

## COMMUNITY EMPOWERMENT TOGETHER, KNOW THE SPREAD AND PREVENTION OF COVID 19

Rita Kartika Sari, Putri Rokhimah Ayuningtyas, Muhammad Agus Supriyono, Citra Primavita Mayangsari, Setyo Trisnadi

Fakultas Kedokteran, Universitas Islam Sultan Agung Semarang, Jawa Tengah, Indonesia

Email: rita.kartika@unissula.ac.id

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*Covid-19; Spread; Prevention; Health Workers; Public; Health Cadres.*

**ABSTRACT**

*The new world is faced with a health problem, namely the new coronavirus disease pandemic (Corona Virus Disease-2019), caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). This disease was first discovered in December 2019 in the City of Wuhan, Hubei Province, China. This disease can manifest from mild respiratory disorders to severe pneumonia which causes death, this is a global challenge. In March 2020, the World Health Organization (WHO) declared Covid-19 a pandemic, meaning that the disease has spread over a large area, for example several continents, or worldwide. Although intensive research efforts around the world have been carried out, among others related to the prevention, spread and also treatment of Covid-19. Government policies and community participation in efforts to deal with the pandemic are very influential in preventing the spread of the Covid-19 virus. In the context of handling the Covid-19 pandemic, in addition to the government's vaccination program, it also recommends maintaining distance, wearing masks, and washing hands as a preventive measure. The aim of this research is to empower the community to recognize the spread and prevent COVID-19 at the UPT Puskesmas Jenawi, Karanganyar Regency. Place of Implementation at the Karanganyar Jenawi Health Center. Implementation time March 14, 2022 Method: Implementation of activities using a group-based method which is carried out in a comprehensive manner, starting from coordination with policy makers at the Jenawi Health Center, approaches and coordination with the community, educating the community, mentoring, and discussions. The activities of the community service team are carried out in a measurable and monitoring and evaluation process to measure achievement of targets and outcomes, through the role of the community, cadres and puskesmas so that they can improve the health status of the community. The sample is 40 respondents with purposive sampling technique. The results of the implementation of education in the community gain knowledge and insight about Covid 19 so that the community can be empowered to participate*

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*in the prevention of Covid 19. The community needs to be vigilant and protective of this global pandemic by knowing its prevention and spread so it is necessary to empower the community and cadres to participate in preventing covid-19 through community service by involving competent experts, namely experts in the field of medicine, public health experts, psychologists providing knowledge to the community related to the spread and prevention of the Covid 19 virus.*

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## INTRODUCTION

SARS-CoV-2 can be transmitted from human to human; the current hypothesis is that the first transmission occurred between bats and an as-yet-undetermined intermediate host. It is estimated that people infected with SARS-CoV-2 will infect about three new people (average to 3.28). Symptoms can vary, with some patients remaining asymptomatic, while others with symptoms with fever, cough, fatigue, and a host of other symptoms. Symptoms may be similar to those of patients with influenza or the common cold. At this stage, it is most likely that the mode of transmission is estimated through direct contact and droplet/aerosol spread (Udugama *et al.*, 2020). SARS-CoV-2 is spreading rapidly throughout the world. Advances in diagnostic approaches, such as the use of real-time polymerase chain reaction (RT PCR), chest radiography, and computed tomography (CT) imaging; However, due to the unavailability of adequate evidence, there is currently no officially approved drug or vaccine against SARS-CoV-2 (Chakraborty *et al.*, 2020).

Corona virus emerged as a global health threat due to its extremely rapid geographical spread over the last two years of the decade. The virus was first discovered in the Chinese city of Wuhan, believed to be acquired from zoonotic sources and spread directly through contact transmission (Park *et al.*, 2021). The symptomatic phase manifests with fever, cough and myalgia to respiratory failure. The diagnosis was confirmed using reverse PCR transcriptase. Prevention strategies play a major role in reducing the spread of the virus publicly/along with isolating the disease and community restrictions, as well as developing vaccines to eliminate the virus, but this is an ongoing challenge (Umakanthan *et al.*, 2020). The current shortage of effective interventions to prevent or treat COVID-19 infection, it is of worldwide concern to conduct vaccine clinical trials, experts are conducting several clinical trials among which several existing vaccines prevent viral or bacterial respiratory diseases, in particular influenza vaccine, pneumococcal vaccine and tuberculosis vaccine Bacillus Calmette Guérin (BCG), as these may hypothetically play a role in the prevention of COVID-19 (Sultana *et al.*, 2020).

Some studies show that to stop the spread of the virus, it's important to limit crowds, shorten the duration of visits or gatherings, maintain social distancing, talk at low volumes around others, wear masks, and hold meetings in well-ventilated areas. In addition, contact tracing can prioritize contacts of people with high concentrations of virus in the airways between them (Chen *et al.*, 2021). In facing a pandemic, it is necessary to calm the day and try to control yourself as well as strengthen emotional and spiritual intelligence so that

stress does not occur, because increased stress will affect biological responses in the body, including increased cortisol hormone and decreased systemic immunity IgG (Sari et al., 2019). People with high intelligence (intelligent people) will more quickly adjust to the new problems faced, when compared to people who are not intelligent, in other words intelligence is divided into intellectual, emotional, adversity and multiple intelligences with this intelligence people will be ready to face any tough challenge, one of which is during a pandemic like today (Sari *et al.*, 2020). The strength of the heart and soul, intrapersonal and interpersonal skills are needed in interacting but still paying attention to health protocols (Syaiful Saehu *et al.*, 2020).

The first case of COVID-19 was found in Indonesia in March 2020 and the spread was quite fast where until July 11, 2021 this virus had infected 2.49 million confirmed people with 2.05 million people recovered and 65,457 died (Task Force for the Acceleration of Covid-19 Handling). Semarang City as the capital of Central Java is the highest area of COVID-19 cases in Central Java Province with until July 11, 2021 there were 294,377 confirmed cases of COVID-19, 230,460 cases recovered, and 12,880 died (Lai et al., 2020).

The development of data on the number of COVID-19 cases in Semarang City is updated daily through the web and social media accounts. Semarang City as the capital of Central Java is the highest area of COVID-19 cases in Central Java Province with until July 11, 2021 there were 294,377 confirmed cases of COVID-19, 230,460 cases recovered, and 12,880 died (Covid-19 Response of Central Java Province).

Coronavirus Disease 2019 (COVID-19) discovered in Hubei Province, China in December 2019, A group of patients were treated with fever, cough, shortness of breath, and other symptoms, using computed tomography (CT), which revealed diverse opacity (denser, more numerous, and confluent) in compared to images of healthy lungs, these findings leading to an early diagnosis of pneumonia (Udugama *et al.*, 2020).

Jenawi District is one of the sub-districts in the Karanganyar Regency which is located in the easternmost area and borders the East Java Province. The area of Jenawi sub-district is approximately 56.0827 Km<sup>2</sup> / 560827.5 Ha which is divided into 9 villages namely Gumeng, Anggrasmanis, Jenawi, Trengguli, Sidomukti, Balong, Seloromo, Menjing, Lempong. Geographically, Jenawi sub-district is a hilly mountainous area (Qi et al., 2022). The lowest altitude is + 450 m (Lempong Village) and the highest + 1000 m (Gumeng and Anggrasmanis Villages) above sea level.

The other 6 villages have altitudes between 460–600 m. Jenawi District is an area in Karanganyar Regency that has borders with: South: Ngargoyoso District, Karanganyar Regency, West: Kerjo District, Karanganyar Regency, North: Sambirejo District, Sragen Regency, East: Sine District, Ngawi Prop. East Java. Jenawi District consists of 9 villages with 34 hamlets, 60 RWs, and 218 RTs with an area of 5,608,275 Ha, consisting of: Hills: 20,035,073 Ha, rice fields: 539,1232 Ha, forest land: 1,600,6655 Ha, plantation land: 611,2215 Ha, rivers and roads: 109,1547 Ha, public facilities land: 744,6,029 Ha. The working area of UPT Puskesmas Jenawi covers an area of 55.78 km<sup>2</sup>, with a distance to the main puskesmas from the nearest area as far as 0.5 km and the farthest as 7 km, with

the nearest travel time of 15 minutes and the farthest 45 minutes by motorized vehicle (Yao et al., 2020).

## **METHODS**

Community empowerment together to identify the spread & prevention of Covid 19 at UPT Puskesmas Jenawi Karanganyar Regency carried out several approaches which were carried out together, namely: 1). Community group based. All community service activities are carried out for the community and health workers by using groups as learning media and mentoring, planning and monitoring as well as evaluating all community service activities. 2). Comprehensively, all community service activities are carried out simultaneously related to human resources, counseling and mentoring from experts to the community and health cadres. 3). Based on local potential and local wisdom by developing local attitudes and culture by empowering the community and cadres to recognize the spread & prevention of Covid 19 at UPT Puskesmas Jenawi, Karanganyar Regency. Furthermore, the three methods above are implemented in 4 (four) stages, namely (1) Socialization, (2) Competency improvement, (3) Implementation of activities, (4) Monitoring and evaluation.

## **RESULTS AND DISCUSSION**

At the end of 2019, a new Corona virus variant was found in Wuhan City, China called the SARS-CoV-2 Virus or better known as Covid-19. Covid-19 attacks the respiratory system in humans which spreads between humans in various countries, including Indonesia. Various policies have been issued to prevent the spread of Covid-19, but there are still additional positive Covid-19 cases. One of them is the policy to prevent the spread of Covid-19 (Wiersinga et al., 2020).

Coronaviruses (CoV) are a large family of viruses that cause illnesses ranging from mild to severe symptoms. There are at least two types of coronavirus known to cause severe symptoms such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (Zhai et al., 2020). Coronavirus Disease (COVID-19) is a new type of virus that has never been identified before in humans. Coronaviruses are zoonotic (transmitted between animals and humans). Research suggests that SARS was transmitted from civet cats to humans and MERS from camels to humans. Several coronaviruses are known to circulate in animals but have not been proven to infect humans, Director General (Ministry of Health, RI. 2020). Clinical manifestations usually appear within 2 days to 14 days after exposure. Common signs and symptoms of coronavirus infection include symptoms of acute respiratory distress such as fever, cough and shortness of breath. In severe cases it can lead to pneumonia, acute respiratory syndrome, kidney failure, and even death (Guo et al., 2020).

SARS-CoV-2 can spread in both ways, namely through direct contact (droplets and human-to-human transmission) and through indirect contact (contaminated objects and airborne transmission). Person-to-person spread of SARS-CoV-2 is thought to occur primarily through breathing, when a person coughs, sneezes, or even talks or sings. SARS-CoV-2 can be transmitted from droplets less than five microns in diameter and air for up

to three hours, air isolation, room ventilation and proper disinfectant application limit the spread of the virus (Melika Lotfia *et al.*, 2020). Government policies and community participation in efforts to overcome the pandemic are very influential in preventing the spread of the COVID-19 virus. In order to handle the COVID-19 pandemic, in addition to the vaccination program, the government also recommends maintaining distance, wearing masks, washing hands as a preventive measure .

Various policies to prevent the spread of Covid-19 have also been issued by various ministries, including the Ministry of Law and Human Rights of the Republic of Indonesia by implementing strict health protocols and strengthening the role of all available resources. Preventive measures, which can be done by managing mental and psychosocial health are also very necessary in maintaining positive emotional conditions such as: feeling happy, thinking positively by reminiscing about pleasant experiences and staying away from hoax news, providing positive support to each other, maintaining communication even though online will have an impact on increasing one's immunity and for those at risk still always manage comorbidities / comorbidities to stay in control.

Prevention on a wider scale must still be carried out. With the new normal life, people can carry out their daily activities as before the pandemic, but must comply with very strict health protocols, including: Physical distancing, wearing masks when traveling, social distancing, washing hands at all times. In other words, new normal life is a change in people's behavior to continue carrying out activities but with strict health protocols to prevent the transmission of COVID-19 (Udugama *et al.*, 2020).

In principle, it is still necessary to provide Health Promotion to the public about COVID-19. The government proactively invites citizens to increase immunity. This effort is carried out to prepare the body's condition to deal with the COVID-19 virus (Ministry of Health of the Republic of Indonesia, 2020). Through health counseling can motivate individuals to accept a process of behavior change that directly affects the individual's value system, beliefs and attitudes. Health education will produce activities that seek to inform individuals about the characteristics and causes of a disease and / or health and the level of risk associated with lifestyle behaviors owned by individuals (Guo *et al.*, 2020).

Community empowerment in improving health according to WHO is a cultural, psychological and political process through individuals and social groups so as to be able to express needs, present concern, develop participation strategies in decision making and carry out political, social and cultural actions to meet health needs, so that with the participation of the community and puskesmas officers can prevent and minimize the spread and prevention COVID 19 (Sukesi *et al.*, 2018). The complexity of the covid 19 problem cannot be solved alone by the government, the covid 19 problem covers various aspects both social, economic, cultural, ecological and so on so that covid 19 control should also involve other sectors, especially the community and cadres who will be the subject of the program (Drożdżal *et al.*, 2020). The community is involved starting from determining the root of the problem related to covid 19, determining programs that are possible for them to do to the process of monitoring and evaluating the program. This is called community empowerment(Sukesi *et al.*, 2018).

The PKM implementation program through the PKM program of community empowerment together to recognize the spread & prevention of covid-19 at the UPT Puskesmas Jenawi Karanganyar Regency supported by the competence of experts in the field of public health, doctors, psychologists Faculty of Medicine Unissula Semarang can increase the degree of public health in preventing and spreading covid-19 (Contini et al., 2020). PKM program activities for community empowerment together to recognize the spread and prevention of covid 19 were carried out at the UPT Puskesmas Jenawi Karanganyar Regency (Al-Qahtani, 2020).

## CONCLUSION

Public knowledge at the Jenawi Health Center regarding Covid-19 needs to be continuously improved. Government policies and community participation in efforts to deal with the pandemic are very influential in preventing the spread of the Covid-19 virus. In the context of handling the Covid-19 pandemic, apart from the vaccination program, the government also recommends maintaining distance, wearing masks, and washing hands as a preventive measure.

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