



PREVALENCE AND ASSOCIATED FACTORS OF CONGENITAL HYPOTHYROIDISM IN BOGOTÁ, COLOMBIA. 2014 - 2020.

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INTRODUCTION

- Congenital Hypothyroidism (CH) is a thyroid hormone deficiency present at birth (1).
- Recent birth cohorts in Bogotá have estimated a prevalence of 1:2183 newborns (NB) (2).
- Effective and timely screening is essential to treat those affected and prevent future consequences

AIM

- Statistical analysis of cases reported in the Public Health Surveillance System (**SIVIGILA by its acronym in Spanish**) database in the city of Bogotá, Colombia
- Characterization of cases and prevalence estimation, as reported in the database in 2015-2020.

METHOD

- Observational, retrospective study, based on the data provided by the SIVIGILA database, which reports all the newborns with congenital anomalies during the 2015 - 2020 period in the city of Bogotá, Colombia.
- The ICD-10 nomenclature was used to classify the cases.
- The biological variables analyzed were birth weight, sex, maternal age, associated malformations and the presence of multiple pregnancies.
- The socioeconomic variables analyzed were maternal housing.
- Data were registered and analyzed using **Microsoft Excel Office 365**

RESULTS

- The prevalence of NB reported as suspected with CH was 1:1220 NB (stable trend on the linear tendency analysis)
- When adjusted for cases with confirmed high values of TSH in umbilical cord measurement, 390 cases were identified, with a prevalence is 1:1562 NB.
- 54% were men and 46% women.
- Of the total CH cases with a reported weight, 20% weighed less than 2500 grams.
- 17.7% of the cases had mothers with housing in a rural area.
- 11 cases presented with associated congenital anomalies: 7 associated to Down Syndrome, 3 associated to cardiopathies and 1 case of polymalformation

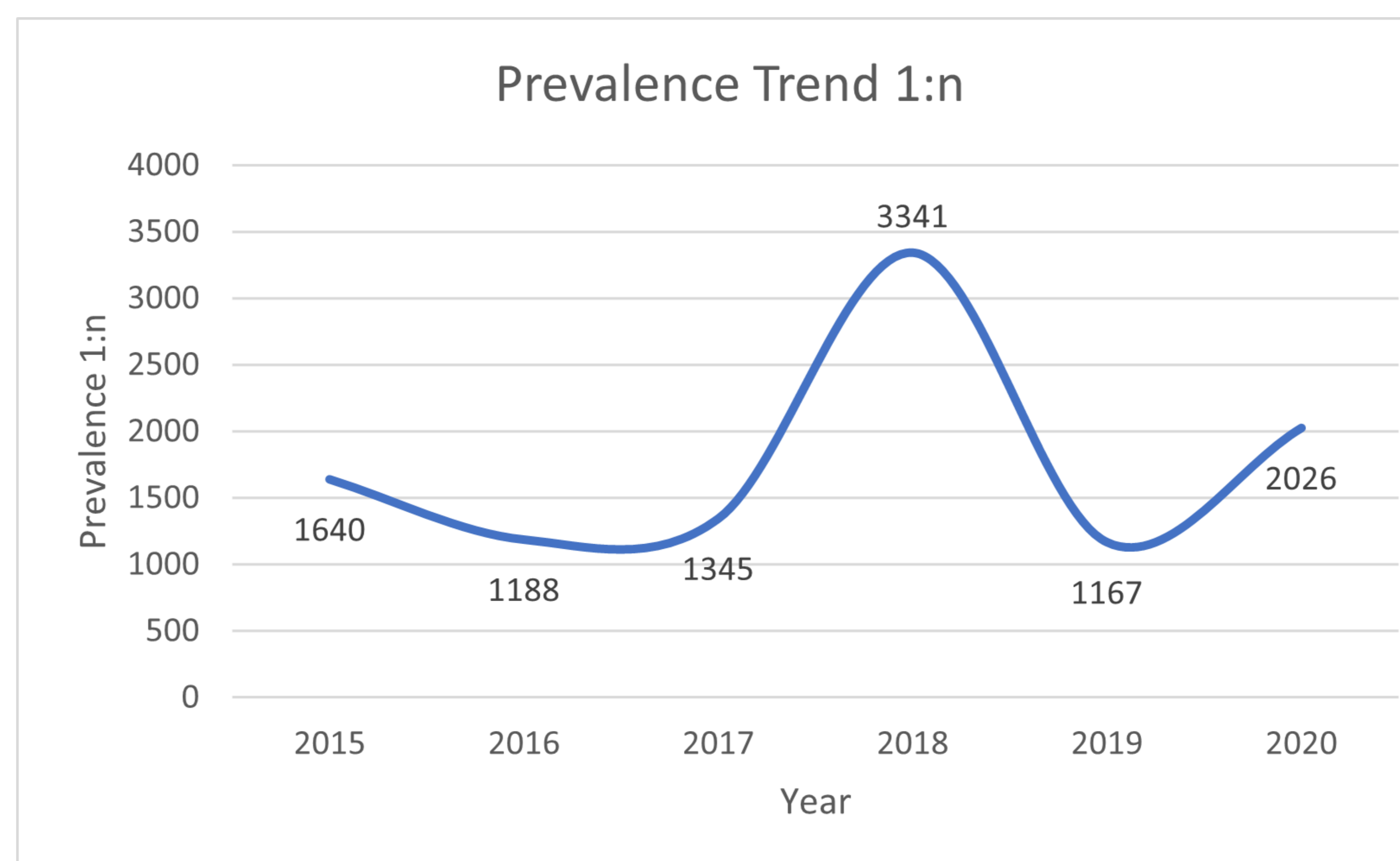


Figure 1: Prevalence linear trend (2015-2020)

	Mean (95% CI)	SD
Maternal age (years)	26.14 (± 0.624)	6,79
Birth Weight (grams)	2879.2 (± 52.1)	598.57
Gestational age (weeks)	37.9 (± 0.19)	2.22
Low Birth weight n (%)	102 (19.88)	
Preterm Births n (%)	79 (15.39)	
Females n (%)	238 (46.39)	
Multiple anomalies n (%)	11 (2.14)	
Multiple gestation n (%)	17 (3.31)	

Table 1: Demographic Data

CONCLUSIONS

- The prevalence of confirmed CH cases is similar to other estimates from Bogotá, but differs from studies in Europe, USA and Quebec (3,4,5)
- Some studies from USA also reported associated cardiopathies and Down Syndrome (3)
- Studying the behavior of this event makes it possible to guide health actions to reduce said disease burden.
- Future changes in the national newborn screening program should seek to correctly identify cases and allow proper reporting.

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