Assessment of Dietary Salt Intake Among Patients With Resistant Hypertension

Adyani Md Redzuan¹, Beverley Beynon-Cobb², Gordon McInnes¹, Sandosh Padmanabhan¹

¹BHF Glasgow Cardiovascular Research Centre, University of Glasgow, G12 8TA, United Kingdom,
²Nutrition & Dietetic Department, University Hospital, Coventry, CV2 2DX, United Kingdom

Introduction: Excessive dietary salt (NaCl) intake may contribute to a lot of complications such as difficult to control blood pressure, increases the risk of cardiovascular disease, renal disease and bone demineralization. A modest reduction in salt intake in both hypertensive and normotensive individuals has been shown to have a significant and important effect on lowering blood pressure. We conducted a cross-sectional study to investigate the pattern of dietary salt intake among hypertensive patients and their knowledge on health risks associated with it.

Methods: A set of questionnaire were sent to patients a week before their appointment date at Glasgow Blood Pressure Clinic. The questionnaire assessed awareness, knowledge and attitude related to healthy salt intake, salt related shopping behaviours and food frequency table (FFT) for daily sodium intake estimation. The questionnaires were then collected on the day of appointment, together with spot urine sample for electrolytes analysis.

Results: A total of six hundred and twelve respondents were available (50% female). Average daily sodium intake among patients was 2.8 g/day. Mean sodium excretion from spot urine sample was 87mmol/L (equivalent of 2g of sodium). Most patients agreed that too much salt in their diet would affects health (90%). Only thirty percent of patients were able to correctly identify the relationship between salt and sodium. Twenty five percent reported reading the salt content of food products when shopping. Most patients who consumed more than 2.4g of sodium per day would add salt to their food even before tasting them. Majority of patients indicated that the taste of food without salt was their greatest concern related to low salt diet.

Conclusions: Based on the FFT, average daily salt intake among hypertensive patients were above the recommended range of less than 2.4 g/day. Raising patients awareness of the health risks associated with high salt consumption may assist in improving blood pressure control and treatment efficacy, increase salt label usage and purchases of low salt foods on the market.