



Published by
Department of Public Health and Preventive
Medicine, Faculty of Medicine,
Udayana University

COVID-19 Pandemic: an opportunity to enhance tobacco control in Indonesia

Putu Ayu Swandewi Astuti^{1,2*}

¹Department of Public Health and Preventive Medicine,
Faculty of Medicine, Udayana University

²Udayana Center for NCDs, Tobacco Control and Lung Health,
Udayana University

*correspondence: ayu.swandewi@unud.ac.id

The world has been facing the ongoing COVID-19 pandemic for two years. In Indonesia, up to 26 December 2021, more than 4.2 million confirmed cases and over 144 thousand deaths were reported.¹ In the period before the COVID-19 pandemic, Indonesia has been experiencing epidemiological transition with the reduction of communicable disease rate, on contrary the continue rising of non-communicable diseases (NCDs) prevalence.² One major predictor of NCDs is smoking, and Indonesia has the highest male smoking rate in the world at 62.9%,³ the adult smoker accounted for 65.2 million peoples.⁴

The COVID-19 which is caused by SARS-CoV-2 virus attacks the human body through respiratory tract which causes mild to severe respiratory problems. Studies showed the severity and fatality of COVID-19 infection increased when the person is smoking.⁵⁻⁷ The plausibility of the association varied from direct to indirect association. Smokers have an upregulation of Angiotensin Converting Enzyme-2 (ACE-2) receptors, and this receptor is the point of entry of the SARS-CoV-2.⁸ Besides, NCDs such as heart disease, chronic respiratory problem and diabetes, are major comorbid diseases which increase severity and fatality of COVID-19 infection;⁹ hence, we can see the intertwined connection of these three pandemics, NCDs, smoking, and COVID-19, signifying the need of

concerted efforts.

The NCDs control has become one of the government priorities, marked with instruction from the Indonesian president on Healthy Community Movement (*Gerakan Masyarakat Sehat/GERMAS*) that include several recommendations for people to be aware and to avoid unhealthy habits such as smoking, and to monitor their risk factors.¹⁰ This is also align with program provided by health services such as the implementation of NCDs risk factor monitoring program through Integrated Constructive Post (*Posbindu*), although these campaign and services need escalation. On the other hand, tobacco control in Indonesia is very lenient compared to other countries, both regionally and internationally.

The evaluation of the MPOWER^{11*} measures outlined on the World Health Organization- Framework Convention on Tobacco Control (FCTC) for Indonesia showed poor coverage of adequate tobacco control measures.¹² Besides, Indonesia is the only country in the Asia Pacific yet to ratify the convention, signifying low commitment of the government to control tobacco use. On the other side, tobacco industry is very well entrenched and has strong influence on the policy and public.¹³

The current national policy for tobacco control is the Government Regulation No. 109 Year 2012 (PP 109/2012) that regulates several aspects of tobacco control including limitation on tobacco

advertising, promotion and sponsorships (TAPS), adoption of smoke free law, adoption of 40% pictorial health warning (PHW) on cigarette packs.¹⁴ However, the above measures are very partial which provide inadequate effects to curb the huge tobacco use problems in Indonesia and to minimise the massive tobacco marketing in Indonesia.^{15,16} This is reflected on the rising smoking rate among young people age 10-18 years from 7.2% in 2013 to 9.1% in 2018.³

Looking at the connection between smoking, NCDs and COVID-19, it is essential to integrate measures to address these problems synergically and to strengthen tobacco control to curb these issues. Based on the MPOWER strategies, there are several potential enhancement and integration of tobacco control and COVID-19 mitigation. Firstly, monitoring tobaccoshouldbecontinuedtomeasure the changing of smoking behaviour during the pandemic and inclusion of smoking status on the surveillance of COVID-19 will provide essential information on the prediction of higher risk of individuals to experience severe condition. Secondly, implementation of smoke free laws to protect from second-hand smokes exposure should be enhanced in this pandemic situation and the monitoring of this implementation can be integrated to the monitoring of COVID-19 health protocols implementation. Meanwhile, working from home and school from home

*MPOWER is a compilation of evidence-based tobacco control policy; M=monitoring tobacco use, P=Protecting people from tobacco use, O=offer help to quit, W=warn about the danger of tobacco, E=enforced ban on tobacco advertising, promotion and sponsorships (TAPS), R=Raise Tax.

policy is adopted during this pandemic, campaign to create smoke free home becomes crucial to reduce the potency of increased second-hand smokes exposures among children of whom family members are smoking.

This pandemic of respiratory disease is also crucial time to increase smoking cessation service for reducing risk of severe COVID-19 infection and for economic reason. During this pandemic, socioeconomic impacts are high especially among low-income families, while smoking is the highest among these groups.¹⁷ Provision and improvement of smoking cessation services should be conducted. Although it can be argued that it may be challenging to enhance the services due to alteration of resources to COVID-19 response, an online cessation supports can be the option.¹⁸ Similarly, awareness campaign for the danger of smoking and its association with NCDs and COVID-19 must be amplified during this pandemic. It can be integrated to COVID-19 awareness campaigns and all avenue both conventional and online should be embraced.¹⁹ It is also important to counter the misleading information spread by tobacco companies regarding smoking and COVID-19 pandemic.

Tobacco companies will continue to market their products in these challenging times, while also providing different range of supports in the form of so called corporate social responsibility. It may be a huge dilemma for the governments, on one hand the need for support to curb the pandemic and on the other hands the conflict interest of tobacco industry which is not align to public health. Whilst in Indonesia, no strong policy in place for this type of support and collaboration with tobacco industry may be making it harder to be stringent to prevent these tobacco companies' strategies. However, it is still important that the governments should try their best to implement stronger tobacco advertising, promotion, and sponsorship (TAPS) ban and to prevent any collaboration with tobacco companies.

The last strategy of the MPOWER is raising tax. Many suggested that tax increase in this situation will provide double benefit for a country, one is to reduce the use of tobacco products and

to gain additional budget for the recovery from the pandemic.^{20,21} The Indonesian government has just announced cigarette tax increase of 12% in mid-December 2021; although it can be argued yet to be optimal but it is a positive move from the government. Beside those strategies, several countries ban or temporarily ban the sale of tobacco products during the pandemic which have shown positive impact on reduction of tobacco use.²² The sales restriction measures could be considered in this situation and also for the long run for instance by regulating the sales around schools, the sales toward young people and selling single sticks.

Indonesia has been suffering huge burden from tobacco use with more than two million morbidities and US 45.9 billion macro-economic lost due to tobacco use in 2015.²³ With the comorbidity of smoking and COVID-19 pandemic, this is the crucial time for the Indonesia government to improve coordinate responses between ministries and the community on tobacco control and COVID-19 recovery.

CONFLICT OF INTEREST:

None declared

REFERENCES

- Government of Indonesia. COVID-19 Dashboard Indonesia: Government of Indonesia. [Available from: <https://covid19.go.id/>; accessed 27 December 2021].
- Mboi N, Surbakti IM, Trihandini I, et al. On the road to universal health care in Indonesia, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2018;392:581–91. doi: [http://dx.doi.org/10.1016/S0140-6736\(18\)30595-6](http://dx.doi.org/10.1016/S0140-6736(18)30595-6) [published Online First: 28 June 2018]
- Ministry of Health Republic of Indonesia. National Report of Basic Health Survey 2018. In: Research and Development Unit, ed. Jakarta: Research and Development Unit, Ministry of Health Republic of Indonesia, 2018.
- Tan YL, Dorotheo U. The Tobacco Control Atlas: ASEAN Region, Fourth Edition. Bangkok, Thailand: Southeast Asia Tobacco Control Alliance (SEATCA) 2018.
- Vardavas CI, Nikitara K. COVID-19 and smoking: A systematic review of the evidence. *Tobacco induced diseases* 2020;18:20. doi: [10.18332/tid/119324](https://doi.org/10.18332/tid/119324) [published Online First: 2020/03/25]
- Simons D, Shahab L, Brown J, et al. The association of smoking status with SARS-CoV-2 infection, hospitalization and mortality from COVID-19: a living rapid evidence review with Bayesian meta-analyses (version 7). *Addiction* (Abingdon, England) 2021;116(6):1319–68. doi: [10.1111/add.15276](https://doi.org/10.1111/add.15276)
- Patanavanich R, Glantz SA. Smoking Is Associated With COVID-19 Progression: A Meta-analysis. *Nicotine Tob Res* 2020;22(9):1653–56. doi: [10.1093/ntr/ntaa082](https://doi.org/10.1093/ntr/ntaa082)
- Leung JM, Yang CX, Tam A, et al. ACE-2 Expression in the Small Airway Epithelia of Smokers and COPD Patients: Implications for COVID-19. *European Respiratory Journal* 2020;2000688. doi: [10.1183/13993003.00688-2020](https://doi.org/10.1183/13993003.00688-2020)
- Bajgain KT, Badal S, Bajgain BB, et al. Prevalence of comorbidities among individuals with COVID-19: A rapid review of current literature. *American Journal of Infection Control* 2020 doi: <https://doi.org/10.1016/j.ajic.2020.06.213>
- President of Republic of Indonesia. President Instruction Number 1 Year 2017 regarding Healthy Community Movement Jakarta, 2017.
- World Health Organization. Tobacco Free Initiative (TFI): MPOWER. [Available from: <https://www.who.int/tobacco/mpower/en/>; accessed 15 April 2019].
- World Health Organization-South East Asia. Evaluation of tobacco control policies and programmes including implementation of the WHO MPOWER technical package in SEAR Member States: WHO-SEARO 2018.
- Astuti PAS, Assunta M, Freeman B. Why is tobacco control progress in Indonesia stalled? - a qualitative analysis of interviews with tobacco control experts. *BMC Public Health* 2020;20(1):527. doi: [10.1186/s12889-020-08640-6](https://doi.org/10.1186/s12889-020-08640-6)
- Government of Indonesia. Government Regulation of Republic of Indonesia No 109 Year 2012 regarding Controlling Substance Containing Adictive Substance in the form of Tobacco Product for Health. . Jakarta: Government of Indonesia, 2012.
- Astuti PAS, Freeman B. "It is merely a paper tiger." Battle for increased tobacco advertising regulation in Indonesia: content analysis of news articles. *BMJ Open* 2017;7(9) doi: [10.1136/bmjopen-2017-016975](https://doi.org/10.1136/bmjopen-2017-016975)
- Astuti PAS, Assunta M, Freeman B. Raising generation 'A': a case study of millennial tobacco company marketing in Indonesia. *Tobacco Control* 2018;27(e1):e41. doi: [10.1136/tobaccocontrol-2017-054131](https://doi.org/10.1136/tobaccocontrol-2017-054131)
- Amalia B, Cadogan SL, Prabandari YS, et al. Socio-demographic inequalities in cigarette smoking in Indonesia, 2007 to 2014. *Preventive Medicine* 2019;123:27–33. doi: <https://doi.org/10.1016/j.ypmed.2019.02.025>
- Clanc L. Tobacco, Tobacco Control and COVID-19: Understanding Their Associations. *Arch Bronconeumol* 2021 doi: [10.1016/j.arbres.2021.07.004](https://doi.org/10.1016/j.arbres.2021.07.004)
- Kabwama SN, Nyamurungi KN, Davidson F, et al. Tobacco control in the context of the COVID-19 pandemic in Uganda: a policy implementation review. *J Glob Health Res* 2020;4:e2020095-e95. doi: [10.29392/001c.17607](https://doi.org/10.29392/001c.17607)
- The World Bank. Indonesia Economic Prospects: Boosting the Recovery. June 2021 ed: The World Bank, 2021.

21. World Health Organization-Europe. Tobacco taxation – a win for public health, a win for revenue and a win for the economy overall 2021. [Available from: <https://www.euro.who.int/en/health-topics/disease-prevention/tobacco/news/news/2021/7/tobacco-taxation-a-win-for-public-health,-a-win-for-revenue-and-a-win-for-the-economy-overall>]; accessed 25 December 2021].
22. Saloojee Y, Mathee A. COVID-19 and a temporary ban on tobacco sales in South Africa: impact on smoking cessation. *Tobacco Control* 2021;tobaccocontrol-2020-056293. doi: 10.1136/tobaccocontrol-2020-056293
23. Kosen S, Thabrany H, Kusumawardani N, et al. Health and Economic Costs of Tobacco in Indonesia : Review of Evidence Series. Jakarta: Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan (LPB) 2017.



This work is licensed under a Creative Commons Attribution