

Association of dietary salt restriction and iodine status in hypertensive patients and non-hypertensives in Addis Ababa hospitals, Ethiopia

Background: Hypertension is an important public health problem worldwide and the trends of prevalence have increased in economically developing countries. Reducing dietary sodium which mainly comes from salt is one of the main recommendations to treatment hypertension. Salt is a vehicle for iodization. Restriction of salt consumption for hypertension patients could cause a reduction of iodine intake from iodized salt.

Objective: This study determined the association between dietary salt restriction, iodine status and knowledge in hypertensive and non-hypertensive patients.

Method: Institutional based cross sectional comparative quantitative study was conducted. Blood pressure was measured and urine samples were collected by simple random sampling method. Data on socio-economic status, life style and medical history was collected using structured questionnaire. Estimates of the iodine status were based on the measurements of the excretion of iodine in urine. The association between dietary salt restriction and iodine status was analyzed using bivariate logistic regression model.

Result: The MUIC were 41.56(SE 9.41 μ g/L) and 46.14(SE 7.86 μ g/L) in hypertensive and non hypertensive respectively. More than 76% were iodine deficient and greater than 30% were severely deficient. The prevalence of iodine deficiency was higher in dietary salt restricted hypertensive patients than non dietary restricted patients but the difference was not statistically significant (P. value=0.12). Hypertension patients on medication were 88% less likely to be iodine deficient than those do not receive medication. UIE of both groups are considerably lower than the recommended intake and dietary salt restricted patients are more likely to be iodine than unrestricted.

Conclusion: Iodine intake is inadequate in dietary salt restricted hypertensive patients. Correcting this situation will have impact on iodine status of hypertensive patients and health planners needs to emphasis on alternative iodine intervention mechanisms to hypertension patients.

Keywords: salt restriction, hypertension, IDD, iodized salt

