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KEPATUHAN PASIEN COVID-19 MENJALANI AKTIVITAS SELAMA ISOLASI MANDIRI/KARANTINA

ADHERENCE OF COVID-19 PATIENT ACTIVITY DURING SELF-ISOLATION/QUARANTINE

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Abstrak

Penyakit virus corona telah menyebar dengan cepat ke seluruh Indonesia. Kebijakan isolasi telah diberlakukan untuk menekan peningkatan jumlah kasus. Namun, tidak semua bisa mematuhinya kata demi kata. Kebaruan penelitian ini adalah meneliti tentang kepatuhan pasien covid-19 menjalani aktivitas selama isolasi mandiri/karantina. Penelitian ini dilakukan berdasarkan sejauh mana pemahaman tentang isolasi mandiri pada pasien COVID-19 dan mengevaluasi kekurangan selama isolasi mandiri. Penelitian ini merupakan penelitian potong lintang dengan desain cross-sectional melalui penyebaran kuesioner dan analisis dilakukan secara deskriptif. Jumlah sampel penelitian ini adalah 165 responden yang merupakan penderita atau pernah menderita COVID-19 di Indonesia. Yang dinilai dari responden adalah protokol kesehatan dasar COVID-19, protokol dasar isolasi mandiri, aktivitas sehari-hari selama isolasi mandiri, persiapan pengobatan. Sebagian besar responden sudah mematuhi protokol. Namun, perlu dicatat bahwa kegiatan dan protokol isolasi diri wajib tidak dipatuhi sepenuhnya di seluruh responden. Kesimpulannya, 14 responden (8.48%) anggota masyarakat tidak dapat melakukan isolasi mandiri dengan benar karena sebagian dari mereka masih belum memenuhi persyaratan isolasi diri yang benar.
Kata kunci : COVID-19; Isolasi Mandiri; Karantina; Kepatuhan

Abstract

Coronavirus disease has spread rapidly throughout Indonesia. Policy for isolation has been enacted for repressing the number increases of cases. However, not all could comply with them words-by-words. The novelty of this study is to examine the compliance of Covid-19 patients undergoing activities during self-isolation/quarantine. This study is done based on how far is the understanding of self-isolation in COVID-19 patients and evaluate the flaw during the self-isolation. This research is a cross-sectional study design through the distribution of questionnaires and the analysis will be carried out descriptively. The samples were 165 respondents that has or had contacted COVID-19. The subjects that was rated are basic COVID-19 health protocol, basic protocol of self-isolating, daily activities during self-isolating, preparation for self-isolating treatment. Most of the respondent has mostly already obeyed. However, it should be noted that compulsory self-isolation activities and protocol are not obeyed fully across the respondents. In conclusion, about 14 respondents (8.48%) community could not carry out the proper self-isolation since some of them still did not fulfill the requirements of proper self-isolation.
Keywords: COVID-19; Self-Isolation ; Quarantine ; Adherence

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1. BACKGROUND

Coronavirus disease originated in China which from Wuhan city has been found in 2019. The cause of the virus which originated called "novel coronavirus 2019" (2019-nCov) by World Health Organization (WHO) but has been given a new name which is "severe acute respiratory syndrome coronavirus 2" (Sars-Cov-2). The coronavirus is spread by human-to-human transmission through droplets from coughing, sneezing and respiratory droplets therefore the number of cases will increase rapidly due to the easy transmission (1). Some policy has been made to decrease the number of the case, for example, is the isolation and tracing of the infected patient. Originated from Wuhan, China now the coronavirus is spread worldwide, including Indonesia. In Indonesia, the number of coronavirus cases since 3rd January 2020 in 3,496,700 cases. It has been reported there are 64,391,434 doses of vaccine have been distributed to the people of Indonesia(2).

COVID-19 is a large global concern. It has a fatality rate of 4.3% and the most common signs and symptoms are fever, sore throat, and muscle soreness or fatigue (3). Some patients could be asymptomatic yet spread the infection. Diagnosis is made by detection of SARS-CoV-2 using reverse transcription-polymerase chain reaction testing, despite that false-negative test results may occur in up to 20% to 67% of patients. Approximately 5% of patients with COVID-19, and 20% of those hospitalized, experience severe symptoms necessitating intensive care. More than 75% of patients hospitalized with COVID-19 require supplemental oxygen (4). The treatment for COVID-19 depends on the severity. Mild COVID-19 only needs isolation and vitamins and sometimes antivirus. Moderate symptoms require a higher dose of vitamins plus antivirus. Severe symptoms require hospitalization for oxygen therapy and sometimes intubation (Burhan et al., 2020). Inactivated vaccines effectiveness for COVID-19 is 65,9% for prevention of COVID-19, 87,5% for prevention of hospitalization, 90.3% for the prevention of ICU admission, and 86.3% for the prevention of Covid-19–related death (5).

The health ministry has already informed the Indonesian people regarding the prevention procedure of COVID-19 transmission beside the vaccine. The procedure is to stay at home all day and go out if only there is something necessary, stay away from crowd, keep 1 meter distance from others, delay routine doctor's appointment or change to online appointment (telemedicine) except when

in an emergency. Those are basic health protocols for COVID-19 that have to be done not just in self-isolation and quarantine, but also everywhere (6). In COVID-19 patient with mild symptom will undergo self-isolation protocol with some requirement which are the patient has no symptom or mild symptom and an isolation environment that have good ventilation. Self-isolation protocols is different from basic health protocols for COVID-19 in that the first one is done in only self-isolation but the second one is to be done even after the self-isolation has been done before (7). Self-isolation is different from quarantine. Quarantine is for those who have close contact with covid-19 patient. Quarantine is separated from others due to has been exposed with the covid-19 patient and can be released once tested negative COVID-19. Self-isolation is for those who tested positive for Covid-19 and can done in private place or medical facility (8).

In this article, we would like to understand how people in Indonesia have different profiles, vaccinations, and symptoms of COVID-19 disease. We would also like to gain the knowledge of adherence toward self-isolation protocols according to experts as this would be crucial to determine whether this country would head toward a great exit strategy to normal life as the key to that is treatment and vaccines (9).

2. METHOD

This research is a cross-sectional study design through the distribution of questionnaires and the analysis will be carried out descriptively. The population of this study was between 10-11 August 2021. The sampling method used in this study was accidental sampling involving 165 respondents and agreeing/willing to fill out the questionnaire. Approval for filling out the questionnaire was done by asking the respondent directly. Samples were taken based on inclusion criteria, namely the characteristics of samples that can be included or are eligible for research. The inclusion criteria in this study were:

1. Patients with laboratory-confirmed COVID-19
2. Patients who are self-isolating COVID-19
3. Patients who have/completed COVID-19 self-isolation

The exclusion criteria in this study are:

1. Patients who do not provide data correctly
2. Patients not using antibody, antigen, or PCR tests

This research was conducted online using a Google Form questionnaire and distributed through social media such as

WhatsApp, Line, and Instagram. This research has been conducted on 10-15 August 2021. The questions contain simple and general questions related to respondent characteristics such as age, gender, and domicile; with the addition of general questions related to COVID-19 regarding vaccination status, activity/protocols, and knowledge regarding self-isolation, and treatment during COVID-19 self-isolation.

3. RESULT AND DISCUSSION

Respondent's Demographics Aspects

The survey results from table 1 showed that respondents who had been self-isolated are more plentiful than respondents who were in self-isolation, the number of female respondents is more plentiful than the number of male respondents, and the most self-isolation groups were in the age of 20-29 years. The domicile of self-isolation respondents most came from East Java. It has been found that only a few respondents only did 1 dose vaccination. On the other hand, the respondents had done the same dose of vaccination and the rest had not been vaccinated. It was also found that most of the respondents has already been vaccinated for the 2nd dose. Furthermore, the respondent who have already been vaccinated with the 2nd dose is more plentiful than respondent who only got vaccinated the 1st dose. The most plentiful diagnosis has been made is through PCR, followed with antigen swab and the fewer is with rapid test.

Table 1. Demographics

Sex	Nominal (n =165)	Percentage (n = 165)
Male	68	41.21%
Female	97	58.79%
Age		
10-29	55	33.33%
30-49	69	41.82%
50-69	39	23.64%
70-89	2	1.21%
Domicile		
DKI Jakarta	20	12.12%
West Java	16	9.70%
Middle Java	10	6.06%
East Java	110	66.67%
Outside Java	9	5.45%

Vaccine Status		
First Dose	29	17.58%
Second Dose	67	40.61%
Not Vaccinated	65	39.39%
Not in a vaccine criterion	4	2.42%
COVID-19 Test		
Rapid Antibody Test	4	2.42%
Antigen Swab Test	67	40.61%
PCR Swab Test	94	56.97%

In the result of the survey table 2, the most symptom is fever and coughing, and anosmia. The least are the respondent with no symptoms and redness in the skin and feet.

Table 2. Signs and Symptoms

Signs and Symptoms	Nominal (n = 165)	Percentage (n = 165)
Fever	116	70.30%
Cough	105	63.64%
Cold/runny nose	82	49.70%
Sore throat	48	29.09%
Difficulty of breathing	26	15.76%
Anosmia	86	52.12%
Ageusia	46	27.88%
Nausea/vomiting	31	18.79%
Headache	76	46.06%
Diarrhea	25	15.15%
Loss of appetite	50	30.30%
Rash on extremity	8	4.85%
Pain in muscle/bone	53	32.12%
No symptom	10	6.06%

Respondent's COVID-19 Self-Isolation Daily Protocol Aspect

From table 3, the majority of respondents' days of self-isolation are 10, 13, and 14 days.

Table 3. Isolation Length

Total	Nominal (n = 165)	Percentage (n = 165)
7 day	2	1.21%
9 day	1	0.61%
10 day	48	29.09%
12 day	1	0.61%
13 day	58	35.15%
14 day	43	26.06%
20 day	2	1.21%
21 day	3	1.82%
Others	5	3.03%

That result is reflected in table 4 regarding monitoring activities during self-isolation, it has been found that only most people observe the vital signs and symptoms every day. That is because only most have the tools required to assess. Among them, there are few of the groups who don't watch themselves every day at all.

Table 4. Self-Assessment during Quarantine

	Nominal (n = 165)	Percentage (n = 165)
Observe body temperature morning and evening	98	59.39%
Observe respiratory rate	41	24.85%
Observe oxygen saturation	104	63.03%
Observe pulse rate	45	27.27%
Observe signs and symptoms	76	46.06%
Not doing anything	12	7.27%

In the results of the survey table 5 regarding compliance to stay at home only during self-isolation, the majority remained at home while only a few are not staying at home.

Table 5. Stay at home compliance

	Nominal (n = 165)	Percentage (n = 165)
Yes	151	91.52%
No	14	8.48%

In the results of the basic health protocol survey in table 6, the majority who remained compliant with the basic health protocol for self-isolation had a level of compliance higher than 90%.

Table 6. Basic health protocol of COVID-19

	Nominal (n = 165)	Percentage (n = 165)
Wear mask	158	95.76%
Keeping 1-meter distance	147	89.09%
Wash hands	161	97.58%
Doing cough ethics	139	84.24%

It was found in the survey results from table 7 that other healthy families are wearing masks during self-isolation patients generally far more than those who did not wear masks. While the percentage between those who live alone between the moderate and the once self-isolated is more or less the same.

Table 7. Compliance of Patient's Family in-a home wearing mask

	Nominal (n =165)	Percentage (n = 165)
Yes	111	67.27%
Live alone	38	23.03%

In the survey results from table 8, daily activities for self-isolation have been met by most people and on average more than 70% with a percentage who are in self-isolation slightly more than those who have self-isolation. The most filled activities with a percentage of more than 80% include opening windows, sunbathing, washing hands regularly, eating nutritiously, and sleeping in separate places. Activities that are less adhered to with a percentage of less than 75% include separating dirty laundry, cleaning the bathroom, using PPE, washing your cutlery, checking vital signs, and removing the mask properly.

Table 8. Compulsory daily activities for self-isolating patient

Open room window and let the sun or air ventilation coming to the room	148	89.70%
Sunbathe for as long as 10-15 minutes during 10:00 – 13:00	150	90.91%
Wash hands with soap or sanitizer	159	96.36%
Exercise up to 3-5 times a week	76	46.06%
Eat healthy food three times a day separated from family	142	86.06%
Separate the laundry from family	99	60.00%
Cleaning the room every day	121	73.33%
Use a mask when at home	116	70.30%
Wash own cutlery separated from others	116	70.30%
Check body temperature and oxygen saturation day and night	112	67.88%
Sleep in own room separated from family	136	82.42%
Throw mask separated from other garbage	95	57.58%

In the survey results of table 9 regarding the ventilation and self-isolation room windows, it has been found that the majority of respondents have ventilation in the room. Meanwhile, there are only a few respondents who don't have a ventilation room. Most patients clean the bathroom every day during self-isolation. Most patients have a private bathroom during self-isolation. Most of them have thermometers and oximeters, but not all of them. For oxygen tubes, only a minority have access to it. The respondent who is infected by COVID-19 who is under the supervision of RT/RW/COVID-19 taskforce is plentiful rather than the respondent who is not under the supervision of local authorities. That said, respondents who received assistance from Local Authorities and Covid-19 Task were much more plentiful compared to those who did not get help however the difference between who gets and who doesn't get is only a few. The most commonly consumed drugs from the most abundant are Vitamin C, Vitamin D, Paracetamol, Zinc, Antibiotics, and Antivirals.

Table 9. Facility, Equipment, and Supplies during Self-isolation

Facility and Equipment	Nominal (n = 165)	Percentage (n = 165)
Ventilation	157	95.15%
Room Sunlight	128	77.58%
Private Bathroom	109	66.06%
Bathroom Hygiene	119	72.12%
Thermometer	114	69.09%
Oximeter	114	69.09%
Oxygen Tube	33	20.00%
Inform authorities	136	82.42%
Authorities help	94	56.97%
Food Source		
Family	104	63.03%
Neighbors	10	6.06%
Buy	47	28.48%
Cook	36	21.82%
Medications		
Vitamin C	156	94.55%
Vitamin D	133	80.61%
Zinc	105	63.64%
Paracetamol	120	72.73%
Antibiotic	97	58.79%
Antivirus	82	49.70%
Steroid	17	10.30%
Others	15	9.09%

Respondents are still exposed to COVID-19 and have to self-isolate after being vaccinated due to the effectiveness of inactivating vaccine of the first dose only 15.5% and the second dose is 65.9% which still enable get infected by COVID-19. In the result of the entire survey, health protocol, basic protocol of self-isolating, daily activities during self-isolating, preparation for self-isolating the treatment most of the respondent has already obey the protocols. However, it should be noted that compulsory self-isolation activities

and protocol are not obeyed fully across the respondents.

A study in the UK on BMJ of the same design (10) found that only 20.2% developed symptoms but did not leave the house immediately. Full compliance 51.8%. Those tested for COVID-19 were 22.2%. Contacting authorities with 83.9%. Research in the UK on Public Health journal also with the same design(11) mentions only 24.9% who develop symptoms but do not leave the house immediately within 24 hours. With 24.5% of asymptomatic patients going out to buy supplies. Compared to our research with 91.52% self-isolation could be indicating that patient in Indonesia is more compliant. But the research in the UK took months and almost a year from the start of the pandemic in March 2020 while our research was only for 2 days in August 2021 so it cannot be fully compared. Office on national statistics in the UK reports in their bulletin that they also found 93% are in self-isolation from 29 November to 4 December 2021 which is similar to our research (12). It could be said that self-isolation adherence is increasing over time.

4. CONCLUSION

In this survey, there are so many respondents which still unaware of the self-isolation protocols especially the knowledge about self-isolation duration and the tools that must have during isolation is still incomplete. Some so many respondents did not observe their symptoms specifically things like observing the respiratory rate, observing the symptom, and observing the pulse rate is still under 50%. Some so many respondents do not separate the mask from other garbage which is dangerous and the mask can contaminate other garbage and a few respondents did not receive a care package from the local community (RT/RW) and the COVID-19 task force. Hence there is an urgent need for mass and proper education regarding COVID-19 self-isolation guidelines.

In conclusion, a majority could carry out proper self-isolation protocol but a few members of the community could not carry out the proper self-isolation because some of them still did not fulfill the requirements of proper self-isolation. Problems that are mentioned can be treated with:

1. Education and particular awareness about self-isolation to the society
2. Increasing society's awareness to report if tested positive for COVID-19 to the neighborhood association so that they can receive help and can be monitored by the COVID-19 task force.

3. By giving the guideline book about self-isolation, especially for patients who are tested positive for COVID-19.

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