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**Goiter Prevalence and Interrelated Components from Coastal Karnataka**

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**Abstract**

**Objective:**To assess prevalence of goiter and associated factors among school going children in Udupi district.

**Methods:**A school based cross-sectional survey was conducted among 6-12 year old children. A sample of 30 villages was selected from the entire district by probability proportionate to size. One school was then randomly selected from each of the 30 villages. Goiter was assessed clinically and was graded as per the recommended criteria of World Health Organization (WHO)/ United Nations Children's Fund (UNICEF)/ International Council for the Control of Iodine Deficiency Disorders (ICCIDD). Salt and urine samples were collected from a subsample for iodine estimation.

**Results:**A total of 2703 children were examined. The mean (±SD) age of the participants was 9.6 y (±1.9). The overall prevalence of goiter in Udupi district was found to be 9.3% with 7.0% and 2.3% having grade 1 and grade 2 goiter respectively. Prevalence of goiter was significantly higher among females [153(11.1%)] as compared to males [98(7.4%)] (p = 0.001). Of the 543 salt samples analyzed, 379 (69.8%) salt samples had adequate salt iodine content (> 15 ppm); while among the children with goiter 32 (8.4%) had inadequate salt iodine. Median iodine value was 202.12 mcg/l among the 270 urine samples tested for iodine levels.

**Conclusion:**Goiter prevalence at 9.3% in the coastal district contributes to the endemicity of the public health problem. The district had adequate iodine nutrition based on median urinary iodine levels. Hence, other contributing factors for the persistence of endemic goiter need to be explored.

**Keywords:**Goiter; Iodine deficiency; Prevalence; School children; Urinary iodine.

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