SUMMARY

Hypertension is a common, important and major global public health problem among the adult population with associated high morbidity and mortality rates. As the prevalence of hypertension increases in adult Nigerians, achieving target blood pressure (BP) control has become an important management challenge. Dietary sodium is an important contributor to the pathogenesis of hypertension and its high intake prevents adequate BP control. Therefore, the aim of this study is to determine the relationship between dietary salt intake markers and blood pressure control among adult hypertensive patients attending Family Medicine Clinic of Federal Teaching Hospital, Ido-Ekiti (FETHI), Ekiti State.

Quasi-experimental study was performed on 564 adult patients (282 in the study group and 282 in control group) with hypertension who had been on treatment for at least 3 months. Relevant data were collected using interviewer administered questionnaire, overnight urine collection for sodium estimation and salt-taste threshold using five different concentrations of salt solution. Respondents in the study group were shown the amount of salt recommended for daily consumption. Approval for this study was obtained from the Ethical Review and Research Committee of the hospital.

There were significant reductions (p<0.001) among the study group in the mean SBP (mmHg) from 150.6±19.7 to 141.9±14.9, while mean DBP (mmHg) reduced from 88.9±10.2 to 83.3±7.9 and MAP (mmHg) from 109.6±11.7 to 103.0±9.7 pre and post-intervention respectively. There were also significant reductions (p=0.014, p=0.006) among the study group post-intervention in the mean USE (mmol/l) and STT (mmol/l) from 210.4±57.2 to 199.4±48.4 and 47.3±19.7 to 42.9±17.7 compared to reductions in the control group from 214.0±62.2 to 211.0±62.5 and
49.7±20.0 to 48.6±20.1 respectively. There was significant increase in overall blood pressure control rate among the study group from 19.9% pre-intervention to 30.7% post-intervention. The blood pressure control rate among respondents in the study group with normal USE and STT also increased from 82.1 to 96.5%, and 85.7 to 98.8% pre and post-intervention respectively.

High salt intake significantly resulted in poor blood pressure control while reduction in its intake improves blood pressure control. Family physicians must ensure effective communication so as to improve the knowledge and practices of salt intake with a view to improving blood pressure control.