularly implemented.

There are many vulnerable practices which may lead the COVID-19 transmission. One study found that the exposure and social interactions between HCWs (Healthcare Workers) and the members of household tend to be the higher risk of being infected of COVID-19.[23] In term of the COVID-19 prevention practice among HCWs, most of them decided to resigned due to insufficient PPE that lead the high level of stress and fear of transmission.[24–27] Being the HCWs with direct contact to the patients and the kitchen staff were mostly found with the asymptomatic carriage of COVID-19.[28–32] The Israel government was recommended to provide more PPE to increase the prevention practices among HCWs.[33] It was reasonable that PPE takes the most important part to increase the protective ways to prevent the COVID-19 transmission. The study in USA, found the LTC (Long Term Care) with inadequate supplies of PPE and COVID-19 tests could lead the high number of cases among HCWs.[34] The sufficient intention from all sectors are needed to reduce the mortality during in line of duty of HCWs.[35] The strict regulation is one way to ensure the availability of PPE.[36]

Conclusion and Recommendation

In summary, it was obtained baseline information of knowledge, attitudes and practices of Indonesian health personnel working in PHCs towards COVID-19. The finding indicates that many health personnel lacked knowledge about the characteristics of the disease and its transmission, improper practices for taking care of patients, but most had good attitudes in responding to disease prevention. Concerning PPE requirement, HCWs need more hazmat suits,

medical grade masks, goggles and boots to respond effectively to COVID-19. Some categories mentioned in this research might benefit the government especially authorized units such as the central government, Ministry of Public health and local municipalities. The results can be used for further intervention and education or training programs for health personnel.

The strengths and limitations of this study

This investigation of knowledge, attitudes and practices of health personnel towards COVID-19 might be the first study in Indonesia covering the whole country. The data collection via online approach was conducted in one month. The readiness of organizations, people, hardware facilities and PPE support might be limited in some areas. However, the results may benefit authorized units to set preventive strategies to control the spread of COVID-19.

Abbreviations

COVID-19 : Coronavirus Disease.

KAP : Knowledge, Attitude, Practice.

PHCs : Public Health Centers.

PPE : Personal Protective Equipment.

WHO : World Health Center.

SD : Standard Deviation.

SPSS : Statistical Package for the Social Sciences.

Ethics Approval and Consent to Participate

Ethics approval from the Health Research Ethics Committee, National Institute of Health Research and Development, (Certificate of Approval No. LB.02.01/KE.330/2020). All of the

respondents can reject to be a participant in this study and they were given an agreement form before filling in the online questionnaires.

Competing Interest

The authors declare no conflict of interest.

Availably of Data and Materials

None.

Authors' contribution

DS and S designed and conceptualized the study and develop the instrument for collecting the data, fixed the methodology. Other authors assisted in the analyzing, interpreting data, finding the supporting journals, cleaning the data, preparation the questionnaire, visualizing the results, interpreting the result, and finalizing manuscripts.

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Author response to Editors' Comment

Knowledge, Attitudes and Practices of Health Personnel in Responding to the COVID-19 Outbreak in Indonesia

Dyah Suryani[1], Suyitno[*2], Maretalinia[3], Elvi Juliansyah[4], Vernonia Yora Saki[5], Kraichat Tantrakarnapa[6]

No.	Editors' / reviewers' comment	Response to comment	Lines
1	Jumlah tabel dan gambar dalam 1 manuskrip adalah 5. Silakan disesuaikan.	The total number of tables has been changed to be 5	141, 157, 178,199,208
2	Add the phone number	Phone number has been added	26
3	What was the design of this research? Conclusion?	The cross-sectional	31
4	Do not personal pronoun such as "we"	The personal pronoun has been deleted	35
5	These are results; there is no conclusion yet.	The conclusion has been added	38
6	This is a recommendation. No need to write this in the abstract	The recommendation has been deleted	38
7	Sort alphabetically	The keywords have been sorted alphabetically	41
8	Could you please replace all COVID-19 data with the newest data to show that the data updated up to now	The updated data has been added	46, 49,51
9	This paragragh is too long and many topics desrcibed. Would you separate into several paragraphs with a specific topic sentence for each paragraph. Some times you have to use past tense.	The paragraph has been separated into 2 paragraphs	56,66
10	What dose it mean? Please more detail.	The self-reported questionnaire is the data which reported by the respondents without any evidence needed, so the bias could be high.	92
11	How did you distribute this Qs to health personal? Do you have a sampling frame to do sampling? Please explain how did you do to collect the data.	The Qs was distributed via social media and use the proportional random sampling based on the province	112
12	Please make the Qs in detail and how to make gropus before the data analysis	The Qs was classified by variables of KAP and analyzed separately	116
13	There are some symblos such as LK1.... a1...., and UPI1....Pleas describe them all in methods.	The symbol of LK, A, UP, and PH has been described and noted below the tables	117,157,179
14	Each question, right? Correct answers and not correct?	Yes, each question based on variables	121
15	Seragamkan tulisan menjadi "COVID-19". Silakan perbaiki keseluruhan manuskrip	All has been changed to be "COVID-19"	all

16	Which scores? How did make the scores?	Mean scores (the results of t-test and ANOVA test)	125
17	Please find the results.... there is a correlation? How to calculate or analyze the coorelation?	Yes, there is a correlation result By using Pearson correlation	199 189
18	Please inform how to interpret the result of these tests.	The way how to interpret has been added	123
19	Cek penulisan dalam keseluruhan manuskrip. Mohon tidak menggunakan kata “we”	“we” pronoun has been deleted	All
20	We did not see the objective for this isue. Please go back to the objective and the method. We think that it did not need in this paper.	The prevalence of COVID-19 cases has been deleted	135
21	This data is out of date. It is not necessary for this case. Please delete it.	Table 1 (distribution of cases of COVID-19) has been deleted	141
22	Perhatikan penggunaan huruf kecil dan besar dalam penulisan judul	The tittle of table has been checked	141, 157, 178,199,208
23	Tabel tidak perlu menggunakan garis vertical Silakan lihat contoh tabel pada artikel jurnal kami yang sudah publish	The vertical line has been deleted	141, 157, 178,199,208
24	When and how? Please describe in the methods.	Has been described	116
25	You do not need to mention both answers; one is enaugh; Such as % correct answer or % agree. Please revise all tables.	It has been only showed one option	157
26	Beri keterangan di bawah tabel sebagai catatan	Done	157,179,
27	How to get these numbers, please include them in the mehods. No table title?	Has been included in the method. The tittle of table has been added	123, 199
28	? please metion completely for the firt time.	Done	31, 52, 203
29	How to compare? Explain it in the method detail. Please separate the reslts of t-test and ANOVA test.	The comparation is based on the mean. The results of t-test and ANOVA test have been separated.	125, 208
30	This is too shallow discussion. Please elaborate this discussion. Use references from published journals.	The discussion part has been elaborated	214-281
31	Lihat contoh penulisan pada artikel jurnal kami yang sudah publish	Has been revised based on the existing journal article	317

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1 pesan

Jurnal Kesmas <jurnalkesmas.ui@gmail.com> 21 Desember 2021 pukul 08.12
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We are looking forward to having your writing again in the near future.

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Dewi Susanna
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