

ABSTRACT

IODINE DEFICIENCY DISORDER PREVALENCE IN TWO STATES OF INDIA

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BACKGROUND & AIM: India has had an Iodine Deficiency Disorder Control Programme since 1962. In nearly all countries where iodine deficiency occurs, it is now well recognized that the most effective way to achieve the virtual elimination of IDD is through Universal Salt Iodization (USI). USI involves the iodization of all human and livestock salt, including salt used in the food industry. Surveillance of Iodine status at all levels brings to a conclusion that consumption of adequately iodized salt intake is a must. The aim of this study was to assess the status of Iodine Deficiency Disorders in two states Delhi and Jharkhand of India.

METHODOLOGY: Salt and Urine samples were collected from 6 -12 year school children and analysed for iodine content at ICCIDD laboratory. 30 clusters were selected in each state using the population proportionate to size (PPS) cluster sampling methodology. 40 urine and salt samples from each cluster and 2 retail shop salt samples were collected.

RESULTS: The median urinary iodine excretion (UIE) was found to be 198.4µg/L and 173.2 µg/L respectively in Delhi and Jharkhand. The percentage of children with UIE <50 µg/L, <100 µg/L in Delhi were 6.34 & 15.85 and Jharkhand were 10 & 26.4. The proportion of households consuming adequately iodized salt (salt with iodine levels of at least 15 parts per million at consumption level) were 88.78% and 64.2% respectively in two States. The proportion of retail shops selling adequately iodized salt was 88.34% in Delhi and 70.9% in Jharkhand.

CONCLUSION: The data reveals that significant progress has been achieved towards elimination of IDD from Jharkhand and Delhi. There is a need of further strengthening the system of monitoring the quality of iodized salt provided to the beneficiaries under the Universal Salt iodization programme to eliminate IDD and prevent the fatal consequences occurring due to iodine deficiency .