

COVID-19 Special Column: The Crisis of Non-Communicable Diseases in the Pacific and the Coronavirus Disease 2019 Pandemic

Si Thu Win Tin PhD; Paula Vivili MPH; Elisiva Na'ati MDiet; Solene Bertrand MES; and Iisapeci Kubuabola MAppEpi

Insights in Public Health is a monthly solicited column from the public health community and is coordinated by HJH&SW Contributing Editor Tetine L. Sentell PhD from the Office of Public Health Studies at the University of Hawai'i at Mānoa and Contributing Editor Michele N. Nakata JD from the Hawai'i Department of Health.

Abstract

Globally, coronavirus disease 2019 (COVID-19) is threatening human health and changing the way people live. With the increasing evidence showing comorbidities of COVID-19 and non-communicable diseases (NCDs), the Pacific region, where approximately 75% of deaths are due to NCDs, is significantly vulnerable during this crisis unless urgent action is taken. Whilst enforcing the critical mitigation measures of the COVID-19 pandemic in the Pacific, it is also paramount to incorporate and strengthen NCD prevention and control measures to safeguard people with NCDs and the general population; keep people healthy and minimise the impact of COVID-19. To sustain wellbeing of health, social relationships, and the economy in the Pacific, it is a critical time for all governments, development partners and civil societies to show regional solidarity in the fight against emerging COVID-19 health crisis and existing Pacific NCDs crisis through a whole of government and whole of society approach.

Keywords

coronavirus disease 2019, non-communicable diseases, health crisis, Pacific

Introduction

Emerging diseases such as coronavirus disease 2019 (COVID-19) are threatening human health and global stability, forcing countries to make difficult decisions, and changing the way people live, work, and interact. Given the evolving situation of COVID-19, new information and recommendations to prevent and control the transmission of COVID-19 have been constantly issued by various scientific institutions. Amid the developing evidence, it is becoming increasingly clear that older adults, and people with pre-existing non-communicable diseases (NCDs) such as diabetes, heart diseases, hypertension, chronic lungs diseases and cancers, are more susceptible to becoming severely ill or dying from the virus.^{1,2} COVID-19 does not discriminate and is affecting both rich and poor, with vulnerable groups likely to suffer the most. Of particular concern are the people in the small Pacific island nations where NCDs have already posed heavy burden to all, and a challenge to achieving the United Nations Sustainable Development Goals.³

Existing Pacific NCDs Crisis and Emerging COVID-19 Pandemic

The Pacific region has been called the NCDs capital of the world, given that NCDs are the leading cause of death in the region, accounting for approximately 75% of mortalities.⁴ Pacific Island countries and territories (PICTs) are among the top 10 countries with the highest rates of diabetes in the world. Approximately one third of the adult population aged 20-79 years in the Federated States of Micronesia, Marshall Islands, Tokelau, and Kiribati have diabetes.⁵ The prevalence of NCD risk factors such as smoking, alcohol abuse, unhealthy diet and physical inactivity are also high. For example, approximately half of the adult population smoke daily in American Samoa, Federated States of Micronesia, Kiribati, Tokelau, and Nauru.⁶ These high prevalence of NCDs and associated risk factors have resulted in disability, premature deaths, and loss of productivity, and are creating a “health, social, and economic crisis” across the Pacific.⁷

With the increasing evidence showing comorbidities of COVID-19 and NCDs, the Pacific represents a region that is significantly vulnerable to this health crisis. The most prevalence comorbidities were hypertension and diabetes, followed by cardiovascular diseases and respiratory system diseases.⁸ A recent study of patients in China showed that smokers comprised more than 25% of the COVID-19 patients who were admitted to intensive care unit, needed mechanical ventilation, or died.⁹ These NCD comorbidities may intensify COVID-19 crisis and will significantly impact health, economic, and social development across the Pacific unless urgent action is taken.

Addressing COVID-19 and NCDs Concurrently

To prepare for and response to the COVID-19 outbreak, several recommended population-based measures have been undertaken to minimize the spread in most PICTs. Examples of these mea-

asures include quarantine or isolation, contact tracing, closure of non-essential businesses, locking down affected areas or cities, promoting hand washing and respiratory hygiene, and social or physical distancing.

Some measures taken to fight COVID-19 are likely to increase the risk of NCDs¹⁰ in the long term. For example, trade and movement restrictions within and between countries has reduced availability and accessibility to healthier foods, and increased reliance on unhealthy processed foods. In addition, there is potential for individuals becoming less physically active as a result of curfews and restricted movement; abuse of tobacco and alcohol while being isolated at home; and increase in domestic violence compounded by further isolation due to quarantine, social disengagement and unemployment. All these impact individuals' mental well-being and overall risks of NCDs.

Hence, while enforcing these urgent critical mitigation measures during the COVID-19 pandemic, it is important to incorporate or strengthen NCD prevention and control measures to safeguard people with NCDs. This will help to keep them healthy and minimise the impact of COVID-19.^{11,12} These include, but are not limited to, measures that promote access to and consumption of a well-balanced diet and nutritious healthy foods including fruits and vegetables where possible; discourage use or consumption of unhealthy products such as tobacco, alcohol and betel nuts; facilitate access to essential health care services for people with NCDs; promote physical activity and mental wellness to help alleviate the psychological impact of the pandemic; and enhance information sharing and awareness to practice preventive measures for this fast-moving global health emergencies of COVID-19 and NCDs.

With mounting evidence that NCDs increase the risk of dying from the COVID-19 and other viral infections such as seasonal influenza,¹³ it is of the utmost importance for the Pacific to intensify a multi-sectoral response to NCDs to minimize the impact of COVID-19 and to prepare for similar potential emerging health crisis or re-emerging diseases in the future. This is a crucial time to strengthen national action on Pacific leaders' commitment for the implementation of the Pacific NCD Roadmap recommendations¹ that are in line with NCDs best-buy interventions² and addressing the NCD-related policy and legislation gaps identified in the Pacific Monitoring Alliance for NCD Action (MANA) Dashboard report.³ These regional recommendations include strengthening fiscal policies to discourage use of unhealthy products such as tobacco, alcohol and sugar-sweetened beverages and promote healthier food options; polices and legislation that address NCD risk factors such as tobacco, alcohol, unhealthy foods and drinks, and physical inactivity; and programs that promote primary and secondary prevention of NCDs. Addressing NCDs and COVID-19 concurrently will help shape, improve, and sustain physical, mental and social wellbeing in long term and contribute to achieving healthy island vision.⁴

Conclusion

Health has been increasingly regarded as a fundamental human right and the backbone of sustainable societies and economies. To sustain wellbeing of health, social relationships, and the economy in the Pacific, it is a critical time for all governments, development partners, and civil societies across the Pacific to show regional solidarity in the fight against the emerging COVID-19 pandemic, reemerging diseases such as measles, and existing Pacific crises such as NCDs and climate change in a whole of government and whole of society approach.

Authors' Affiliations:

- Public Health Division, Pacific Community (SPC), Suva, Fiji (STWT, EN, IK)
- The University of Sydney, Sydney, Australia (STWT)
- Public Health Division, Pacific Community (SPC), Noumea, New Caledonia (PV, SB)

1. World Health Organization. China mission report Feb 2020. <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>. Accessed April 4, 2020.
2. Centers for Diseases Control and Prevention. Coronavirus Diseases 2019. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>. Accessed April 4, 2020.
3. United Nations. Sustainable Development Goals. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>. Accessed April 5, 2020.
4. World Health Organization. Noncommunicable diseases country profiles 2011. <http://www.who.int/nmh/countries/2011/en/>. Accessed April 5, 2020.
5. International Diabetes Federation. IDF Diabetes Atlas 7th Edition. <http://www.idf.org/idf-diabetes-atlas-seventh-edition> Accessed April 5, 2020.
6. World Health Organization. PICT NCD Risk Factor STEPS reports.: <http://www.who.int/chp/steps/reports/en/>. Accessed April 5, 2020.
7. Honiara Communiqué on the Pacific Noncommunicable Disease Crisis. 9th Meeting of Ministers of Health for the Pacific Island Countries, 2011.
8. Yang J, Zheng Y, Gou X, et al. Prevalence of comorbidities in the novel Wuhan coronavirus (COVID-19) infection: a systematic review and meta-analysis. *Int J Infect Dis.* March 12, 2020; S1201-9712(20)30136-3. DOI: 10.1016/j.ijid.2020.03.017.
9. Guan W-jie, Ni Z-yi, Hu Y, et al. Clinical characteristics of coronavirus disease 2019 in China. *N Engl J Med Overseas Ed.* February 9, 2020; DOI: 10.1101/2020.02.06.20020974.
10. World Obesity, obesity and covid-19 policy statement 2020. <https://www.worldobesity.org/news/obesity-and-covid-19-policy-statement>. Accessed April 4, 2020.
11. Healthy Caribbean Coalition open letter to CARICOM heads of state and government about NCDs and COVID-19, March 2020. Available from: <https://www.healthycaribbean.org/hcc-open-letter-to-caricom-heads-of-state-and-government-about-ncds-and-covid-19/>. Accessed April 4, 2020.
12. NCD Alliance. NCD Alliance response to COVID-19, March 2020. <https://ncdalliance.org/news-events/news/ncd-alliance-response-to-covid-19>. Accessed April 5, 2020.
13. Hong K-W, Cheong HJ, Choi WS, et al. Clinical courses and outcomes of hospitalized adult patients with seasonal influenza in Korea, 2011-2012: Hospital-based Influenza Morbidity & Mortality surveillance. *J Infect Chemother.* 2014;20:9-14.
14. World Bank. Non-Communicable Disease (NCD) Roadmap Report 2014. Washington. <http://documents.worldbank.org/curated/en/534551468332387599/pdf/893050WP0P13040PUBLIC00NCD0Roadmap.pdf>. Accessed April 8, 2020.
15. World Health Organization. Best buys and other recommended interventions for the prevention and control of NCDs 2017. https://www.who.int/ncds/management/WHO_Appendix_BestBuys.pdf. Accessed April 8, 2020.
16. The Pacific Monitoring Alliance for NCD Action (MANA). Status of non-communicable diseases policy and legislation in Pacific Island countries and territories, 2018. New Caledonia: Pacific Community (SPC); 2019.
17. World Health Organization. Healthy Island Vision: Yanuca declaration on health in Pacific Islands Countries and Territories 2015, 11th Pacific Ministers for Health Meeting 2015.