Epidemiological and socioeconomic CHANGES in the child population that debuts with DM1 in this 21st century

INTRODUCTION
The Spanish society, and specifically the child population has experienced a demographic, economic and social change in the last 20 years. There are multiple historical epidemiological records of DM1, but not in our environment and less focused in the last 20 years and social variables that greatly influence the health care we give in the consultations.

OBJECTIVE
To evaluate demographic, socio-economic and social changes in the population of children who debuted in this century with DM type 1a.

METHODS
We study patients with Type 1 Diabetes Mellitus from January 2000 to the present. Longitudinal study of global epidemiological, social, demographic and clinical variables and by five-year periods, focusing on the latter. Comparison with global data of the different regions from Spain and using data from the Basque Government, INE and EUSTAT. p:0.05 SPSS 19.0

RESULTS
105 patients with Diabetes Mellitus type 1 (34% M / 66 % H), with age at diagnosis of 8.7 ± 3.1 years (43% with ketoadidosis vs 57% without ketoadidosis). HbA1c average to debut of 10.9 ± 1.56, an average duration of 2.3 weeks of frank symptoms before consultation, 92% with at least one positive Ac, 18% with associated self-immunity (celiac, thyroid).

The incidence declared in Euskadi is 12.8 cases / 10^5 (HormResPaediatr, 74) and of 11.6 cases according to Detp.de Salud.
In Alava it is 15.1 cases / 10^5 (statistical differences of 0.02).
The rate of foreigners <15 years in Euskadi is 8.2%, Alava 16.8%.

57% are families of Spanish origin, 43% at least one parent is a foreigner.
If we value the last five-year period, the proportions are 28% foreign vs. 72% foreign.
The rate of foreigners <15 years in Euskadi is 6.2%, Alava 16.8%.
The OR of children with DM type 1 debut is 2.35 globally (p: 0.001) and in the last five years of 4.20 (p: 0.0001).
If we value this sub-population, the degree of CAD is 70% (OR 2.5 p.001 vs. foreigners), HbA1c average of 11.5%, a duration of symptoms of 4.8 weeks (OR 2.5 p.001 versus outsiders), 100% autoimmunity, 15% other autoimmune.
The frequencies of the variables sex, age at debut were not different.
16% of families at debut had a “non-classical” family unit (separation, divorce, single parents). Similar to average family data with children in Euskadi 18%.
At the end of the study and after several years of debut (average 5.8 years) the rate was increased to 28%, OR 1.80 (p: 0.001).
If we study the sub-group of foreign population (43 families, 2 at debut (5% p: 0.01 with respect to outsiders) they were in this situation.
After the study, this subgroup had not modified the rate.

CONCLUSIONS
We assume that this study may pose some deficiencies due to the regionalization of the sample, but demonstrates a real social change in our population with an impact on diabetic pathology.
There is a more vulnerable population (by genetics, culture, customs), which in turn is increasingly numerous: immigrants, who come later to consult Debuto n most prevalent clinical situation worse (CAD). The barriers and language and cultural differences are an added handicap in monitoring these patients.
On the other hand, the debut of a child can be a cause of serious family breakdown, as evidenced by the increase in the separation rate.
This makes us suggest recommending an increase of emotional support to these families.

Evolución índice tasa de ruptura 2006 - 2016

Note: Los datos estan referenciados en base a los datos del 2006.