Implications of new Hypertension Guidelines on resource poor healthcare systems

Nadarajah Sreeharan, T Kumanan, K Sujanitha & M Guruparan
Department of Medicine, University of Jaffna
Jaffna 40000, Sri Lanka
BMJ 2019; 365; 24 April 2019

The editorial by Haase et al (1) challenges some of the recommendations in the draft Hypertension guidance launched recently by NICE. We concur with their assessment on the dangers of overdiagnosis and overtreatment that may result from the lowering of the parameters for the 10-year cardiovascular risk in patients with Stage 1 hypertension. However, the guidance takes a more conservative and pragmatic approach in retaining the threshold for diagnosis and target for treatment at a clinic reading of 140/90 mm Hg in patient groups with and without type 2 diabetes. This is contrary to the 2017 American College of Cardiology/American Heart Association guidelines which, based on the SPRINT study data, had recommended significant lowering of the levels. We wish to highlight the additional negative impact the lowering of the cardiovascular risk and/or the blood pressure thresholds could have on healthcare systems in resource poor countries based on our experience in Sri Lanka, a designated low-middle income country.

Almost one fifth to one third of the adult population in Sri Lanka have hypertension as defined by the pre 2017 ACC/AHA criteria. The impact of globalization and improved economic status has created an upward social mobility of the population with an exponential increase in the incidence of non-communicable diseases (NCD). Although Sri Lanka had invested heavily in free education and healthcare with demonstrably high literacy rates and positive health indices, the focus of this investment has been on secondary and tertiary care institutions, whilst primary care systems remain poorly developed. Focus on preventative health has been on areas such as communicable diseases, child and women's health whilst emphasis on NCDs has been limited until recently. In the absence of any regular structured screening program, hypertension is usually picked up as an incidental finding during an unrelated medical consultation or diagnosed late in the process when the patient presents with hypertension mediated organ damage. Furthermore, non-adherence to appropriate antihypertensive medications has been highlighted as a serious public health issue (2).

In the context of the issues highlighted above, which is reflective of healthcare systems in many low and low-middle income countries, further lowering of the

threshold for diagnosis and treatment will expand the pool of “hypertensives” and have significant resource implications, deviating resources from areas which are already poorly served in the management of existing patients with hypertension. From the perspective of resource poor settings, the specific recommendations from both guidelines fail to meet at two of the checklist items at the population level; viz the tendency to cause harm or as a minimum, the failure to consider the net benefits over harm.

Guidelines released in North America and Europe tend to have a wider following amongst healthcare practitioners globally, including in resource poor settings. National Guidelines in many disease areas are either limited or tend to follow the western recommendations. However, the methodologies used to measure BP and the population studied in a well resourced clinical trial setting in the US such as the SPRINT study bears no relationship whatsoever to the management of hypertensives in resource poor settings. We do recognize the benefits to individuals in keeping the blood pressure and cardiovascular risk levels as low as possible, as suggested in a statement from the International Society of Hypertension (3), especially through life style modifications. But to incorporate the new recommendations into national policies for the management of hypertension in resource poor settings will be a step too far.

1. Hasse CB, Gyuricza JV & Brodersen J. New hypertension guidance risks overdiagnosis and overtreatment. BMJ 2019; 365; 1167.

2. Kumanan T, Guruparan M & Mohideen MR. Point of view. Non-adherence of antihypertensive therapy: A serious public health issue in Sri Lanka. Journal of the Ceylon College of Physicians 2016; 47; 50-51.

3. Weber MA, Poulter NR et al. Time to Reappraise Blood Pressure Thresholds and Targets? A statement from the International Society of Hypetension – A Global Perspective. Hypertension 2016; 68 (2); 266-268.