

# Implementation of Health Protocol in the Election of Regional Head of Surakarta City during the Covid-19 Pandemic

Ida Untari<sup>a,1,\*</sup>, Purwanti<sup>b,2</sup>

<sup>a</sup> DIII Nursing Study Program, ITS PKU Muhammadiyah Surakarta

<sup>b</sup> Office of Population Control and Family Planning (DPPKB) Surakarta City

<sup>1</sup> [idauntari@itspku.ac.id](mailto:idauntari@itspku.ac.id); <sup>2</sup> [purwanti.solo@gmail.com](mailto:purwanti.solo@gmail.com)

\* Corresponding Author

## ABSTRACT

The COVID-19 pandemic that is spreading over the globe has altered the social life. The COVID-19 pandemic has been affecting not only the health sector but also the field of government order. Despite concerns about the spread of COVID-19 through crowds, the government's agenda for holding regional elections remains strict, one of which is the mandatory implementation of health protocols for voters, voting officers, and witnesses from various parties involved. As health protocol monitoring officers at different polling stations, the government collaborated with several health professional organizations, one of which was the Indonesian Public Health Association (IPHA). The results of the health protocol monitoring in the Surakarta City election revealed violations of health protocols at several polling stations where voting officers inappropriately wore masks. It demonstrated the need for increased awareness and assistance in implementing health protocols for several voting officers, as well as an evaluation note for both the City Government and the Surakarta City Health Office, as well as the professional organizations on duty.

## KEYWORDS

Health Protocol;  
Low Awareness;  
Pilkada



This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license

## 1. Introduction

The rapid spread of the COVID-19 pandemic has altered the social order. Changes in life order include human life order with humans and human life order with God. The President of the Republic of Indonesia issued Decree No. 11 of 2020, establishing a COVID-19 public health emergency where the spread of COVID-19 is extraordinary, as evidenced by the number of cases and deaths. The increased and cross-border spread of the disease has an impact on political, economic, social, cultural, defense, and security aspects, as well as welfare. Thus, the government must carry out mitigation efforts according to the provisions of Presidential Decree Number 11 of 2020 concerning the stipulation of health emergencies. Post-covid research is used as a reference for community service to support the program. Bulchand used a smart destination framework for post-COVID-19 island tourism recovery [1]. American Society of Hematology living guidelines on anticoagulants use for thromboprophylaxis in COVID-19 patients is Cuker's post-discharge thromboprophylaxis [2]. Levy modeled ventilator weaning and early rehabilitation units to manage post-ICU disorders following severe COVID-19 [3]. Shepherd presented Wernicke's post-COVID presentation as bilateral vision loss [4]. Woźniak researched bioeconomics during COVID-19 and perspectives for a post-pandemic world [5].

Jacob explained the reasons for investing in maternal, newborn, and child health to build a resilient society after COVID-19 [6]. Greene studied the reduction of COVID-19 hospitalizations among New York City residents following the feasibility of an age-based SARS-CoV-2 vaccine [7]. Research on post-COVID-19 is Kakamad's research on post-covid-19 invasive pulmonary aspergillosis [8] and Narula's post-COVID-19 cardiology practice and training [9]. Arbillaga-Etxarri studied the post-COVID-19 respiratory physiotherapy decision-making algorithm [10]. Iqbal reviewed the characteristics and predictors of acute and chronic post-COVID syndromes in a systematic review and meta-analysis [11]. Karthikeyan conducted a survey-based study to investigate the challenges and impact of the COVID-19 lockdown on Indian optometry practice [12]. Hodder investigated the SARS-CoV-2-specific T-cell response to recurrent COVID-19 pneumonitis in patients with post-CART B-cell aplasia [13]. Lo

Iacono's study found that COVID-19 vulnerability and perceived norm violations predict a loss of social trust [14]. Before and after the COVID-19 pandemic, was there a message for climate change adaptation and mitigation? Jiricka-Pürerer investigated [15].

Lindh examined swallowing function in COVID-19 patients after invasive mechanical ventilation [16]. Roest dissected COVID-19-associated myocarditis after heart transplantation [17]. Picot conducted advocacy for a prospective clinical trial to test the post-exposure potential of hydroxychloroquine against COVID-19 [18]. Vrba studied a case of hybrid transthoracic esophagectomy due to carcinoma with complications after COVID-19 pneumonia [19]. Martins-Filho researched the efficacy and safety of hydroxychloroquine as prophylaxis and treatment before and after COVID-19 exposure [20]. Großhennig reviewed arguments against hasty deviation from plans in COVID-19 [21]. Thomas studied clinical practice recommendations for physiotherapeutic management of COVID-19 in the acute hospital setting and beyond [20]. Cholangiopathy is part of the post-COVID syndrome, written by Rojas in his research [23]. Kumar revealed the impact of COVID-19 on production and sustainable operations management [24]. Guillain-Barre syndrome, studied by Khan, was an autoimmune disorder following COVID-19 vaccination [25]. Teleworking and car use intentions following COVID-19, Olde Kalter examined evidence from large-scale GPS tracking and survey data in the Netherlands [26]. Kemp identified COVID-19 as an opportunity to advance sustainable UK fisheries policy in the bold new world post-Brexit [27]. D. Vergara reviewed post-COVID-19 educational trends in engineering, virtual laboratory [28]. Cavaleri investigated the impact of COVID-19 on EU drug regulation [29]. Rizzo studied COVID-19 exclusion codes to ensure post-recovery care in the proposal area for the Apulia Region government [30].

The simultaneous regional elections in Indonesia are one of the national celebrations, based on the decision of the General Election Commission of the Republic of Indonesia, Number 258/PL.02-Kpt/01/KPU/VI/2020, on the implementation of the election of governor and deputy governor, regent and deputy regent, and or mayor and deputy mayor simultaneously in 2020. Regional and national elections will continue to be held without a regional or national increase in COVID-19. Furthermore, the Surakarta City Pilkada necessitates coordination between the government sector, the Surakarta City Health Office, and professional organizations, one of which is the Surakarta Branch of the Indonesian Public Health Experts Association (IAKMI).

IAKMI became a legal entity on June 18, 2013, based on the Ministry of Law and Human Rights decree No. AHU-113.AH.01.07, year 2013. As a professional organization responsible for preventing infectious diseases in the community, IAKMI aspires to form strategic partnerships with the government to achieve the highest level of health. The participation of the IAKMI Surakarta City Branch in monitoring health protocols during Pilkada national celebration activities is a special trust. It is an opportunity for management and members to contribute through community service. The implementation of health protocol is a must for all participants in the election, including the local committee, officers from the voting committee, witnesses, and election participants. The government's mandate to assign IAKMI members as health protocol monitoring officers in collaboration with the health office is a form of legitimacy for professional organizations. The things to monitor include a). the availability of hand washing stations with running water, soap, or hand sanitizer, b). the availability of hand dryer tissues, c). temperature checks for all involved and present, d). provision of masks, and e). provision of gloves and disinfectant for officers. When everything is available and used as it should be, it indicates that the health protocol is obeyed and that the continued behavior is appropriate. Continuing to use masks properly, maintaining distance, not shaking hands, and frequently using disinfectant from start to finish means complying with the procedure. The community service reports the results of monitoring the behavior of the health protocol to officers involved in polling stations, including voting officers, witnesses, and voting participants.

## 2. Method

In detail, the implementation of health protocol monitoring in the Surakarta City Election is as follows:

- Assignment of IAKMI officers to locations determined by the health office. The officers were placed in one area of the Manahan Health Center, covering the Mangkubumen subdistrict with six polling stations (TPS 11–16) and the Manahan subdistrict with 11 polling stations (TPS 13–23).
- Briefing officers by the head of the Manahan Health Center via Google meeting application with assignment material, assignment regions, monitoring sheet, and progress reports on December 8, 2020. Furthermore, explaining the health monitoring team’s authority, which includes ensuring that the voting process complies with the Health protocol, ensuring body temperature checks by voting officers, ensuring the voting officers and voters wear masks, ensuring voters wash their hands with soap or hand sanitizer before voting, ensuring there is no crowd at the TPS location, seating in the waiting room is at least one meter between seats, reprimanding and coordinating with the local voting officers if there is a health procedure violation, coordinating with the coordinator in the event of a medical emergency requiring evacuation, providing a report to the coordinator.
- Providing officers with personal protective equipment such as KN95 masks, hand sanitizers, face shields, and gloves. Complete monitoring sheet of whether voting officers’ and voters’ compliance with health protocols, medical emergency events, actions, referrals, and conclusions
- Monitoring health protocol at determined polling stations.

### 3. Results and Discussion

A total of 32 officers in charge of monitoring the progress of the voting day on December 10, 2020, were present at the opening ceremony. Purwanti, S.K.M., M.Kes., the Chairperson of the Surakarta Branch of IAKMI Management, opened the ceremony, accompanied by the secretary Ida Untari, S.K.M., M.Kes., as the monitoring team's coordinator. The staff was distributed to the polling station location according to the task division. At each polling station, the assignment time was from 07.00 to 12.00. After the allotted time, all officers collected the results of their observations at each polling station, and a recap was obtained from two sub-districts, as presented in the table.

**Table 1.** Results of Observation of Health Protocols in Manahan Village

Polling station	Health Protocol Monitoring		Voting officer compliance
	In accordance	Not in accordance	
13	+	-	Obey
14	+	-	Obey
15	+	-	Obey
16	+	-	Obey
17	+	-	Obey
18	+	-	Obey
19	+	-	Obey
20	+	-	Less Obedient
21	+	-	Obey
22	+	-	Obey
23	+	-	Obey

Table 1 shows that voting officers are still violating the health protocol. Some documented health protocol violations include officers being caught wearing masks incorrectly (sagging to the chin) and repeatedly being reminded, as shown in Figure 1. It revealed that one out of eleven polling stations or 9% of polling stations in Manahan Village do not comply with health protocols.

**Table 2.** Results of Observation of Health Protocols in Mangkubumen Village

Polling station	Health Protocol Monitoring		Voting officers compliance
	In accordance	Not in accordance	
11	+	-	Obey
12	+	-	Obey
13	+	-	Obey
14	+	-	Obey
15	+	-	Less Obedient
16	+	-	Obey

Table 1 shows that voting officers are still violating the health protocol. Some documented health protocol violations include officers being caught wearing masks incorrectly (sagging to the chin) and repeatedly being reminded, as shown in Figure 1. It revealed that one out of six polling stations or 16% of polling stations in Mangkubumen Village do not comply with health protocols.

The Health Protocol is a behavior that has been established through the Decree of the Minister of Health of the Republic of Indonesia Number: HK.01.07/MENKES/382/2020 concerning Health Protocols for the Community in Public Places and Facilities for the Prevention and Control of COVID-19. This regulation stipulates that the health protocol becomes a reference for ministries or agencies, both provincial and district or city governments, and the community, including associations, managers, owners, workers, and visitors in public facilities and other components in establishing policies, fostering business activities, conducting business activities to prevent new epicenters/clusters during the COVID-19 pandemic.

The general health protocol must contain: 1) Individual health protection, which includes washing hands with soap and running water or using a hand sanitizer, maintaining a minimum distance of one meter, increasing body resistance by implementing clean and healthy behavior such as consuming balanced nutrition, physical activity, at least 30 minutes a day and adequate rest (minimum seven hours), and avoiding risk factors for people who have comorbid diseases or vulnerable conditions such as diabetes, hypertension, lung disorders, heart problems, kidney disorders, immunocompromised states, pregnant, elderly people, children, and others. They must be more careful in their activities in public places and facilities. 2) Public health protection is an effort that must be obeyed by all components of society to prevent and control the spread of COVID-19.

The potential for transmission of COVID-19 in public places and facilities is caused by movement, crowds, or interaction of people that can cause physical contact. In protecting public health, the role of managers, organizers, or those in charge of public places and facilities is critical to carry out the following: a) The element of prevention includes health promotion activities carried out through outreach, counseling, and the use of various information media to provide information, as well as examples from figures, community leaders, and through the mainstream media. Other activities include protection through the provision of reachable hand washing facilities, provision of hand sanitizers, efforts to screen people who will enter public places and facilities, maintain social distance, periodically, disinfect surfaces, rooms and equipment, and discipline behavior of people who are at risk of transmitting and contracting COVID-19 such as crowding, not wearing masks, smoking in public places and facilities and so on, b) Elements of case finding (detection) include facilitating early detection to anticipate the spread of COVID-19 in coordination with the health office or local health service facilities, monitor health conditions (symptoms of fever, cough, runny nose, sore throat, and shortness of breath) for everyone in public places and facilities, c) Elements of comprehensive treatment quickly and effectively by taking care of oneself to prevent wider spread between others, coordinate with the department local health or health care facilities to carry out close contact tracing, rapid tests or Real Time Polymerase Chain Reaction (RT-PCR), as well as other treatments as needed. Handling sick or deceased people in public places and facilities refers to the applicable standards according to the provisions of the laws and regulations.



**Fig. 1.** Documentation of health protocol Monitoring Officer at Manahan Village polling station



**Fig. 2.** Documentation of health protocol Monitoring Officer at Mangkubumen Village polling station

In addition, a study in New York showed an estimate of the effectiveness of universal mask use to reduce the overall transmission of Covid-19 by 7% and an even higher reduction of up to 20% in people aged 65+ during the first month of the implementation of the mask-wearing order in the United States. The study shows that face coverings can substantially reduce the transmission of Covid-19, although other preventive measures are still needed. Learning from past influenza outbreaks, a modeling study to look at the effectiveness of mask use showed that mask-wearing adherence resulted in a significant risk reduction (at least 50% prevalence and 20% cumulative incidence) for N95 masks, high-filtration surgical masks, and pediatric masks with both high filtration and low filtration. Face masks, especially surgical masks, are also recommended as an effective intervention strategy in reducing the spread of pandemic influenza (H1N1). Recent research has also shown that the effectiveness of masks worn mass/universally is comparable to the implementation of other health protocols, such as maintaining distance in closed spaces such as workplaces, schools, and other public spaces. Therefore, monitoring health protocols, including mask-wearing compliance, is necessary.

#### 4. Conclusion

The implementation of the 2020 Surakarta city election has been carried out by professional members of the IAKMI (Indonesian Association of Public Health Experts) and have made several notes: All polling stations monitored implemented health protocols according to applicable regulations, but a minor health protocol violation occurred. In practice, it was discovered that voting officers did not wear masks properly. It is a special note for the regional governments' evaluation and Surakarta City Health Office.

### Acknowledgment

Thank you especially to all the health protocol monitoring teams who have carried out their duties carrying the flag of the professional organization of the Indonesian Public Health Experts Association (IAKMI) Surakarta City Branch, coordinator of the monitoring team and chairman of IAKMI Surakarta City Branch, Research and Community Service Institute ITS PKU Muhammadiyah Surakarta, Dean of FIK and Head of the Undergraduate Public Health Study Program, Faculty of Health Sciences, University of Muhammadiyah Surakarta and Head of the Covid-19 Task Force, University of Muhammadiyah Surakarta.

### Author Contribution

This is a moment of contribution to carry out community service for both management and members. The implementation of health protocol behavior is a fixed price that must be carried out by all involved in the Pilkada.

### Funding

Thank you especially to all the health protocol monitoring teams who have carried out their duties carrying the flag of the professional organization of the Indonesian Public Health Experts Association (IAKMI) Surakarta City Branch, coordinator of the monitoring team and chairman of IAKMI Surakarta City Branch, Research and Community Service Institute ITS PKU Muhammadiyah Surakarta, Dean of FIK and Head of the Undergraduate Public Health Study Program, Faculty of Health Sciences, University of Muhammadiyah Surakarta and Head of the Covid-19 Task Force, University of Muhammadiyah Surakarta.

### Conflict of Interest

The authors declare no conflict of interest.

### References

- [1] J. Bulchand-Gidumal, "Post-COVID-19 recovery of island tourism using a smart tourism destination framework," *J. Destin. Mark. Manag.*, vol. 23, p. 100689, Mar. 2022.
- [2] A. Cuker et al., "American Society of Hematology living guidelines on the use of anticoagulation for thromboprophylaxis in patients with COVID-19: July 2021 update on post-discharge thromboprophylaxis," *Blood Adv.*, Nov. 2021.
- [3] J. Levy et al., "A model for a ventilator-weaning and early rehabilitation unit to deal with post-ICU impairments following severe COVID-19," *Ann. Phys. Rehabil. Med.*, vol. 63, no. 4, pp. 376–378, Jul. 2020.
- [4] E. Shepherd, D. Smyth, A. Sterenstein, A. Dorsch, and T. Mizen, "Post-COVID Wernicke's presenting as bilateral vision loss," *Am. J. Ophthalmol. Case Reports*, p. 101271, Jan. 2022.
- [5] E. Woźniak and A. Tyczewska, "Bioeconomy during the COVID-19 and perspectives for the post-pandemic world: Example from EU," *EFB Bioeconomy J.*, vol. 1, no. March, p. 100013, Nov. 2021.
- [6] C. M. Jacob et al., "Building resilient societies after COVID-19: the case for investing in maternal, neonatal, and child health," *Lancet Public Heal.*, vol. 5, no. 11, pp. e624–e627, Nov. 2020.
- [7] S. K. Greene et al., "Reduced COVID-19 hospitalizations among New York City residents following age-based SARS-CoV-2 vaccine eligibility: Evidence from a regression discontinuity design," *Vaccine X*, vol. 10, p. 100134, Apr. 2022.
- [8] F. H. Kakamad et al., "Post covid-19 invasive pulmonary Aspergillosis: A case report," *Int. J. Surg. Case Rep.*, vol. 82, p. 105865, May 2021.
- [9] N. Narula and H. S. Singh, "Cardiology Practice and Training Post-COVID-19," *J. Am. Coll. Cardiol.*, vol. 76, no. 4, pp. 476–479, Jul. 2020.
- [10] A. Arbillaga-Etxarri et al., "Fisioterapia respiratoria post-COVID-19: algoritmo de decisión terapéutica," *Open Respir. Arch.*, vol. 4, no. 1, p. 100139, Jan. 2022.

- [11] F. M. Iqbal, K. Lam, V. Sounderajah, J. M. Clarke, H. Ashrafian, and A. Darzi, "Characteristics and predictors of acute and chronic post-COVID syndrome: A systematic review and meta-analysis," *EClinicalMedicine*, vol. 36, p. 100899, Jun. 2021.
- [12] S. K Karthikeyan, P. Nandagopal, V. S. R, and A. Nayak, "Challenges and impact of COVID-19 lockdown on Indian optometry practice: A survey-based study," *J. Optom.*, no. xxxx, Dec. 2020.
- [13] A. Hodder et al., "SARS-CoV-2-specific T-cell responses to recurrent COVID-19 pneumonitis in a patient with post-CART B cell aplasia," *Blood Adv.*, Jan. 2022.
- [14] S. Lo Iacono, W. Przepiorka, V. Buskens, R. Corten, and A. van de Rijt, "COVID-19 vulnerability and perceived norm violations predict loss of social trust: A pre-post study," *Soc. Sci. Med.*, vol. 291, no. October, p. 114513, Dec. 2021.
- [15] A. Jiricka-Pürner, C. Brandenburg, and U. Pröbstl-Haider, "City tourism pre- and post-covid-19 pandemic – Messages to take home for climate change adaptation and mitigation?," *J. Outdoor Recreat. Tour.*, vol. 31, p. 100329, Sep. 2020.
- [16] M. G. Lindh, G. Mattsson, H. Koyi, M. B. Johansson, R. Razmi, and A. Palm, "Swallowing function in COVID-19 patients after invasive mechanical ventilation," *Arch. Rehabil. Res. Clin. Transl.*, p. 100177, Jan. 2022.
- [17] S. Roest et al., "COVID-19-related myocarditis post-heart transplantation," *Int. J. Infect. Dis.*, vol. 107, pp. 34–36, Jun. 2021.
- [18] S. Picot et al., "Coalition: Advocacy for prospective clinical trials to test the post-exposure potential of hydroxychloroquine against COVID-19," *One Heal.*, vol. 9, no. April, p. 100131, Jun. 2020.
- [19] R. Vrba, L. Lubuska, and P. Spicka, "Hybrid transthoracic oesophagectomy due to carcinoma with complications after COVID-19 pneumonia – A case report," *Int. J. Surg. Case Rep.*, vol. 90, no. November 2021, p. 106749, Jan. 2022.
- [20] P. R. Martins-Filho, L. C. Ferreira, L. Heimfarth, A. A. de S. Araújo, and L. J. Quintans-Júnior, "Efficacy and safety of hydroxychloroquine as pre-and post-exposure prophylaxis and treatment of COVID-19: A systematic review and meta-analysis of blinded, placebo-controlled, randomized clinical trials.," *Lancet Reg. Heal. - Am.*, vol. 2, p. 100062, Oct. 2021.
- [21] A. Großhennig and A. Koch, "COVID-19 hits a trial: Arguments against hastily deviating from the plan," *Contemp. Clin. Trials*, vol. 98, no. September, p. 106155, Nov. 2020.
- [22] P. Thomas et al., "Physiotherapy management for COVID-19 in the acute hospital setting and beyond: an update to clinical practice recommendations," *J. Physiother.*, vol. 68, no. 1, pp. 8–25, Jan. 2022.
- [23] M. Rojas, Y. Rodríguez, E. Zapata, J. C. Hernández, and J.-M. Anaya, "Cholangiopathy as part of post-COVID syndrome," *J. Transl. Autoimmun.*, vol. 4, p. 100116, 2021.
- [24] A. Kumar, S. Luthra, S. K. Mangla, and Y. Kazançoğlu, "COVID-19 impact on sustainable production and operations management," *Sustain. Oper. Comput.*, vol. 1, no. June, pp. 1–7, 2020.
- [25] Z. Khan et al., "Guillain-Barre syndrome: An autoimmune disorder post-COVID-19 vaccination?," *Clin. Immunol. Commun.*, vol. 2, no. November 2021, pp. 1–5, Dec. 2022.
- [26] M.-J. Olde Kalter, K. T. Geurs, and L. Wismans, "Post COVID-19 teleworking and car use intentions. Evidence from large scale GPS-tracking and survey data in the Netherlands," *Transp. Res. Interdiscip. Perspect.*, vol. 12, p. 100498, Dec. 2021.
- [27] P. S. Kemp, R. Froese, and D. Pauly, "COVID-19 provides an opportunity to advance a sustainable UK fisheries policy in a post-Brexit brave new world," *Mar. Policy*, vol. 120, p. 104114, Oct. 2020.
- [28] D. Vergara, P. Fernández-Arias, J. Extremera, L. P. Dávila, and M. P. Rubio, "Educational trends post COVID-19 in engineering: Virtual laboratories," *Mater. Today Proc.*, vol. 49, pp. 155–160, 2022.
- [29] M. Cavaleri, F. Sweeney, R. Gonzalez-Quevedo, and M. Carr, "Shaping EU medicines regulation in the post COVID-19 era," *Lancet Reg. Heal. - Eur.*, vol. 9, p. 100192, Oct. 2021.
- [30] E. Rizzo, S. Carlà, and S. Ruggeri, "A COVID-19 exemption code to ensure post-recovery care: From the territory a proposal for the Apulia Region government," *EClinicalMedicine*, vol. 26, p. 100516, Sep. 2020.