

NATIONAL IODINE DEFICIENCY DISORDERS CONTROL PROGRAMME

Introduction

Iodine is required for the synthesis of the thyroid hormones, thyroxine (T4) and triiodothyronine (T3) and essential for the normal growth and development and well being of all humans. It is a micronutrient and normally required around 100-150 microgram for normal growth and development. Deficiency of iodine may cause following disorders:

Goiter
Subnormal intelligence
Neuromuscular weakness
Endemic cretinism
Still birth
Hypothyroidism
Defect in vision, hearing, and speech
Spasticity
Intrauterine death
Mental retardation

Burden of Disease

Iodine deficiency has been identified all over the world. It is significant health problems in 130 countries and affect 740 million people. One third of the world population is exposed to the risk of IDD.

It is estimated that in India alone, more than 6.1 crore people are suffering from endemic goiter and 88 lakh people are mental/ motor handicaps. A national level survey has been carried out in 25 states and 5 union territories in the country and found that out of 282 districts surveyed, in 241 districts it is a major public health problem where the prevalence rate is more than 10%. It is estimated that more than 71 million persons are suffering from goiter and other iodine deficiency disorders like mental retardation, deaf mutism, squint, and neuromotor defects.

Programme

Following the successful trial of iodized salt in Kangara valley, Himachal Pradesh in 1962, India has launched 100% centrally sponsored the National Goiter Control Programme.

Objectives

1. Initial survey to identify magnitude of problem in the country;
2. Production and supply of iodized salt to the endemic regions;
3. Health Education & Publicity;
4. To undertake monitoring of the quality of iodized salt assessing urinary iodine excretion pattern and monitoring of Iodine Deficiency disorder; and
5. Re-survey in goiter endemic regions after five years continuous supply of iodized salt to assess the impact of the control programme. The result of re-survey in some areas has revealed that the prevalence of goiter has not been controlled as desired.

In 1992, the National Goiter Control Programme (NGCP) was renamed as National Iodine Deficiency Disorder Control Programme(NIDDCP).

Policy

On the recommendations of Central Council of Health in 1984, the Government took policy decision with the goal of "Universal Iodization of Salt" by 1992 and starting of Salt department in the Ministry of Industry. Realising the importance of iodine deficiency in relation to Human Resource Development, NIDDCP has been included in 20 point programme of Prime Minister. The Central notification restricting the sale of non-iodated salt with effect from May 1998 has since been lifted with effect from November 2000. The notification issued by 29 states/UTs covering their entire territory and partially by 2 states restricting the sale of non-iodated salt in their respective states are still continuing.

Pilot Project Against Micronutrient Malnutrition

Micronutrient malnutrition is a global public health problem. There is problem of iodine, iron, zinc, and fluorine deficiency leading to many clinical manifestations in the population. The pilot project programme against micronutrient malnutrition is being started in the year 1995 in Assam along with four other states – Bihar, Orissa, West Bengal and Gujarat. This project has been merged with NIDDCP.

Objectives

1. To assess the magnitude of fluorosis and dental caries beside assessing the iron and Vitamin-A deficiency in the project area;
2. To assess and improve iron and vitamin-A status in school going children, adolescent, boys and girls, non-pregnant women, adult males and geriatric population;
3. To launch extensive information, education and communication strategy through mass media to improve the dietary habits of the populations; and
4. To study zinc level in various food products and soil.
5. To coordinate with similar ongoing programme being implemented in the country.

Comments

1. Universal iodization of salt has not been achieved even after a decade has passed away when the target was set to be achieved.
2. More strengthening of transportation of iodized salt by Railways and roads is needed. Monitoring during transportation is usually not done regularly.
3. Boosting up of political and bureaucratic commitment is required as the problem of visible goiter has been reduced.
4. There is a difference in guidelines for assessment of IDD issued by Indian Government and international organizations