



PUBLIC EDUCATION ABOUT EYES DURING THE COVID-19 PANDEMIC

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ABSTRACT

In December 2019, a case of pneumonia of unknown etiology first reported in Wuhan, Hubei Province, China.⁽¹⁾ The etiology was finally identified and showed a new type of coronavirus, which was given the tentative name 2019 *novel coronavirus* (2019-nCoV). On February 11, 2020, the World Health Organization (WHO) announced the name of the new virus, namely *Severe Acute Respiratory Syndrome Coronavirus-2* (SARS-CoV-2), and the name of the disease as *Coronavirus Disease* (COVID-19). Indonesia reported its first two confirmed cases of COVID-19 in March 2, 2020. As of September 8, 2020, the number of confirmed cases of COVID-19 in Indonesia was 200,035, with 8,230 deaths (CFR 6.9%).

Keywords: Covid-19, Eyes Health

INTRODUCTION

The SARS-CoV-2 virus is part of the coronavirus family. There are two other known types of coronavirus, including *Middle East Respiratory Syndrome* (MERS) and *Severe Acute Respiratory Syndrome* (SARS).⁽⁴⁾ Coronavirus is zoonotic (transmitted between animals and humans). Meanwhile, the animal that is the source of the transmission of COVID-19 is still unknown.⁽⁵⁾

Clinical symptoms of patients with COVID-19 infection can be asymptomatic (asymptomatic), fever (temperature > 38°C), cough, and difficulty breathing.⁽⁶⁾ In addition, it can be accompanied by severe shortness of breath, fatigue, myalgia, gastrointestinal symptoms, other respiratory tract symptoms, and in severe cases, ARDS, sepsis, and septic shock can occur.⁽¹⁾

Currently, the transmission of SARS-CoV-2 through droplets released when coughing, sneezing, or contact is believed to be the main route of virus transmission.⁽¹⁾ Other transmission routes can be aerosol and fecal-oral. Vertical transmission between mother and child is still uncertain.⁽⁷⁾

Eye involvement in COVID-19 cases was reported in several journals. Research in Hubei, China, reported that 12 out of 30 confirmed COVID-19 patients were accompanied by conjunctivitis.⁽⁸⁾ One of the positive COVID-19 patients with conjunctivitis in Italy detected SARS-CoV-2 RNA in eye specimens which may be a potential source of infection.⁽⁹⁾ Several studies emphasize that the eyes are a potential entry point for this virus and emphasize the importance of masks and eye protection.⁽¹⁰⁾

This mode of transmission is what makes COVID-19 so contagious. Until now, there is no vaccine or specific treatment to deal with COVID-19, so prevention is the best step to take.⁽¹¹⁾



Based on this background, one of the reasons for the rapid spread of this infection may be the lack of public education and knowledge about the dangers of the coronavirus. People are still not familiar with how the SARS-CoV-2 virus is transmitted, so they are not introspective and do not take steps to prevent infection.

This lack of knowledge of the transmission of the COVID-19 virus must be resolved immediately. This educational video about things to pay attention to regarding the eyes during the COVID-19 pandemic can be a means of health promotion to prevent the spread of infection.⁽¹²⁾ Hopefully, the educational video can attract people's attention to get to know COVID-19 and increase public awareness of how we should work together to reduce the transmission of this virus.

METHODS

Community service activities in the form of counseling have been carried out in September 2021 at the Merdeka Health Center, Palembang. This activity aims to increase the knowledge of the general public and health workers regarding matters that must be considered regarding the eyes during the COVID-19 pandemic. This outreach activity was carried out with the provisions of the Merdeka Health Center by not gathering large numbers of people.

DISCUSSION

The education delivered contained information about the coronavirus or COVID-19, symptoms in the eyes related to COVID-19 infection, the transmission of the COVID-19 virus, prevention of infection primarily through the eyes, and eye health care during the COVID-19 pandemic. In addition, this counseling contains information on personal protective equipment (PPE) when examining patients for medical personnel.

Healthy behavior in the form of wearing a mask, washing hands with soap as often as possible and rinsing with running water after doing activities outside the home, eating nutritious food and according to needs, especially foods that can increase endurance, adequate rest, and regular exercise are behaviors that recommended and disciplined by the community during this pandemic. Ways to prevent transmission of the coronavirus through the eyes can also be done in several ways, such as using protective glasses to protect the area around the eyes and prevent particles, water, or other chemicals from infecting the eyes. Also, avoid touching and rubbing the eyes.

Merdeka Health Center, Palembang is one of the primary health centers of Palembang City, which has equipped and provided handwashing facilities using water and soap or alcohol-based hand sanitizers in various strategic locations in the workplace following the required number such as entrance doors, patient waiting rooms, examination rooms, waiting rooms, which are frequently accessed by medical personnel and patients. Ensure all work areas are clean and hygienic by performing regular cleaning using disinfectants (door handles, banisters, elevator buttons, attendance machines, examination rooms, and others).

The use of personal protective equipment (PPE) is also very important for medical personnel because medical personnel is the individuals most at risk of infection, especially those who have close contact with COVID-19 patients or personnel who treat

COVID-19 patients. Health workers can protect themselves when caring for patients by adhering to infection prevention and control practices, which include administrative, environmental, and engineering controls as well as proper use (i.e., proper selection of the appropriate type of PPE, how to use it, how to remove it and how to dispose or wash it). PPE). Health workers need to be reminded that PPE is only one aspect of infection prevention and control measures.



CONCLUSION

Public outreach activities regarding the eyes during the COVID-19 pandemic at the Merdeka Health Center, Palembang went smoothly. This activity aims to educate the public and health workers in introducing things that consider the eyes during the COVID-19 pandemic. So that they can break the chain of the spread of COVID-19 has become a pandemic.



REFERENCES

1. Susilo A, Rumende CM, Pitoyo CW, Santoso WD, Yulianti M, Sinto R, et al. Coronavirus Disease 2019 : Tinjauan Literatur Terkini Coronavirus Disease 2019 : Review of Current Literatures. 2020;7(1):45–67.
2. Ren L, Wang Y, Wu Z, Xiang Z, Guo L, Xu T, et al. Identification of a novel coronavirus causing severe pneumonia in human : a descriptive study. 2020;133(9):1015–24.
3. Media Informasi Resmi Terkini Penyakit Infeksi Emerging. Situasi Terkini Perkembangan Coronavirus Disease (COVID-19) 6 Mei 2020. covid19.kemkes.go.id. 2020.
4. Wu D, Wu T, Liu Q, Yang Z. International Journal of Infectious Diseases The SARS-CoV-2 outbreak : What we know. 2020;94:44–8.
5. KEMENKES RI. Pedoman Pencegahan dan Pengendalian Coronavirus Disease (COVID-19). KEMENKES RI. Jakarta: Direktorat Jenderal Pencegahan dan Pengendalian Penyakit; 2020.
6. PDPI. Pneumonia COVID-19 Diagnosis & Penatalaksanaan di Indonesia. Jakarta: Perhimpunan Dokter Paru Indonesia; 2020. p. 12.
7. Zhou W. Buku Panduan Pencegahan Coronavirus: 101 Tips Berbasis Sains Yang Dapat Menyelamatkan Hidup Anda. Wuhan, China: Chief Physician of Wuhan Center for Disease Control and Prevention; 2020.
8. Wu P, Duan F, Luo C, Liu Q, Qu X, Liang L, et al. Characteristics of Ocular Findings of Patients With Coronavirus Disease 2019 (COVID-19) in Hubei Province, China. JAMA Ophthalmol [Internet]. 2020; Available from: <https://doi.org/10.1001/jamaophthalmol.2020.1291>
9. Colavita F, Lapa D, Carletti F, Lalle E, Bordi L, Marsella P, et al. SARS-CoV-2 Isolation From Ocular Secretions of a Patient With COVID-19 in Italy With Prolonged Viral RNA Detection. Ann Intern Med [Internet]. 2020; Available from: <https://doi.org/10.7326/M20-1176>
10. Kuo IC. A Rashomon Moment? Ocular Involvement and COVID-19. Ophthalmology [Internet]. 2020 May 7; Available from: <https://doi.org/10.1016/j.ophtha.2020.04.027>
11. Chen P, Mao L, Nassis GP, Harmer P, Ainsworth BE, Li F. Coronavirus disease (COVID-19): The need to maintain regular physical activity while taking precautions. J Sport Heal Sci [Internet]. 2020;9(2):103–4. Available from: <https://doi.org/10.1016/j.jshs.2020.02.001>
12. Rodrigues Junior JC, Rebouças CB de A, Castro RCMB, Oliveira PMP de, Almeida PC de, Pagliuca LMF. DEVELOPMENT OF AN EDUCATIONAL VIDEO FOR THE PROMOTION OF EYE HEALTH IN SCHOOL CHILDREN . Vol. 26, Texto & Contexto - Enfermagem . scielo ; 2017.