



Abstract

The aim of the study was to describe the incidence and prevalence trends of diabetes mellitus (DM) type 1 in children of different age groups in Ukraine during 2002–2013.

Objective and hypotheses

Ukraine has a 27 districts, with a population of 45 553 000, including 7 990 391 children, 8 629 of them has a DM

Methods

We analyzed data based on a clinical diagnosis in child population aged 0-17 y.o. centrally from all regions of Ukraine during 2002-2013.

The prevalence and incidence (newly diagnosed cases) of DM 1 were studied in children aged 0-17 y.o. and in different age groups (0-6, 7-14 and 15-17 y.o.).

Results

Based on the Ukrainian Pediatric Diabetes Register the number of children in 2013:

- with DM1 0-17 y.o. – 8 629 (1 in 1080),
- with DM2 – 64 (1 in 124557),
- with neonatal diabetes - 32 reported cases (1 in 249113).

Among DM1 group the number of children without any chronic complication was 58,3%; HbA1c level was $8,72 \pm 1,3\%$ (vs $7,09 \pm 1,23\%$ in DM2 group, $p < 0,05$).

During 2002-2013 the prevalence and incidence of DM1 in pediatric population 0-17 y.o. has greatly increased from 7,77 to 10,80 and from 1,0 to 1,58 (per 1000) accordingly, especially in the youngest age group (0-6 y.o.) [Fig.1, 2].

Results

Fig 1. Incidence of DM1 in children different age groups (per 1000 population)

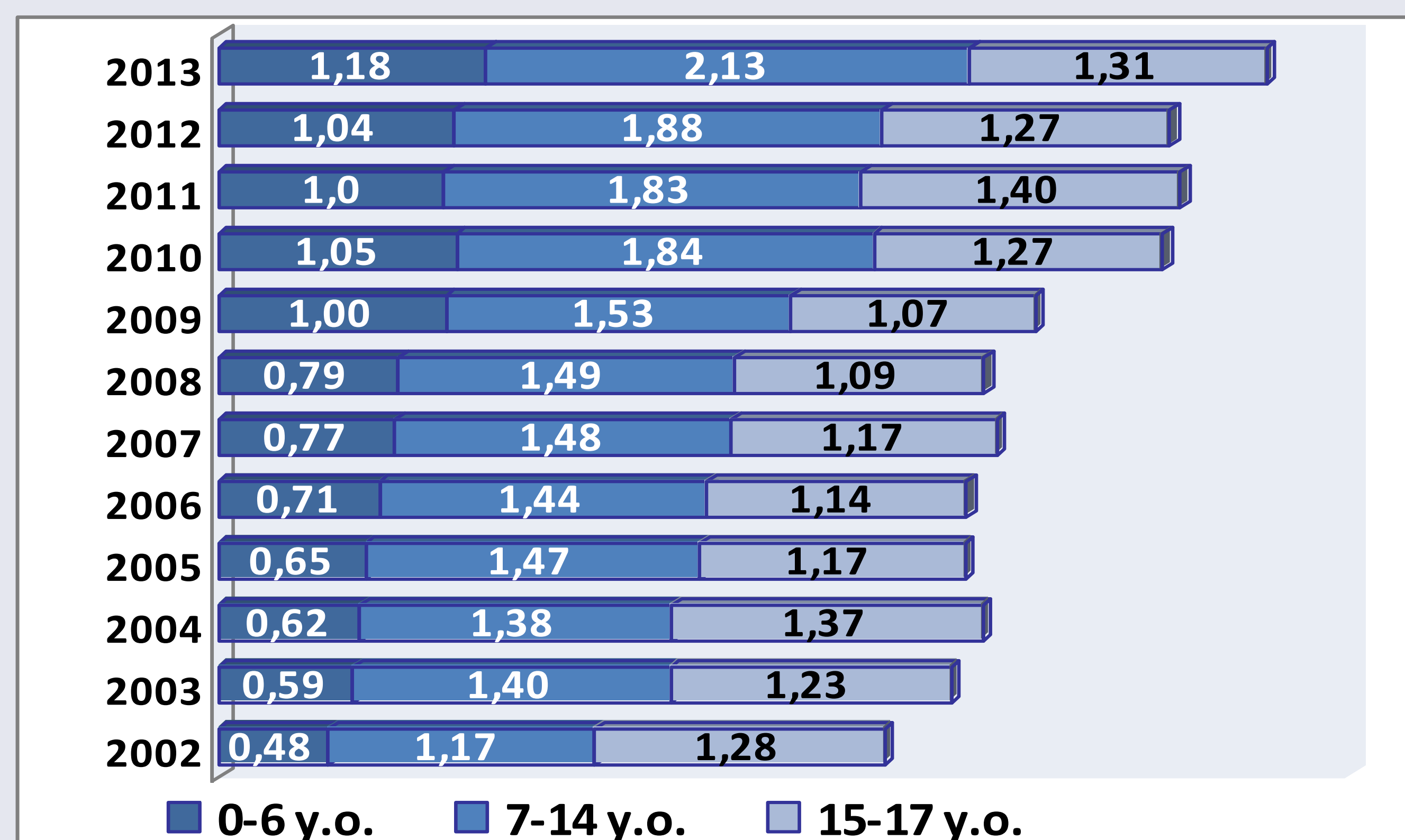
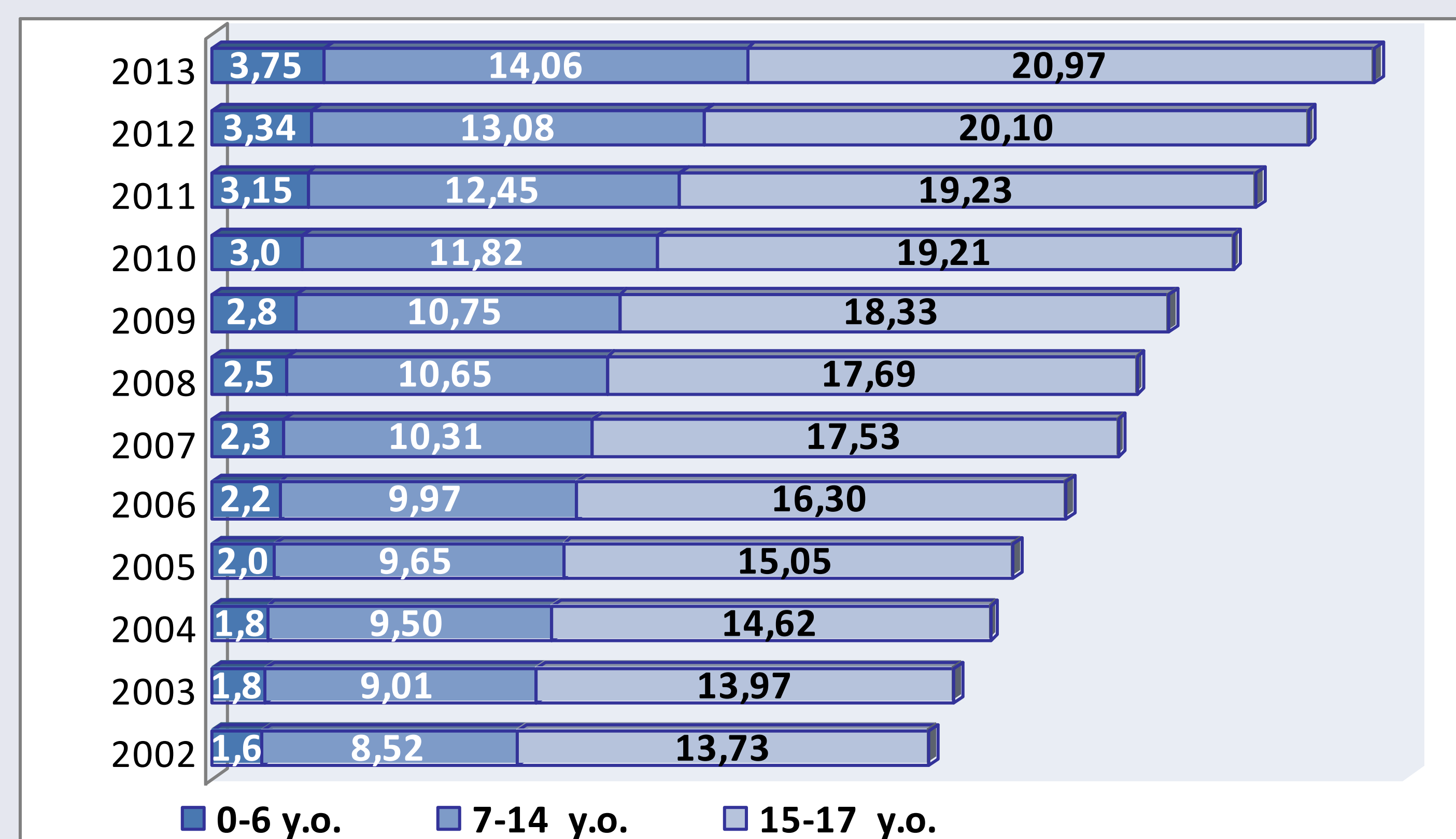


Fig 2. Prevalence of DM1 in different age groups (per 1000 population)



Conclusions

In recent years incidence rate of childhood DM1 continues to rise, especially in children aged 0-6 y.o. (vs 15-17 y.o.) on a background of decreasing of the total child population.

The annual increase of incidence of DM1 in 2013 was 2,98%.

References

1. Statistical information on pediatric endocrinology by 2013 / MOH of Ukrain. - Kyiv, 2014 - 102 p .
2. Statistics diabetes in children in Ukraine in tables and graphs / by NB Zelinska. - Kiev : PBX «ФЕПЗБ», 2013. - 16 p.