



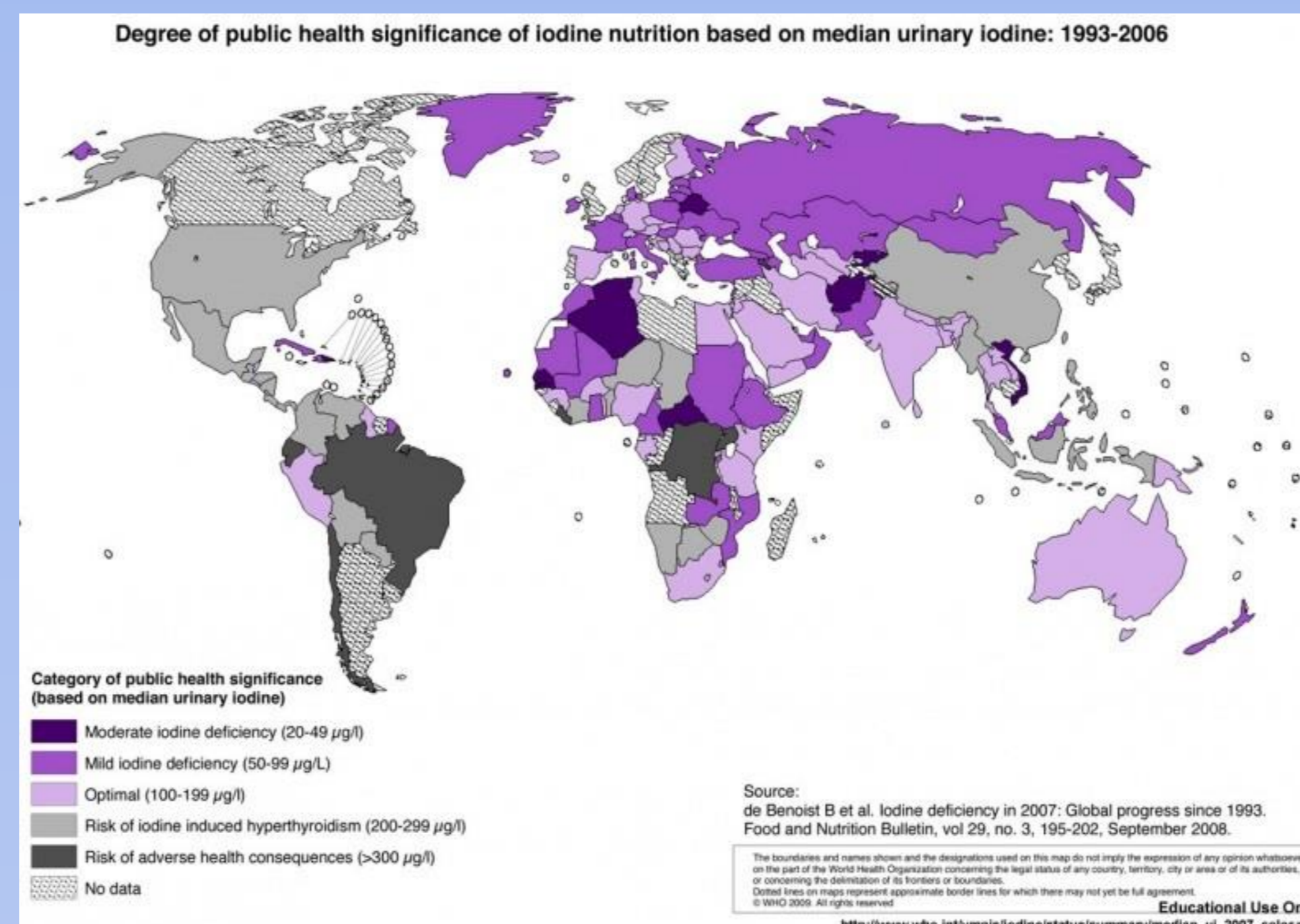
Epidemiological aspects of pediatric thyroid disorders in Western Ukraine

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Background: According to WHO data, (2017) Ukraine is known as a country with endemic mild iodine deficiency. According to Unisef research in Ternopil region (2002) median of urinary iodine excretion was 141,86 mg/l.

- Thyroid disorders: endemic and nodular goiter, thyroiditis, congenital and acquired hypothyroidism are group of the most common endocrine problems in children and adolescents in Ternopil Region (Ukraine) during the last decades.



The aim of current study was to estimate the prevalence of goiter according to etiology in the pediatric population of Ternopil region by retrospective analyses of statistic data from official register in Ternopil. The study shows that in spite of reduction of children's population (0-17 years old) from 215 thousands in 2008 to 199 thousands in 2018 thyroid pathology prevalence and distribution permanently increases. (Table)

Table. Prevalence and Incidence of thyroid conditions per 1000 children 0-18 years in population

Diseases	2008		2018	
	Incidence	Prevalence	Incidence	Prevalence
Goiter 1 grade	17.77	43.22	18.56	43.56
Goiter 2 grade	1.02	4.28	0.94	5.06
Autoimmune thyroiditis	0.13	0.25	0.14	0.58
Nodular goiter	0.09	0.28	0.12	0.29
Hypothyroidism	0.03	0.21	0.18	0.65

According to governmental database in Ternopil region, the amount of affected children from 0 to 18 years variats from 4.9 to 5.7 % of whole population during the last years. It is well known fact, that the main cause of euthyroid goiter 1 and 2 grade is iodine deficiency. And by WHO guideline (2007, Geneva) it is recommended that a total goiter rate (number with goiters of grades 1 and 2 divided by total examined) of 5% or more in schoolchildren 6 to 12 years of age be used to signal the presence of a public health problem.

Conclusions: Summing up what has been presented, iodine deficiency could not be clearly confirmed in our region. So, current study should to be continued in target group of children with urine iodine determination to implement a regional program to eliminate probable iodine deficiency disorders.