Thyroid disease is being increasingly diagnosed with greater awareness and is one of the chronic non-communicable disease affecting women more though male population is not spared of the ailment. In India thyroid disorders are in a transition zone from a predominant iodine deficient nation to now a iodine sufficient population. The global goiter prevalence is more than 2 billion with more than 40 million in India. The true prevalence and incidence in India of Thyroid disorders is difficult to estimate, even conservative estimates put the geographical prevalence between 42 million cases of Iodine Deficiency Disease is included. Functional studies of the goitrous subjects showed overall prevalence of 5.4% hypothyroidism, 1.9% hyperthyroidism. 7.5% prevalence of autoimmune thyroiditis was demonstrable by fine needle aspiration biopsy among female goitrous students. On the basis of this countrywide study and other related studies, it can now be estimated that the total burden of significant thyroid disease in the country in the post salt-iodization phase is approximately 42 million. As India is now predominantly Iodine sufficient we are nearing the peak prevalence of the autoimmune epidemic. It is estimated that about 200 million people are at the risk of Iodine Deficiency Disease in our country.

The role of Iodine as an immunogen in prevalence of autoimmune thyroid disorders in India is a contentious issue. Despite of National Iodine Deficiency Disorder Control Programme (NIDDCP) since 1962, many districts in India still have pockets of Iodine deficiency. Iodine is an essential micronutrient with an average daily requirement at 100-150 micrograms for normal human growth and development. Deficiency of Iodine can cause physical and mental retardation, cretinism, abortions, stillbirth, deaf mutism, squint and various types of goitre. Results of sample surveys conducted in 325 districts covering all the States/Union Territories have revealed that 263 districts are endemic where the prevalence of Iodine Deficiency Disorders is more than 10%. It is estimated that more than 71 million persons are suffering from goitre and other Iodine Deficiency Disorders. The Government is implementing the National Iodine Deficiency Disorders Control Programme (NIDDCP) formerly known as National Goiter Control Programme (NGCP) since 1962 a 100% centrally assisted programme with a focus on the provision of Iodated salt, IDD survey/ resurvey, laboratory monitoring of Iodated salt and Urinary Iodine excretion, health education and publicity. The annual production of Iodated salt is about 52.00 lakh M.T. Government of India has banned the sale of non iodated salt in the entire country for direct human consumption under Prevention of Food Adulteration Act, 1954 with effect from 17th May, 2006. For effective implementation of the Programme at the State level, the Ministry of Health is providing financial assistance to all the States/UTs for establishment of an IDD Control Cell, and IDD Monitoring Laboratory in addition to assistance for conducting surveys and Health Education and publicity for consumption of iodated salt by the population. The month of October has come to be known as ‘IDD Month’; so also, 21 October as the ‘Global IDD Day’ which is marked by government of India. Nodular disease of the thyroid is seen in 8.5% of the population. Thyroid Cancer is relatively rare and the incidence is 8.7 per 1,00,000 but is also rapidly emerging as a problem in urban India especially papillary thyroid cancer.

In the special issue of ‘Indian Thyroid Guidelines’, we have covered core issue on Thyroid disease. In the last three decades technological advances in radio immunoassay as well as chemiluminescent assay and imaging techniques have helped in accurately diagnosing thyroid disease. Screening of high risk patients will help in uncovering sub clinical thyroid disease studies. The most frequent thyroid disorder in pregnancy is maternal hypothyroidism. There is widespread morbidity and mortality attributed incidence deprivation during pregnancy. As in pregnancy, the disorders of the thyroid gland are most commonly encountered endocrine disorder in pediatric age group with hypothyroidism being the commonest. Thyroid dysfunction in children has the most pronounced effect on growth and development. Thyroiditis and hyperthyroidism is seen often on routine screening for weight loss and other hypermetabolic and hyperactive states and is seen in all age groups. Thyroid eye disease is recognized by many physicians and is managed jointly by endocrinologist and ophthalmologist. Thyroid emergencies deal with acute clinical conditions associated with thyroid hormone excess or deficiency needing special approach to this life threatening situations. Each topic has been discussed by the core group and consensus arrived at to formulate directions for the practicing physicians.

The Indian Thyroid Society, which is a dedicated society for thyroid disorders in India, has actively collaborated with the Association of Physicians of India in developing these guidelines.

References