How Is Health Promoting University Strategy to Handle the COVID-19 Pandemic?

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Abstract

The current COVID-19 pandemic has affected many countries, including Indonesia. Many parties, including educational institutions, have to deal with pandemic conditions. This paper aims to describe how the academic institution, Jenderal Soedirman University, is handling the pandemic situation. Various activities led by the COVID-19 Unsoed Task Force undertook several efforts to respond to the pandemic, such as conducting active supervision for all academics, mentoring teams, educating, conducting real work lecture programs, and forming COVID-19 joint volunteer teams. During data monitoring, several activities were completed such as handling patients in surveillance, tracking, and follow-up. Other efforts in the education field were also carried out to keep running the activity, but with a joint security procedure COVID-19 as well as several policies set such as changing the way of teaching to be online. Best possible efforts have been made by the university to respond to the pandemic quickly and effectively.

Keywords: Pandemic Response, COVID-19, academic

1. Introduction

The COVID-19 pandemic still occurs today and has affected around 215 countries. Total cases until June 15 were 7,981,498 with 435,155 deaths (Yang & Zhang, 2020). The outbreak that began in December 2019 in Wuhan, China has caused a lot of changes in human life. The disease caused by the Cov-2 SARS virus is transmitted from human to human via its main spread, i.e. droplets contaminated with the virus. In addition, transmission also occurs when people touch the surfaces of objects that are contaminated with the virus, and then contact the surface of mucosal body surface such as the mouth, nose, and eyes. Clinical manifestations of this disease can cause mild illnesses such as flu-like illness, but can also cause harmful effects such as death.

COVID19 is currently spreading over the world outside of China’s mainland. In China, on the other hand, the number of COVID19 cases has dropped dramatically. As of April 4, 2020, the number of confirmed cases and deaths in nations like as the United States, Italy, Spain, and Germany had surpassed the number of cases in China. China is currently rated fifth among countries with COVID19 cases worldwide. Statista reported a total of 1,016,395, 750,024, 213,133, and 53,238 COVID19 cases, active infections, recoveries, and deaths worldwide from April 4, 2020 to April 4, 2020. These data were gathered during a three-month period. The United States had the highest number of active infections, while Italy had the highest number of deaths. Furthermore, the number of COVID19 cases, recoveries, and fatalities in Indonesia was roughly 2,092, 150, and 191, respectively. Even though the number of instances in Indonesia is still modest, it is necessary to be informed of the widespread cases (Yang & Zhang, 2020).

This COVID-19 pandemic affects a number of sectors, not just the health sector but also a multi sectors, such as the economy, social culture and education. In the education sector, educational institutions must adapt to the circumstances of this pandemic so that they can continue to work properly. Some government policies of various countries choose their own options such as lockdown, large-scale social restrictions and other options that order people to work from home. Particularly in university, where health promoting university being adapted, it has important role in health development. Universities as educational institutions have the authority to produce regulations to develop students’ independence and life skills. Universities as large organizations can take advantage of the potential of the academic community to implement integrated health research (Tsouros, Dwoding, Thompson, & Dooris, 1998).
Vietnam, Taiwan, Nepal, Italy, France, the United States and other countries. A significant knowledge gap in the current outbreak is that the proportion of mild and asymptomatic cases for fatal cases, often described as a surveillance pyramid, is unknown for the 2019-nCoV; a situation, which seriously impedes epidemic assessments and complicates responses to outbreaks. 2019-nCoV spreads from human to human through droplets and contact spread (Tsouros et al., 1998). MERS-CoV antibodies (Middle Eastern respiratory syndrome corona virus) were detected in camels since 1983, but the first human case was only detected in 2012 (Suresh, 2020).

Indonesia is known as a plural society consisting of more than two thousand and five hundred ethnic groups, some of which have a specific lifestyle. There are still people who are backward and live in isolation. They are faced with several problems in their lives with a specific environment. The isolation and remote areas that they experience affect their ability to obtain accessibility in obtaining socio-economic services, so that the implementation policy for self-isolation and Clean and Healthy Behaviour becomes a challenge for the prevention and handling of cases. In addition to the problems of poverty that are carried out, they are among the groups of people who at least get a touch of meeting basic physical, psychological, social and spiritual needs. Even though their population is quite large, their quality of life is still far from the feasibility condition compared to other dominant community groups (Farag et al., 2019).

Modifications to environmental management that are simple and other ways of eradicating that can be implemented by communities are suggested (Suyanto & Muyijadi, 2017). Viruses can cause infection events (Nalim, 2012) Air pollutant material traveling around the world is now considered a trigger factor (Zander, Erin, Cloe, & Chris, 2013). Management of residential environments such as: (1) providing and handling green open land (open space); (2) provision and handling of drainage; (3) waste management; (4) the provision and handling of vesicles disposal, the provision of clean water becomes an important matter in the handling of the environment (Borisova, 2018).

The information media continues to develop with the presence of technology that increasingly makes it easy for humans so that a message can be conveyed properly, precisely, quickly and useful (Rauf, 2015). Management environment, the dissemination of information related to knowledge, prevention and handling of covid become the basic principle of tracking, prevention and handling of covid. In addition, the importance of preserving the local cultural values of the archipelago and spiritual values becomes a challenge in the very fundamental socio-cultural changes. The acceleration of information on the wave of globalization has brought significant changes to society, both at the surface level (attitudes and behavioural patterns) and deep structure (value systems, outlook on life, philosophy and beliefs). Changes occur because of cultural contact between countries which is interpreted by the dialectics of new values with old values that dominate each other, which allows homogenisation and neoliberalisation in all aspects of life including local cultural values that have been the community’s guideline (Saurik, Purwanto, & Hadikusuma, 2019).

The co-pandemic incident also struck the entire Indonesian community. Covid handling policies are mostly done to save public health. Institutional policies such as the Work Form Home (WFH) policy and online lectures are also applied in Educational Institutions such as Jenderal Soedirman University. In addition to academic teaching and training, Jenderal Soedirman University adopted various roles such as centers to expand community services through urban / rural health center, satellite center for hospital-based disease surveillance, outreach services on behalf of Hospital Medical College, facilitation of public health initiatives, promotion epidemiological perspective in research activities and guidelines for the use of appropriate bio-statistical methods, and so on. With the growing importance of the subject, it is very important that the department examine their roles, taking into account the expectations of students, faculty, other external stakeholders, and collaborators (Suradi, 2018). This research will explain the mechanisms for handling case tracking, prevention of transmission and environmental modification.

2. Method

2.1 Design and Sample

This research was conducted by survey method through epidemiological surveillance mechanisms. The research team conducted online data collection and then it was filled by the entire academic community. The population in this activity is the entire academic community which does not rotate, including lecturers, education staff, and students. Forms are distributed to all academics.

2.2 Instrument Development

The surveillance instrument for monitoring the health condition of Unsoed academics was developed by the surveillance team. This instrument was compiled based on early detection guidelines for COVID-19 infection. Some of the questions asked in this questionnaire were travel history of the last 14 days, transportation used, and symptoms felt at the time of data collection.
2.3 Data Collection

Data is collected using Google forms that are distributed in several ways, namely WhatsApp groups, student executive bodies, social media such as Facebook, Instagram, university websites, and Telegrams. Forms are distributed for two days at each stage of data collection.

2.4 Data Analysis

Data from the Google form was then analysed to see the respondent’s criteria. The surveillance team established criteria for people at risk of COVID-19 exposure based on travel history and symptoms felt while filling out the surveillance form. Then the screening team from the Medical Faculty re-examine the selection list of people at risk to establish a list of people under supervision (ODP). After getting ODP criteria, there was an advocacy team in charge of making contact with the ODP list. The work section of the Unsoed Pandemic response team for active surveillance is as follows:

![Flowchart](image)

Figure 1. Mechanisms for Handling Case Tracking, Prevention of Transmission and Environmental Modification

The advocacy team provided assistance in the form of the latest conditions of students with ODP status. The advocacy team consists of a medical team, community health workers and psychologists for ODP assistance. The public health assistant will assist in terms of education about COVID-19, independent isolation procedures and quarantine mechanisms and ensure the availability of logistics during the quarantine phase. Medical personnel will handle and decide on the right treatment procedure and referral process in accordance with the current ODP conditions. Psychologists will assist with mental health related to ODP. The advocacy team assistance is expected to be complete since the establishment of the ODP, the quarantine phase until recovery.

3. Result

Unsoed’s preparedness activities in the face of this pandemic, one of which is by conducting surveillance activities. The surveillance instrument developed by the surveillance division includes several lecturers from the public health and medical study programs. The surveillance activity has been carried out in 3 stages of data collection. Summary of this activity can be seen in Table 1.
Table 1. Summary of surveillance activity

<table>
<thead>
<tr>
<th>Phase</th>
<th>Results</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 surveillance</td>
<td>4139 respondents, 13 identified as ODP</td>
<td>Lecturer = 393</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student = 3559</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educational staff = 187</td>
</tr>
<tr>
<td>Phase 2 surveillance</td>
<td>3092 respondents, 12 identified as ODP</td>
<td>Lecturer: 291</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student: 2655</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educational staff: 146</td>
</tr>
<tr>
<td>Phase 3 surveillance</td>
<td>908 respondents, 9 identified as ODP</td>
<td>Lecturer: 173</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student: 660</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educational Staff: 75</td>
</tr>
</tbody>
</table>

Based on Table 1, the participation of the Unsoed academic community in surveillance activities is good, although it has decreased from phase 1 to phase 3. This surveillance activity is carried out using an online platform to facilitate user access. The identified ODP is then need to do laboratory checks with Polymerase Chain Reaction (PCR) to immediately establish a diagnosis. The team also provides psychological assistance for academics who have tested positive for COVID-19.

4. Discussion

Coronavirus 19 (COVID-19) is a highly contagious viral infection caused by acute corona virus 2 (SARS-CoV-2) respiratory syndrome (Velhal, 2015). The emergence of new pathogenic virus strains is a constant threat to global health, with the new corona virus strain COVID-19 as a recent example. COVID-19, which is caused by the SARS-CoV-2 virus, quickly spread throughout the world (Shereen et al., 2020). While early cases of this disease, human-to-human transmission has led to the rapid spread of the virus throughout China. The Chinese government has implemented a strategy of containment against locking throughout the city, screening at airports and train stations, and isolation of suspected patients. However, the number of cumulative cases continues to grow every day. The ongoing outbreak presents challenges for modelers, because limited data is available on the initial growth trajectory, and the epidemiological characteristics of novel corona viruses have not been fully explained.

Case tracking at UNSOED begins with the discovery of ODR data of 165 cases. The data was found from various faculties. Determination of ODR is based on data Travel history and health complaints experienced. We use a phenomenological model that has been validated during an outbreak. Transmission and that the growth of the epidemic has slowed in recent days (Mendoza et al., 2020). The new COVID-19 belongs to the SARS-CoV group, and it originates from bats but infects humans through smuggled pangolins. Initially, the mode of transmission of infection was from animals to people, but transmission of the virus from person to person and community was confirmed in many parts of the world. With an incubation period of between two and fourteen days, signs and symptoms of infection are mild to high respiratory diseases; characterized by coughing, breathing problems (shortness of breath), high temperature (fever), fatigue (fatigue) and nausea. Recommendations for environmental modification related to social distance, which include avoiding all forms of contact with people; either through greetings, hugging or shaking hands and large gatherings, avoiding contact with animal belongings, dead or living animals, sick and dead people from COVID-19 epidemic areas, and basic hygienic practices such as washing hands with clean water and antiseptics thoroughly soap for at least twenty seconds must always be practiced. Prevention of standards in the handling of COVID-19 becomes absolute in the prevention of this case (Roosa et al., 2020).

The current corona virus outbreak 2019 (COVID-19) has prompted the World Health Organization (WHO) to declare a Public Health Emergency of International Concern on January 30, 2020. On February 28, 2020, COVID-19 has spread throughout China with nearly 80,000 cases of which confirmed and affected at least 51 countries and regions worldwide. Case isolation and contact tracing are common interventions used to control outbreaks of infectious diseases (Ayenigbara, 2020). Case tracking is carried out by filling out surveillance form data to be followed up on case determination and assistance and prevention. This is done so that the number of patients does not continue to increase and prevention of transmission can be done given the gravity of the case. About 15% of patients with COVID-19 are confirmed to have severe illness and 5% require ICU level care (He, 2020). Preventing and controlling epidemics faces enormous challenges.
University leaders take effective steps. First, they asked about health symptoms and recommended their isolation at home. During isolation, body temperature and symptoms are reported every day. Second, they minimize the association on campus. Third, the UNSOED COVID-19 team advocates through online media to popularize epidemic prevention knowledge and let people know how to do well in self-protection. Fourth, remain calm regarding COVID-19 information through online media. Fifth, for COVID-19, assisting the supply of logistics for all academics during quarantine. Sixth, provide assurance of assistance when the COVID-19 occurs. Seventh, tri dharma activities are carried out online through the Internet. Eighth, people diagnosed with COVID-19 are isolated and treated in designated hospitals. Ninth, using big data surveillance to improve tracking management. The opinion of other researchers states that the diagnosis in this case is an absolute requirement (Ra, Till, & Luedy, 2020). The use of online media is very helpful to prevent crowds of people (B. Fu & X. Fu, 2020). Case handling is a challenge in developing models (Fekete, 2017). Care services are a challenge in handling cases globally (Sunarsih et al., 2019). Clinical practice with a public health perspective makes community medicine a unique specialty. At their health center, community doctors not only implement disease prevention programs, assess community health needs, manage health care teams and advocate for policies that promote health but also diagnose and treat diseases. The case handlers at UNSOED are already comprehensive. Starting from the activities (promotive, preventive, curative, and rehabilitative) at the Health Center (Jindal, 2011). This treatment is also carried out by using local community values (Kumar, 2017).

Attitudes towards risk, attitudes toward leader commitment as role models, group norms, and trust in the ability to carry out safety and health procedures determine the safety climate that leads to intentions for safe and healthy behaviour in performance (Wibowo, Diniawati, & Sein, 2019). The approach taken to handle cases starts from the approach community leaders, religious leaders, BEM and related communities and related services / agencies and health service center. The results of this research can be comprehensively useful for Health program, planning and policy (Ismara et al., 2019).

5. Conclusion

Handling COVID-19 in institutions becomes a big challenge in an organization. The ease of tracking communications and handling cases can be done through online media. Institutional policy to play a role quickly and accurately becomes one of the important supports in handling this case.

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Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest.

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