## HYPERTENSION IN PATIENTS WITH TYPE 2 DIABETES MELLITUS: MANAGEMENT NEEDS TO BE MORE INTENSIFIED

## Dear Sir,

We read with interest the recent original article by Chan<sup>(1)</sup> discussing the issue of management of hypertension among patients with type 2 diabetes mellitus. The author is to be congratulated for conducting such a comprehensive study on a topic of high importance both for healthcare providers and researchers. We wish to comment more on the management of hypertension in patients with type 2 diabetes, which is always a precarious condition.

Diabetes mellitus is behaving as a pandemic disease and Asian countries are at the forefront in this scenario. It is projected that by the year 2030, among the top ten countries with the highest numbers of estimated cases of diabetes mellitus, seven countries will be from Asia (India, China, Indonesia, Pakistan, Bangladesh, Japan and Philippines)<sup>(2)</sup>. Hypertension is a very common comorbid condition in diabetes mellitus<sup>(1,3)</sup>, affecting 60% to 68% of individuals with diabetes mellitus. Diabetes mellitus and hypertension are well-reported as independent risk factors for many disorders like coronary artery disease, cerebrovascular disease, end-stage renal disease, and eye disease. When diabetes mellitus and hypertension co-exist, the risk of these morbid consequences further increases<sup>(3,4)</sup>. However, there is ample evidence to demonstrate a significant reduction of these disease incidences by lowering the blood pressure in individuals with diabetes mellitus. In the UK Prospective Diabetes Study (UKPDS)<sup>(5)</sup>, for example, reductions of 10 mm Hg in systolic blood pressure decreased 24% diabetes-related end-points, 37% microvascular end-points, 44% strokes and 32% deaths related to diabetes mellitus.

We are, nevertheless, concerned about the suboptimal control of blood pressure among type 2 diabetics by care-providers in different parts of the world. For example, other than Chan's report<sup>(1)</sup>, a recently-published work indicated that only 36% of diabetics had a blood pressure control of <130/80 mmHg. Literature<sup>(6,7)</sup> have identified patient-specific factors (poor compliance to therapy, lack of knowledge about the seriousness of the condition and importance of management adherence, affordability and accessibility to care) and physician-specific factors (busy clinics, lack of awareness to clinical practice guidelines and management protocols, and poor compliance to these guidelines and protocols) that impose the poor control of hypertension.

We strongly recommend the continuous surveillance and monitoring of blood pressure and its optimal control among individuals with type 2 diabetes mellitus. Along with increasing the knowledge of patients about the seriousness of this condition and the importance of adherence to management, there is an immense need to intervene on the healthcare side. Healthcare services should be made accessible and affordable to every patient with diabetes. Healthcare professionals' education regarding the standards of care should be improved and updated through formal and informal educational programs on a continuous basis. Availability of clinical guidelines and management protocols should be readily accessible to every healthcare provider, in particular, to those providing diabetes care. In addition, more research is required to identify and intervene in the various factors responsible for the suboptimal control of blood pressure among patients with type 2 diabetes mellitus, and to assess the impact of these interventions.

Yours sincerely,

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