

# Strengthening Sanitation During Pandemic Implementation in Patutrejo Village, Grabag, Purworejo

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**Abstract.** In early March 2020, the Covid-19 pandemic began to enter Indonesia. Almost all areas in Indonesia were exposed, one of them was Purworejo Regency, Central Java. The citizen of Purworejo Regency, especially Patutrejo Village, had limited internet access which became an obstacle in delivering information related to habitual adaptation in preventing the transmission of Covid-19. This activity aims to increase people understanding about the procedures of implementation of New Habit Adaptation and their compliance with health protocols during the Covid 19 pandemic; and to strengthen the sanitation procedures during Covid-19 pandemic. It is qualitative study based on observation, socialization activities, discussions, questions and answers. The subject is all citizen of Patutrejo Village, Purworejo Regency. The results show implementation of socialization against the dangers of Covid-19 and the application of health protocols. A hand washing place which were equipped by hand soap installed in four areas in Patutrejo village. The results of this activity are expected to increase awareness of Patutrejo's people about the dangers of Covid-19 transmission and the importance of implementation of health protocols in 3 M (maintaining distance, wearing masks and washing hands with soap).

**Keywords:** Covid-19 pandemic · Health protocol · Sanitation strengthening

# 1 Introduction

The purpose of this research is the strength sanitation in the pandemic with providing on the danger coronavirus and the researchers give tools of health protocols. High mortality in the world in December 2019 until now due to the covid 19 infection pandemic [1]. The effects of the covid 19 pandemic in the world are fatal in the tourism sector [2]. The effects of covid 19 also have an impact on the social, economic, political, and human sectors [3]. A person's fear of Covid 19 is high only in a woman and a health professional [4]. Some people are starting to be vigilant and careful and adopt a healthy lifestyle, but there are some who don't care and seem dismissive. It is this indifferent attitude

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that then accelerates the spread of the coronavirus [5]. The influence of covid 19 on a person's mentality due to the lockdown changes a person's habits from not knowing the internet [6]. Corona spread from China greatly changed various human habits in this world [7]. Corona virus can cause meningitis [8]. Corona virus infection in pregnant patients has an effect on placental infection [9]. Quick action in anticipating the corona virus in the workplace can reduce the risk of contracting it between employees [10]. Risk management in the workplace is strongly influenced by employees exposed to Covid 19 [11]. Psychological support greatly helps accelerate the healing of Covid 19 patients [12]. Likewise, it is very important, moral support and family environment for third trimester pregnant women who are exposed to Covid 19 [13].

From a social perspective, community life in Patutrejo Village shows what it is called as a close-knit community. The strong bond among inhabitants indicates that the community can collectively prevent the spread of Covid-19. However, limited internet access in Patutrejo Village presents an obstacle in delivering information related to the adaptation of new habits and the importance of implementing health protocols. There is a need for a system that can deliver accurate and directed information on the danger of Covid-19 and how to prevent it to the people of Patutrejo Village to halt additional cases in the area. The purpose in this research is based on the background above, the researcher sets the main objective of this study to increase people understanding about the procedures of implementation of New Habit Adaptation and their compliance with health protocols during the Covid 19 pandemic; and to strengthen the sanitation procedures during Covid-19 pandemic. The novelty in this research is providing tools of health protocols and education regarding about coronavirus.

## 2 Research Methods

A dissemination program to be enacted for the community was sanitation strengthening during the Covid-19 pandemic. The study location was in Patutrejo Village, Grabag Sub-District, Central Java. It was a qualitative study based on observation, dissemination activities, discussions, questions and answers. Observation was performed first to determine the problem faced by partners and solution to help them in overcoming the problem. Dissemination was carried out with material regarding the dangers of the coronavirus and procedures for implementing new habits by always complying with health protocols. It was carried by the means of lectures accompanied by discussions and a question-and-answer forum for people who need further information on the dissemination materials. At the end of the activity, the handover of thermo-guns, hand sanitizers and installation of sanitation in the form of hand washing facilities as one of the supporting facilities for the implementation of health protocols were carried out.

# 3 Results and Discussions

#### 3.1 Result

The program was carried out on Wednesday, November 25, 2020 at Patutrejo Village Hall, Grabag Sub-District, Purworejo Regency, Central Java. The first agenda was the

dissemination on the dangers of coronavirus and procedures for implementing new habits, attended by 26 participants. Then, it was followed by the handover of handwashing facilities placed in Hamlet I, Hamlet II, Hamlet III and Hamlet IV of Patutrejo Village. According to the Central Statistics Agency, Patutrejo Village in 2022 had a male population of 1179 and 1159 women, while at the beginning of the Covid 19 pandemic in Patutrejo Village there were only 19 people exposed to Covid 19. The results of the research on July 12, 2020 that there were 1681 new cases in Purworejo with an average of 1707 cases per 7 days as in Fig. 1. New Cases and Deaths due to exposure to Covid 19 in Purworejo Regency.

Observation activity as seen in Fig. 2, dissemination activity as seen in Fig. 3 and the handover of hand-washing facilities and health protocol equipment as seen in Fig. 3. To heed the call, the community service team invited the people of Patutrejo Village to comply with health protocols. The life of an adult community is very likely to have mental and psychological health problems due to the Covid 19 pandemic The effect of this covid 19 on society tends to be very dependent on social media [14] so that with these two things our group provides socialization of the influence of social media on people's lives in the new normal era. The effect of the vaccine is very influential on corona virus patients [15] so our group provides education in the village about the importance of Vaccine 1, 2 and even booster vaccines for our common safety.

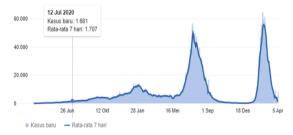


Fig. 1. New Cases and Deaths due to exposure to Covid 19 in Purworejo Regency.



Fig. 2. Observation activity.



Fig. 3. Dissemination activity.

#### 3.2 Discussions

The community service activity was carried out in the form of dissemination in order to foster awareness and vigilance against the dangers of Covid-19 which is still widespread both in the world and in Indonesia. The results of the first activity show that there were some participants who did not understand the meaning of adapting new habits and implementing the correct health protocol, thus, the dissemination is expected to improve the understanding of Patutrejo Village residents regarding the prevention of the transmission of Covid-19.

The dissemination was then continued with the handover of aids to strengthen sanitation and the enforcement of health protocols. The second activity results in the delivery of sanitation tools and equipment to facilitate the implementation of health protocols. The sanitary equipment includes hand washing instrument in the form of a jar or equivalent, as well as several other complementary health protocols such as hand washing soap, hand sanitizer and masks. The installation of this hand washing facility received a very good response from local residents. Hand washing facilities equipped with soap encourage residents to always wash their hands before their daily routines so that public health is maintained.

## 4 Conclusion

Public awareness in implementing health protocols during a pandemic is very important and must be improved. Some important aspects are still not well understood by some residents of Patutrejo Village in facing the adaptation of new habits. The results of this activity are expected to improve awareness of Patutrejo people about the dangers of Covid-19 transmission and the importance of implementation of health protocols in 3M (maintaining distance, wearing masks and washing hands with soap).

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## References

- Aggarwal, G., Lippi, G., & Michael Henry, B. (2020). Cerebrovascular disease is associated with an increased disease severity in patients with Coronavirus Disease 2019 (COVID-19): A pooled analysis of published literature. *International Journal of Stroke*, 15(4), 385–389. https://doi.org/10.1177/1747493020921664
- Bakar, N. A., & Rosbi, S. (2020). Effect of Coronavirus disease (COVID-19) to tourism industry. *International Journal of Advanced Engineering Research and Science*, 7(4), 189– 193. https://doi.org/10.22161/ijaers.74.23
- 3. Abodunrin, O., Oloye, G., & Adesola, B. (2020). Coronavirus pandemic and its implication on global economy. *International Journal of Arts, Languages and Business Studies*, 4(March), 13–23.
- 4. Doshi, D., Karunakar, P., Sukhabogi, J. R., Prasanna, J. S., & Mahajan, S. V. (2020). Assessing coronavirus fear in Indian population using the fear of COVID-19 scale. *International Journal of Mental Health and Addiction*, *19*(6), 2383–2391. https://doi.org/10.1007/s11469-020-00332-x
- Aulia Rahmi, V., Ismanto, H., & Zainuddin Fathoni, M. (2020). Inovatif Saat Pandemi Covid Melalui Pelatihan Kewirausahaan Khas Perempuan Berbahan Sampah 'Kolaborasi BUMDes dan Warga'. *Dinamisia: Jurnal Pengabdian Kepada Masyarakat*, 4(3), 418–425. https://doi. org/10.31849/dinamisia.v4i3.4632
- Kumar, M., & Dwivedi, S. (2020). Impact of coronavirus imposed lockdown on Indian population and their habits. *International Journal of Science and Healthcare Research (IJSHR)*, 5(2), 88–97.
- 7. Omori, R., Mizumoto, K., & Chowell, G. (2020). Changes in testing rates could mask the novel coronavirus disease (COVID-19) growth rate. *International Journal of Infectious Diseases*, 94, 116–118. https://doi.org/10.1016/j.ijid.2020.04.021
- 8. Moriguchi, T., Harii, N., Goto, J., Harada, D., Sugawara, H., Takamino, J., & Shimada, S. (2020). A first case of meningitis/encephalitis associated with SARS-Coronavirus-2. *International Journal of Infectious Diseases*, 94, 55–58. https://doi.org/10.1016/j.ijid.2020.03.062
- Ikhtiyarova, G. A., Dustova, N. K., Khasanova, M. A., Suleymanova, G. S., & Davlatov, S. S. (2020). Pathomorphological changes of the placenta in pregnant women infected with coronavirus COVID-19. *International Journal of Pharmaceutical Research*, 13(01), 1000907. https://doi.org/10.31838/ijpr/2021.13.01.283
- Wang, K., Wong, E. L. Y., Cheung, A. W. L., Yau, P. S. Y., Chung, V. C. H., Wong, C. H. L., & Yeoh, E. K. (2021). Influence of vaccination characteristics on COVID-19 vaccine acceptance among working-age people in Hong Kong, China: A discrete choice experiment. *Frontiers in Public Health*, 9(December). https://doi.org/10.3389/fpubh.2021.793533
- Yang, J., Xie, H., Yu, G., & Liu, M. (2021). Antecedents and consequences of supply chain risk management capabilities: An investigation in the post-coronavirus crisis. *International Journal of Production Research*, 59(5), 1573–1585. https://doi.org/10.1080/00207543.2020. 1856958
- Stojanov, J., Malobabic, M., Stanojevic, G., Stevic, M., Milosevic, V., & Stojanov, A. (2021).
  Quality of sleep and health-related quality of life among health care professionals treating patients with coronavirus disease-19. *International Journal of Social Psychiatry*, 67(2), 175–181. https://doi.org/10.1177/0020764020942800
- Yue, C., Liu, C., Wang, J., Zhang, M., Wu, H., Li, C., & Yang, X. (2021). Association between social support and anxiety among pregnant women in the third trimester during the coronavirus disease 2019 (COVID-19) epidemic in Qingdao, China: The mediating effect of risk perception. *International Journal of Social Psychiatry*, 67(2), 120–127. https://doi.org/ 10.1177/0020764020941567

- Arslan, G., Yıldırım, M., Tanhan, A., Buluş, M., & Allen, K.-A. (2020). Coronavirus stress, optimism-pessimism, psychological inflexibility, and psychological health: Psychometric properties of the coronavirus stress measure. *International Journal of Mental Health and Addiction*, 19(6), 2423–2439. https://doi.org/10.1007/s11469-020-00337-6
- 15. Kojima, N., Roshani, A., Brobeck, M., Baca, A., & Klausner, J. D. (2022). Incidence of SARS-CoV-2 infection among previously infected or vaccinated employees. *International Journal of Infectious Diseases*, 118, 21–23. https://doi.org/10.1016/j.ijid.2022.02.015

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