

Editorial

Preventing a Hypertension “Storm Surge” in Southeast Asia

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Hypertension (HTN) and cardiovascular disease (CVD) remain the top killer in most parts of the world,^[1] and in the Philippines, they account for more than a quarter of all deaths.^[2] Based on the mortality statistics released by the Philippine Statistics Authority, of the 582,183 deaths in 2016, around 164,524 were due to ischemic heart disease, cerebrovascular disease, and other HTN-related diseases.^[3] Just like in most parts of the world, elevated blood pressure (BP) is the single most attributable cause of deaths in our country.^[4]

Although in the more affluent countries in the region such as Singapore and Brunei, the prevalence of HTN is going down, comparable to that in other first-world or high-income countries, the prevalence in the low- and middle-income countries in Southeast Asia (SEA) is still on the rise.^[5-7] In a region where strong tropical typhoons are a constant threat, an HTN “storm surge” looms over our heads.

The overall prevalence rate in the region continues to increase. Approximately more than 30% of adults in SEA have raised BP $\geq 140/90$ mmHg. Almost 1.5 million deaths, comprising 9.4% of total deaths, are attributed to HTN yearly.^[4,5,7]

Awareness remains a big problem in the region, and in several countries, the awareness level is still $<50\%$, with a little over half of them on treatment. It still follows the global rule of halves in HTN. Just like in the rest of the world, control rates to BP levels below $140/90$ mmHg still leave much to be desired.^[4,5,7]

The long-term cardiovascular outlook is even made worse with the rising tide of type 2 diabetes mellitus (T2DM), as a frequent comorbidity of HTN in the region. HTN and T2DM coexist in 40–60% of individuals diagnosed with either of the two.^[5,8] The presence of both diseases heightens the cardiovascular risk, making CVD as still the leading cause of deaths in several countries in the region.

It is truly unfortunate that despite all efforts by the government and the private sector, there is still an increase in the number of people dying from acute myocardial infarction, cerebrovascular

accidents, and other HTN-related cardiovascular events in the past 10 years, compared to a few decades earlier.^[2]

It is also quite alarming that Filipinos, similar to other Asians, are developing strokes and heart attacks at a relatively younger age compared to Caucasians, despite having a leaner body frame. One likely reason for this is still the dismally inadequate control of elevated BP in the country. In the Philippines, although the HTN awareness rate has somewhat improved with continuing public health education campaigns by an alliance of organizations organized by the Philippine Heart Association (PHA) and Philippine Society of HTN (PSH), only one of five hypertensive Filipinos have their BP reduced to target level of $<140/90$ mmHg.^[2]

If we were to adopt the redefined BP threshold for HTN of $<130/80$ mmHg from the American College of Cardiology/American Heart Association (ACC/AHA),^[9] the control rate is likely to be $<10\%$ and the prevalence to be close to 50% of adult Filipinos. Both the PHA and the PSH recommend still adhering to the old BP diagnostic cutoff of $140/90$ mmHg or higher.

Many practicing physicians, particularly primary care physicians, rely on published treatment guidelines to help them in the diagnosis, evaluation, and treatment of their hypertensive patients. At least seven countries in SEA have published national HTN guidelines,^[5] which have very similar recommendations to international guidelines such as the 2017 ACC/AHA guidelines and the 2018 European Society of Cardiology/European Society of HTN guidelines. Efforts have been made though to locally attune the guidelines, addressing local issues, and concerns.

One population-directed intervention which has shown reasonable success in some countries in the region is reduction of salt intake at the population level.^[10,11] This could perhaps be our best bet to really curb the rising tide of HTN in the region.

A paper reviewing levels of sodium intake in six SEA countries (Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) showed that sodium intake in most

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Received: 29-04-2019; Accepted: 14-05-2019

doi: 10.15713/ins.john.0149



SEA countries was higher than the World Health Organization recommendation of 2 g/day.^[12] More studies are needed though to accurately estimate sodium intake using 24-h urinary sodium excretion, which remains the “gold standard.” Offhand though, it is quite clear that the sources of the excess dietary sodium are the added sauces, condiments, and processed foods – including instant noodles and meals – which are quite popular in many countries in the region. There is no question that sustained consumer education is imperative to make population-directed salt reduction strategies effective.

There are barriers that need to be overcome to achieve better prevention and control of HTN in the region. Among these are cultural norms and traditional practices that encourage unhealthy behaviors and promote misconceptions about HTN, like believing that HTN only needs treatment when one has symptoms. There is also a lack of an enabling environment for healthy lifestyle practices, still high smoking rate despite the additional excise taxes imposed on tobacco products, inequities in health care with insufficient facilities, and resources for early detection and treatment, particularly in primary health-care facilities. Treatment adherence or long-term patient compliance is another major barrier which may be due to financial constraints, i.e., high out-of-pocket cost of treatment.^[5,13,14]

It is heartening to note that majority of the countries in SEA are bolstering their health education campaigns to make the public more aware of the perils of HTN and are actively collaborating with global initiatives in this regard. One of these initiatives is the May Measurement Month (MMM) campaign of the International Society of HTN (ISH) since 2017.^[4] It is an annual month-long global undertaking with more than 80 countries actively participating to raise awareness of HTN. The MMM campaign is intended to serve as a temporary expedient solution to the inadequate screening programs in many countries worldwide. The SEA region has been very active in this campaign, contributing significantly to the global pool, which has screened more than 1.2 million in 2017^[4] and 1.5 million in 2018.^[15]

Indeed, the professional and political will to control HTN and prevent its “storm surge” are well in place in most countries in the region. However, it may not be as easy as a walk in the park. The lofty goal of HTN prevention and control is a complex one, and only an effective multisectoral collaboration could achieve it in the foreseeable future.^[5] Professional cardiovascular organizations, the rest of civil society, food manufacturers and outlets, the government, health officials, policymakers, and the most important stakeholders – the patients and their families – should work hand in hand to get their act together against this killer disease. The governments should increase allocation of financial and other resources for HTN and CVD control programs, particularly population-directed and primary health-care approaches, wherein high-risk hypertensive individuals are identified and prioritized for treatment.

There are no shortcuts to HTN prevention and control. A sustained awareness, treatment, and control programs encouraging positive health-seeking behavior in the population

are imperative to get us to goal – and that is, to achieve the 25 by 25 vision^[16] or aspiration of global cardiovascular organizations including the World Heart Federation and ISH. The vision aims for a 25% reduction in the prevalence of HTN and likewise reducing all HTN-related complications by the year 2025 in SEA and worldwide.

It may be a utopian goal, but nonetheless, still a goal worth pursuing if we wish to thwart the “storm surge,” HTN is poised to cause the SEA region and the rest of the world in our lifetime.

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How to cite this article: Castillo RR, Mercado-Asis LB. Preventing a Hypertension "Storm Surge" in Southeast Asia. *Hypertens* 2019;5(2): 40-42.

Source of support: Nil, **Conflict of interest:** None

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