Commentary

Road to trans-fat free Philippines: An emerging milestone amidst COVID-19 pandemic

Carl Joseph N. Ablao\textsuperscript{a,b,c}, Rosario S. Sagum\textsuperscript{b}, Anna Katrina M. Maddela\textsuperscript{b,c}, Joshua Macapagal\textsuperscript{d}

\textsuperscript{a} Institute of Education, Far Eastern University, Manila, Philippines
\textsuperscript{b} The Graduate School, University of Santo Tomas, Manila, Philippines
\textsuperscript{c} Philippine General Hospital, University of the Philippines, Manila, Philippines
\textsuperscript{d} School of Dentistry, Centro Escolar University, Manila, Philippines

Since the year 2000, non-communicable diseases specifically, cardiovascular diseases (CVDs), have remained to be the leading cause of mortality rate in the world \cite{1}. In the Philippines, diseases of the heart are also the major cause of death. Current epidemiological studies have reported that hypertension, cardiovascular and cerebrovascular disease are major risk factors that could increase the severity of patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) \cite{2}. Additionally, there is a strong positive correlation between the intake of industrially produced trans fatty acids and coronary heart disease as a driving factor for morbidity and mortality \cite{3}.

With the advent of the SARS-CoV-2, patients with non-communicable diseases (NCDs) have exacerbated unfavorable outcomes. The relationship between SARS-CoV-2 and Trans Fatty Acid (TFA) is the increased risk factors and worse effects of developing cardiovascular diseases. TFA is linked with an increased risk of cardiovascular diseases. NCDs share risk factors by triggering the severity of SARS-CoV-2. Addressing TFA elimination in the food systems will lessen the possible complications of SARS-CoV-2 and NCDs particularly, cardiovascular diseases.

The Asia Pacific regions or ASEAN neighboring countries particularly, Thailand is the first ASEAN country who successfully eliminated the industrial TFA in their food supply by disallowing the production and importation of partially hydrogenated oils and its products \cite{4}. However, in the Philippines, there is no existing law pertaining to the regulation of trans fats in the country. Studies related to trans-fat consumption in the Philippines are also lacking. Collective actions from the community, industries, local agencies, and lawmakers intend to strengthen the health policy that regulates TFA mitigation. The collective actions resulted from the impact of the pandemic.

TFA consumption does not have beneficial effects on the body. According to Food and Drug Administration (FDA) revealed that Partially Hydrogenated Oils (PHO), as the main source of artificial trans-fat in the global food supply, is no longer “Generally Recognized as Safe,” or GRAS \cite{5}. Consequently, the deleterious effects of TFA accompanied by a lack of awareness of food products containing TFA like fat-based spreads, shortenings, and some baked goods increase the modifiable risk factors. It may not be stated quantitatively in the nutrition labels, but it can be found qualitatively in the packet ingredient list as “partially hydrogenated,” a hidden source of TFA.

The Philippines is in its initial phase of TFA banning. It is one of the many key reform agendas identified by the Department of Health (DOH). The DOH as the lead agency with FDA, and other relevant agencies, to implementing and enforcing the trans-fat free Philippines policy to food products marketed in the traditional markets and food establishments. The Act shall apply to all
food business operators as defined under the Philippine food safety regulatory system. The manufacture, importation, distribution, and sale of the PHO are prohibited. Moreover, conducting research and development, cost reduction of trans-fatty acid testing, and training to comply with the provisions will be implemented. Also, it is important to raise public awareness on the provisions of this Act, the health harms from TFA, sources of TFA in the diet, and ways to replace PHOs with healthy alternative oils and fats [6].

The World Health Organization (WHO) aims that all countries will ban TFA in the global food supply by 2023. In 2018, WHO published the REPLACE modules, an action package that provides practical strategies for TFA reduction and implementation guidance to countries. WHO encourages countries to adopt their best-practice regulatory options for eradicating the industrially produced TFA from the food supply by limiting industrially produced TFA to 2 g per 100 g of total fat in all food products and prohibiting the production and utilization of PHOs [7]. The government and stakeholders urgently need to take preventive action to reduce the death rates by reducing TFA in the Philippine food supply. Besides, food industries, including large-scale manufacturers and foodservice establishments, should be aware of these approaches and start to reduce TFA content in their products [8].

The Philippines is in the process of fine-tuning the regulations and making them to a policy. Health authorities, educators, local agencies, and policymakers express their support in eliminating the industrially-produced TFA despite the COVID-19 crisis. The goal is a profound, significant decrease in death rates due to the impact of cardiovascular diseases and other comorbidities to SARS-CoV-2 by stopping its production in the national food supply. Significantly, educating the people on the importance of trans fat free policy as a milestone will help protect the health and quality of life of the Filipinos.

Authors’ contribution

Mr. Carl Joseph N. Ablao prepared the first draft of the manuscript with important contributions from Ms. Anna Katrina M. Maddela, Prof. Rosario S. Sagum, PhD, and Mr. Joshua Macapagal. All the authors contributed equally to the manuscript and read and agreed to the final manuscript.

Declaration of Competing Interest

We declared no competing interest.

References

[1] WHO reveals leading causes of death and disability worldwide: 2000-2019. 9 December 2020. https://www.who.int/news/item/09-12-2020-who-reveals-leading-causes-of-death-and-disability-worldwide-2000-2019. Accessed on 28 February 2021
[2] Wang B, Li R, Lu Z, Huang Y. Does comorbidity increase the risk of patients with COVID-19: evidence from meta-analysis. Aging 2020;12:6049–57 (Albany NY). doi: 10.18632/aging.103000.
[3] de Souza RJ, Mente A, Maroleanu A, Cozma AI, Ha V, Kishibe T, et al. Intake of saturated and trans unsaturated fatty acids and risk of all cause mortality, cardiovascular disease, and type 2 diabetes: systematic review and meta-analysis of observational studies. BMJ 2015;351:h3978. doi: 10.1136/bmj.h3978.
[4] Chavasit V, Photi J, Dunkum P, et al. Evolution of Trans-fatty acid consumption in Thailand and strategies for its reduction. J Clin Hypertens 2020;22:1347–54. doi:10.1111/jch.13921.
[5] FDA. Trans fat. https://www.fda.gov/food/food-additives-petitions/trans-fat. Accessed on 6 March 2021
[6] Senate Bill 1954: An act to protect Filipinos from the harmful effects of trans fatty acids, And For Other Purposes. https://static1.squarespace.com/static/5f6d70fa06e786235f6df9a0/t/6028d7b1feae11bbcc5c3d1c/1613270401982/58+1954+Trans+Fat+Free+Philippines+Bill+Sen.+Kiko+Pangilinan.pdf. Accessed on 7 March 2021
[7] WHO. WHO announces certification programme for trans fat elimination. https://www.who.int/news/item/17-11-2020-who-announces-certification-programme-for-trans-fat-elimination. Accessed on 6 March 2021
[8] Madhujith T, Sivakanthan S. Taking trans fats out of the food supply. Agricultural research for sustainable food systems in Sri Lanka. De Silva RP, Pushpakumara C, Prasada P, Weerakewa J, editors. Singapore: Springer; 2020. doi: 10.1007/978-981-15-3673-1_13.