

CHANGES IN THE PREVALENCE OF DIABETES MELLITUS IN PREGNANCY: A NATIONWIDE ANALYSIS FROM HUNGARY

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OBJECTIVES

Diabetes in pregnancy can lead to adverse outcomes for both the mother and child, including increased risks of cardiovascular disease and type 2 diabetes. Gestational diabetes mellitus (GDM) affects approximately 14% of pregnant women globally. Our aim was to examine the epidemiology of diabetes during pregnancy in Hungary between 2010 and 2023.

METHODS

We conducted a retrospective, descriptive study using national data derived from the Pulvita Health Databank. We analysed the number of patients, cases, the age of patients (by age groups) in both outpatient and inpatient care, as well as the average length of hospital stay. The following ICD codes were included: O24.0, O24.1, O24.2, O24.3, O24.4, and O24.9. Additionally, data on the number of women aged 15-49 and live births were collected from the Hungarian Central Statistical Office. Prevalence was calculated by dividing the number of patients by the female population aged 15-49 for each year.

RESULTS

The number of patients per 1,000 women aged 15-49 rose from 1.97 to 3.68 (+87.22%) in inpatient care and from 3.37 to 5.02 (+49.13%) in outpatient care (Figure 1). Prevalence also showed an increasing trend when adjusted for live births (2010: 51.95 per thousand; 2023: 92.12 per thousand; +77.32%). No significant changes were observed in patient age; however, the proportion of pregnant women aged 41-50 in inpatient care slightly increased (from 3.17% to 5.74%) (Table 1). The number of cases per patient observed in outpatient care also increased, from 5.73 to 6.51 (Figure 2). However, the average length of hospital stay decreased from 8.43 days to 5.98 days (-29.01%) (Figure 3).

CONCLUSIONS

Diabetes mellitus during pregnancy demonstrates an increasing trend in Hungary. Preventing the disease and providing timely treatment are critical for ensuring the health of both mothers and their children. Our findings highlight the importance of health policy efforts targeting this issue.

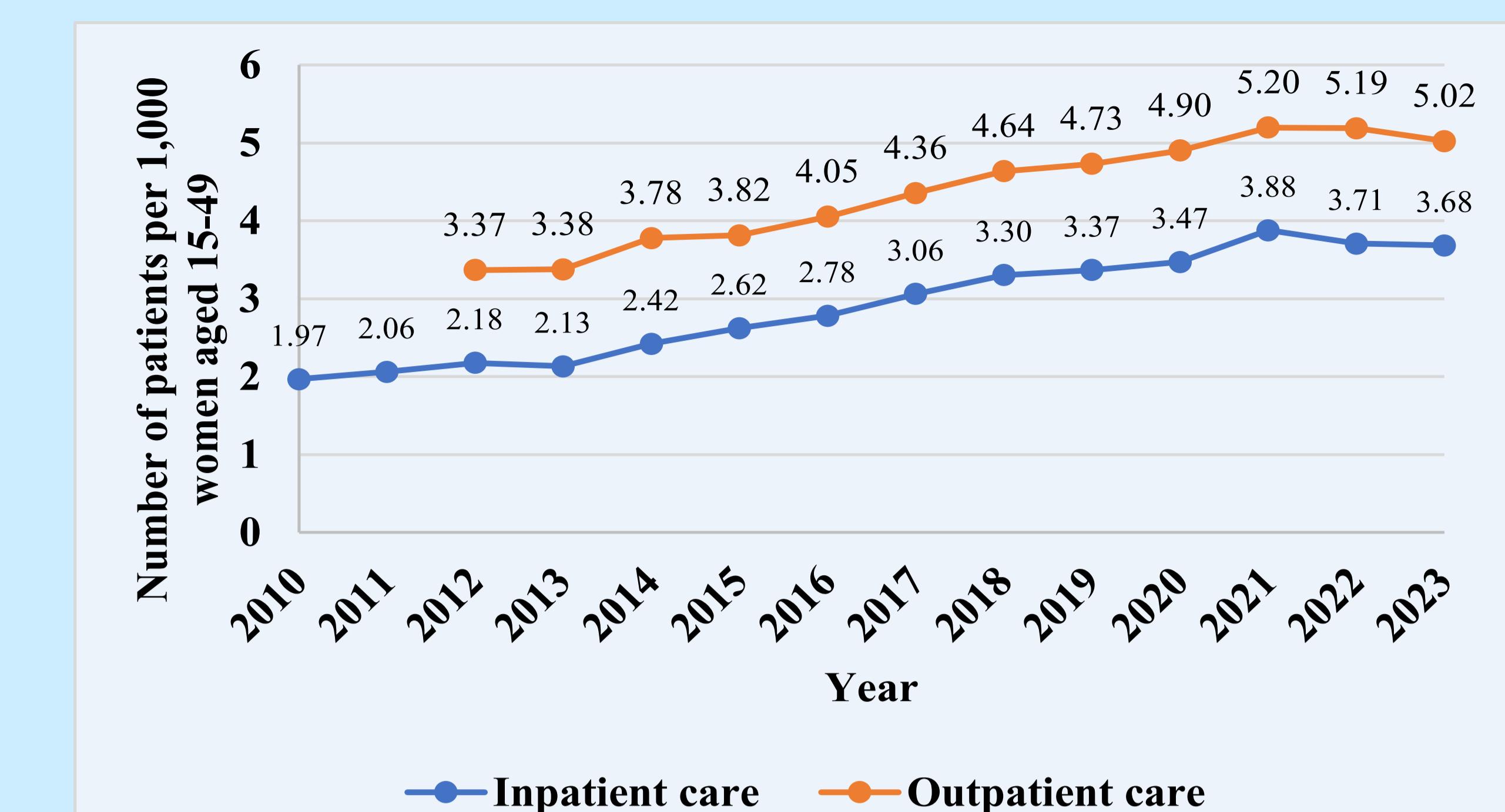


Figure 1.
The number of women with diabetes in pregnancy per 1,000 women aged 15-49 in Hungary (2010-2023)

Age	2010	2015	2019	2023
5-18	0.79%	0.57%	0.84%	0.43%
19-30	39.59%	36.22%	37.11%	38.89%
31-40	56.45%	58.18%	55.37%	54.94%
41-50	3.17%	5.03%	6.68%	5.74%

Table 1.
Changes in the distribution of women with diabetes in pregnancy by age (2010-2023)

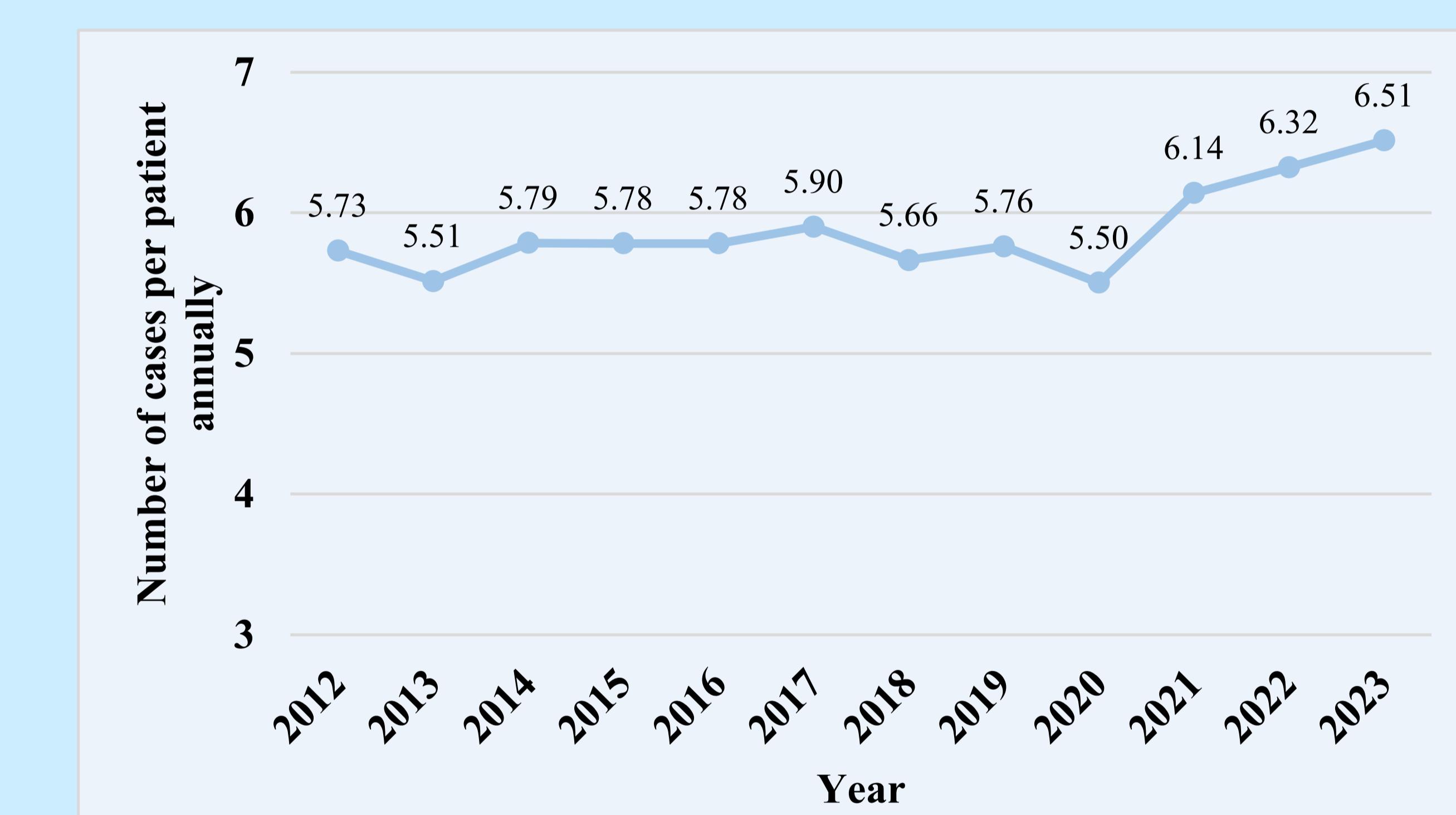


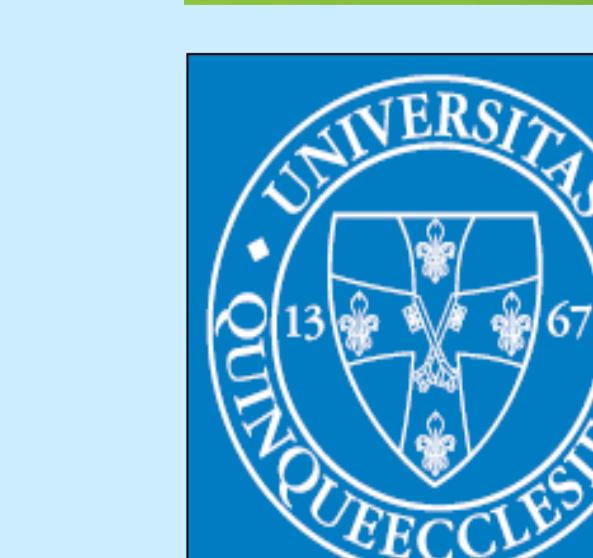
Figure 2.
The number of cases per patient observed in outpatient care in Hungary (2012-2023)



Figure 3.
The average length of hospital stay of women with diabetes in pregnancy in Hungary (2010-2023)

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