IODINE STATUS AMONG SCHOOL CHILDREN IN ALBANIA

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Abstract

Iodine deficiency disorders (IDDs) are one of the worldwide public health problems of today. IDDs remain a public health problem in Albania. This survey is undertook to determine median urinary iodine concentration in a sample of school children, and to assess the level of iodine in salt samples at the household level, after the introduction of the use of iodized salt at national level in Albania. A cross-sectional study was done among school children aged 6-13 years. A complete list of government schools in Albania was obtained and 60 were selected on the basis of "probability proportion to size" (respectively 30 clusters per urban and rural zone). A sample size of 1060 was decided based on an expected prevalence of 45% with relative precision 0.1 and design effect of two. Urine and salt samples were studied for iodine concentration. It was found that: the median urinary iodine concentration was 100.4 mg/l, indicating non iodine deficiency; also 49, 6 % of the urine samples examined showed iodine insufficiency (2,4 %-severe IDD, 13,4 %- moderate IDD and 33,7 % mild IDD, respectively). Iodine content was found to be adequate in 62, 1 per cent of salt samples. The median iodine concentration of salt samples was 18, 5 mg/l. Compared to the results of previous surveys, the IDDs rates has declined in the last few years. However, as this study showed, IDDs continue to be an important public health problem in our country. This calls for identification of factors to strengthen National IDD Control Programme; the need to ban production, trading and use of the non-iodized salt in Albania; and repeated surveys every 3-5 years to monitor the progress achieved in eliminating IDD.

Keywords: Iodine deficiency disorders, iodine, school children.