The prevalence of congenital hypothyroidism in Kermanshah in 2006-2010

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Abstract

**Background:** Congenital hypothyroidism (CH) is one of the most important causes of mental retardation in children and only if diagnosed early, its complications can be prevented. The worldwide incidence of congenital hypothyroidism is one in 3000-4000 live births but 2.2/1000 in Iran. The aim of this study was to determine the incidence of congenital hypothyroidism in Kermanshah during 2006-2010.

**Methods:** This was a descriptive–analytical study. All infants that were born in Kermanshah city from 2006 to 2010 were studied. On days 3-5 after birth blood sampled were obtained from their heel and the samples were referred to the Health Center. The concentration of TSH was determined by filter paper, using ELISA method. Data were collected via recorded information in Kermanshah City Health Center and focal hypothyroid physician.

**Results:** 68587 infants were screened with 97% screening rate. The recall rate was 6/3 percent. 116 children were treated of which 65 (56%) of them were males and 51 (44%) were female. 28.4 percent of them had positive consanguineous marriage. There was statistically significant correlation between the TSH level and consanguineous marriage. The incidence of CH was 169 per 100000 live birth.

**Conclusion:** Because the incidence of CH is higher than that of the global rates, continuation and strengthening of newborn screening programs should be considered as a health priority.

**Keywords:** congenital hypothyroidism, neonates, screening

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