## **SUMMARY**

Diabetes mellitus is one of the most frequently diagnosed childhood diseases. The number of cases is rapidly growing in Europe, in the world and also in Poland, which is currently one of the countries with the highest dynamics of disease growth. Incidence increases especially in the younger and youngest age groups. The factors responsible for the damage to the  $\beta$ -cells of the pancreas deprive the patient of insulin forever. Substitution treatment is necessary for the rest of life, and the level of metabolic control and the quality of life of the patient, especially the small patient, become a priority for cooperation in the therapeutic team.

On average, annually, in the studied years 2009- 2019, type 1 diabetes in the Podkarpackie Province developed 21,2 children/ 100 thousand. People. Most children fell ill in the follwing district: Strzyżowski, Przeworski, Łańcucki, approx. 30 children/ 100 thousand.people/ year. Based on the collected data, an increasing trend in the incidence rate was observed in all age groups, in particular in the group of children aged 5-9 and 10-14 years. The incidence was higher and significantly differentiated in the population of boys in individual districs and in the group of children from urban areas in the following years. At the time of diagnosis, celiac disease was significantly more frequent in children from urban areas, the difference being more than twofold (p= 0,0018). Among girls, significantly higher levels of HbA1C (p=0,0004) were observed, especially among girls living in the countyside (p=0,0006). The HbA1C level does not differ between years, but it is significantly higher in the gropu of children in the countryside (p=0,02226). At the time of diagnosis, the pH level differed from year to year (p=0,0234). a statistically significant realationship between the numer of cases and season of onset was also confirmed (p=0,0000). Most children fell ill in October an November and the leat in June and May.

The study of the dynamics of changes in the incidence of type 1 diabetes in the Podkarpackie Province in the past decade is an important source of knowledge about the current incidence rates, age structure, social, health and environmental conditions of the studied group. The results of the study may shape the regional health policy, including the preparation of medical staff and specialist medical services.