

Recent Western blood pressure guidelines may boost stroke risk in Asian patients

Link between blood pressure and stroke much stronger in Asia than it is in Europe/North America

European and North American blood pressure guidelines, issued last year, may actually boost the stroke risk if used for Asian patients, particularly the elderly, suggests an expert opinion published online in the journal **Heart Asia**.

High blood pressure is a key risk factor for stroke, but the link between the two is much stronger in Asians than it is in Europeans or North Americans, say the experts.

The global number of people with poorly controlled high blood pressure has risen from 600 million in 1980 to almost 1 billion in 2008, and predicted to rise a further 60% to 1.56 billion by 2025.

The prevalence of high blood pressure in Asian countries has risen sharply in the past 30 years, and particularly over the past decade, as a result of increasing urbanisation and the adoption of a Western lifestyle

High blood pressure among Asian populations has unique features in terms of the response to drug treatment, risk of complications, and outcomes, say the authors. This leads to disproportionately high rates of death and ill health from stroke compared with Western populations.

"Although evidence-based and qualified guidelines have been recently released from Europe and North America, the unique features of Asian hypertensive patients raise concerns on the real clinical applicability of these guidelines to Asian populations," write the authors.

The latest Western guidelines increased target blood pressure to 140/90 mmHg for patients at high risk of cardiovascular disease and renal failure, but this may be too high for Asian populations warn, the authors. Some Asian guidelines have recommended more stringent targets in these patients, they say.

Treating high blood pressure in elderly Asian patients is particularly challenging, they say. And the threshold for systolic blood pressure recommended by Western guidelines could boost the risk of stroke in these patients. A threshold below 140/90 mmHg might be more appropriate, they suggest.

"The paucity of data on the correct definition of the most appropriate [blood pressure] target in elderly patients, highlighted by the few available trials, should be perceived as a stimulus for future research in Asia, not as an argument for questioning the benefit of treatment," they write.