



BODY MASS INDEX OF BULGARIAN PREGNANT WOMEN – TRENDS OVER TIME

(Results from a comparative study between 2017 and 2022)

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Introduction

In the recent decades the proportion of women in reproductive age who are overweight or obese increases. This increases the risk for pregnancy and delivery complications.

Aim of the study

To assess the tendencies in body mass index (BMI), and the proportions of overweight, obese and morbidly obese women at the onset of pregnancy in Bulgarian population comparing institutional data from 2017 and 2022.

Materials and methods

- 860 pregnant women for 2017 and 857 – for 2022 who delivered in a state university Ob/Gyn hospital in Sofia.

- Data about their initial BMI at the onset of pregnancy – from the patients’ charts.

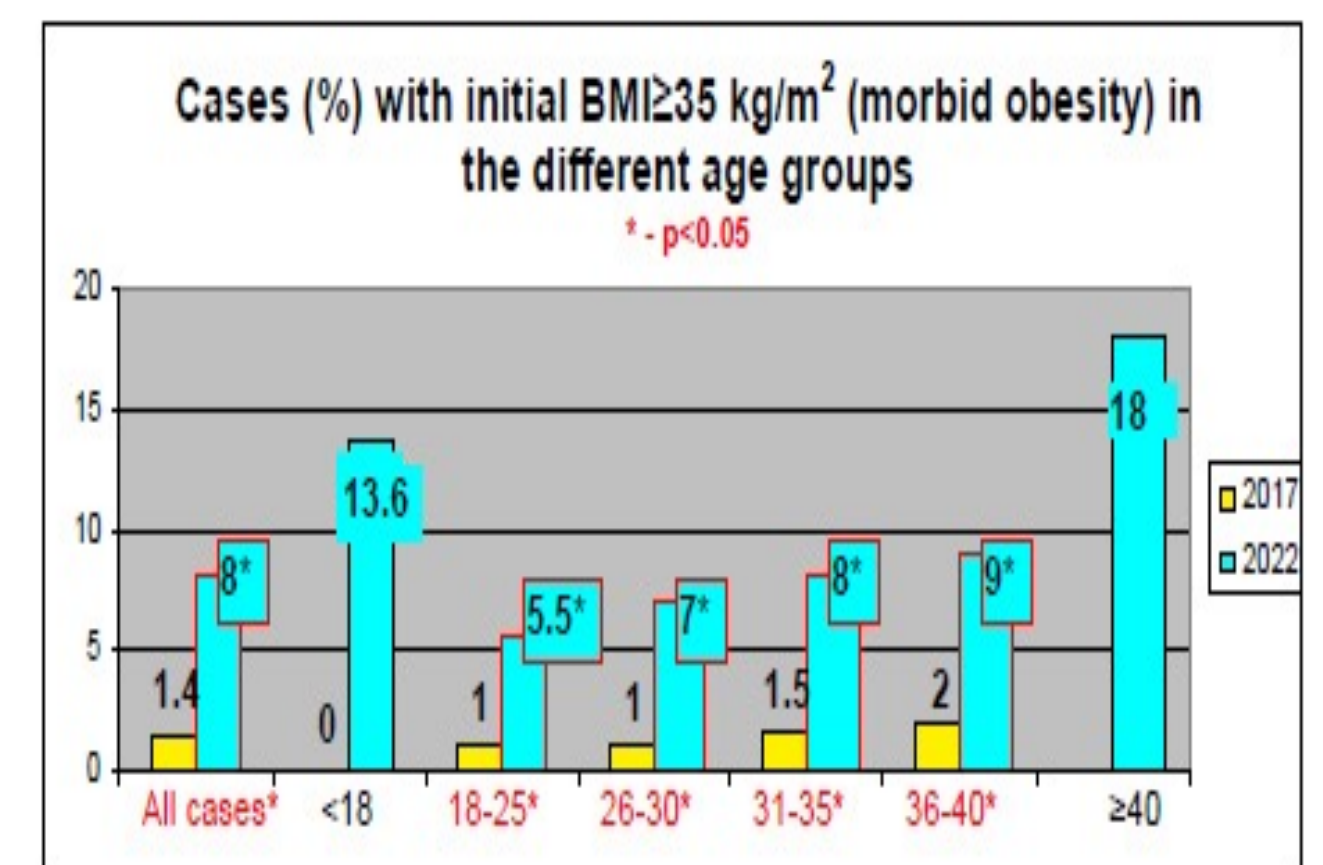
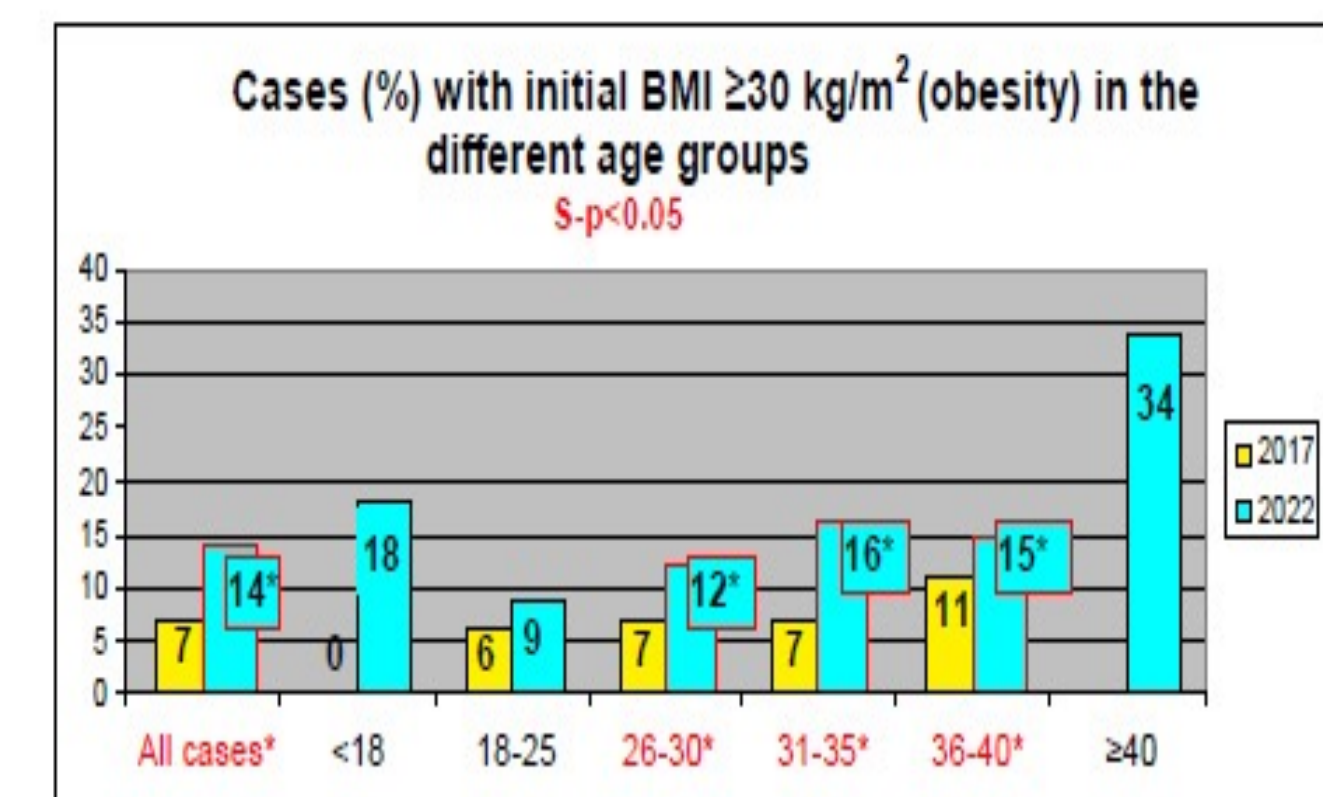
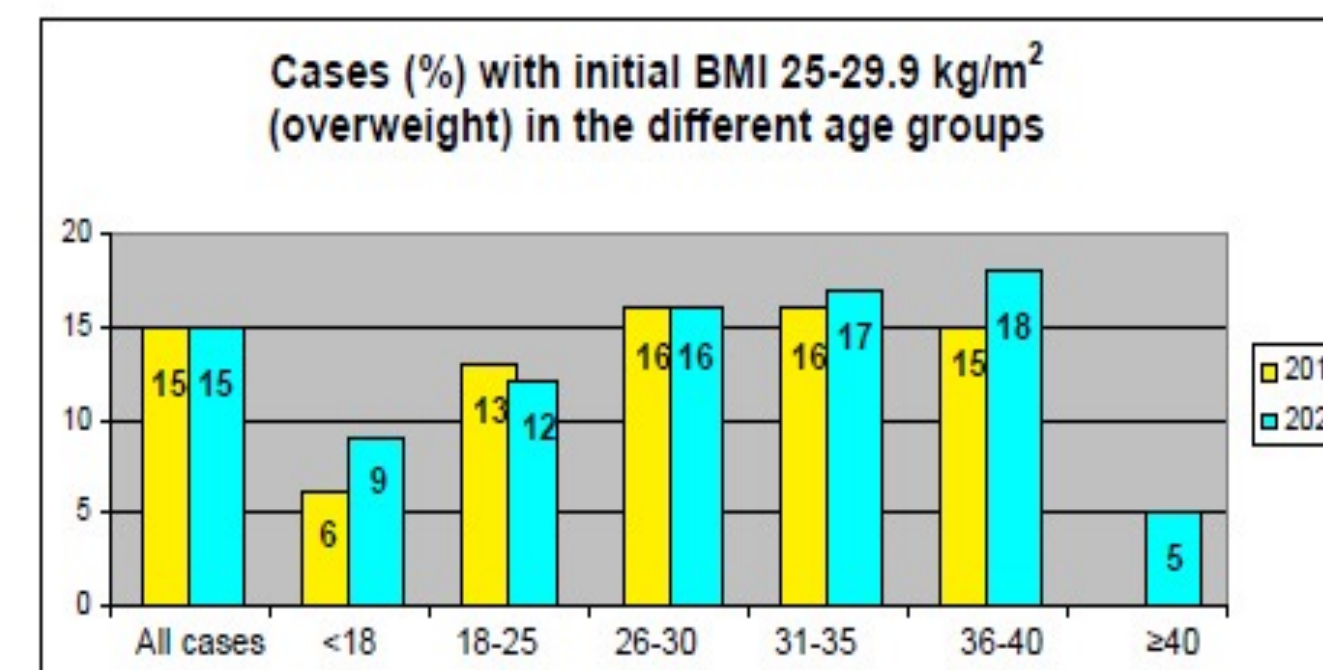
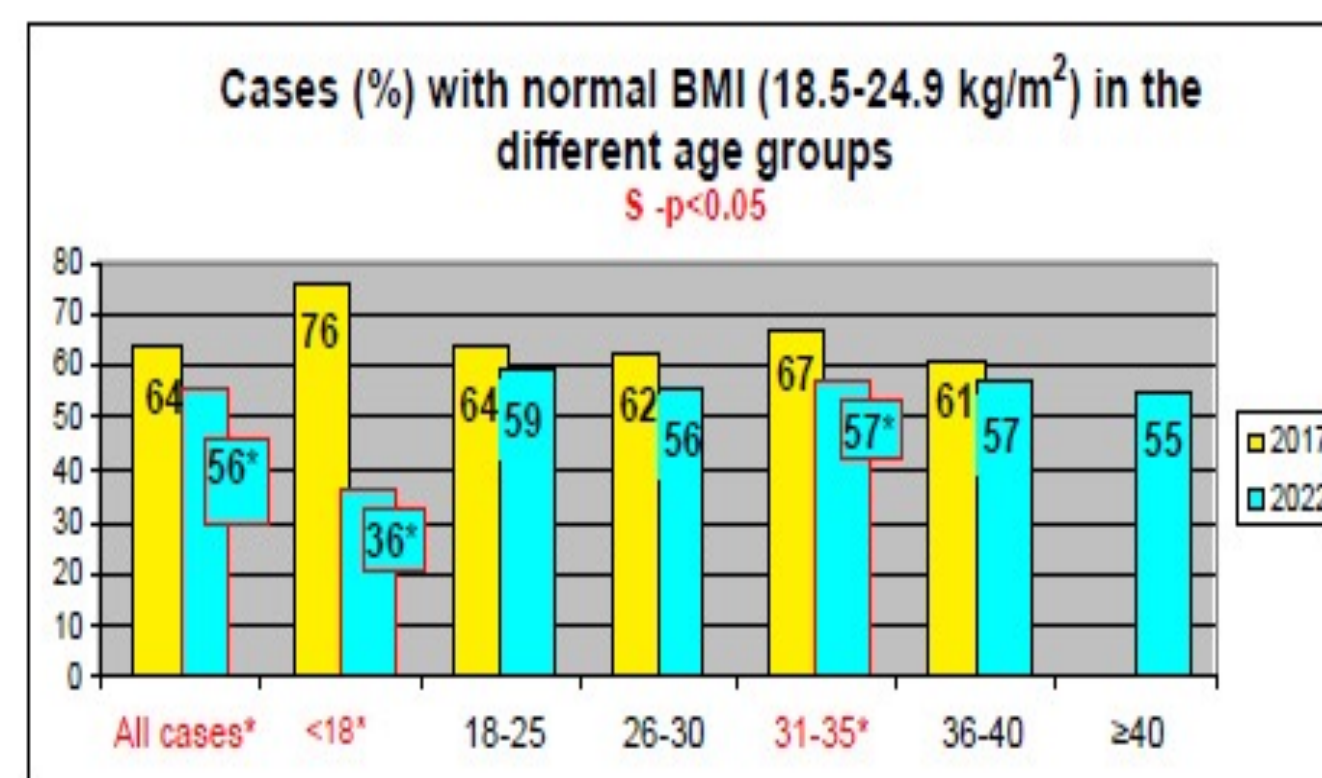
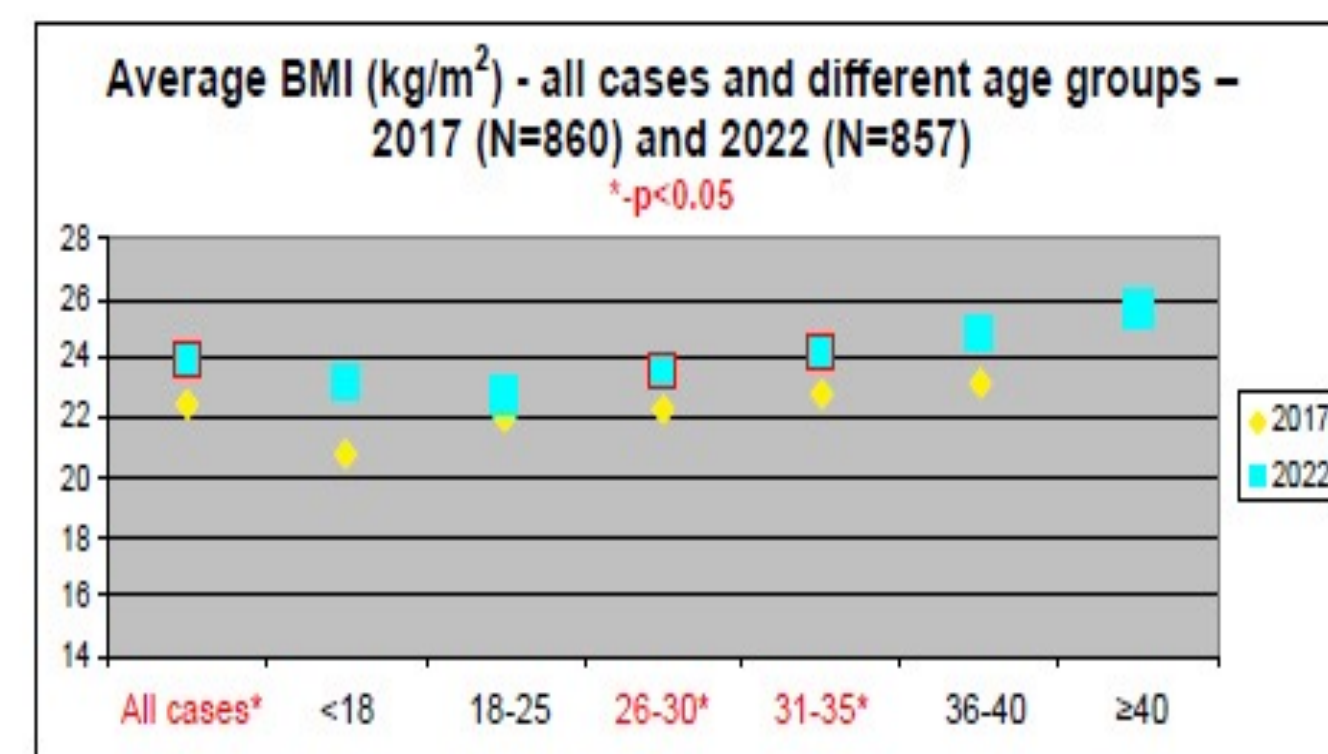
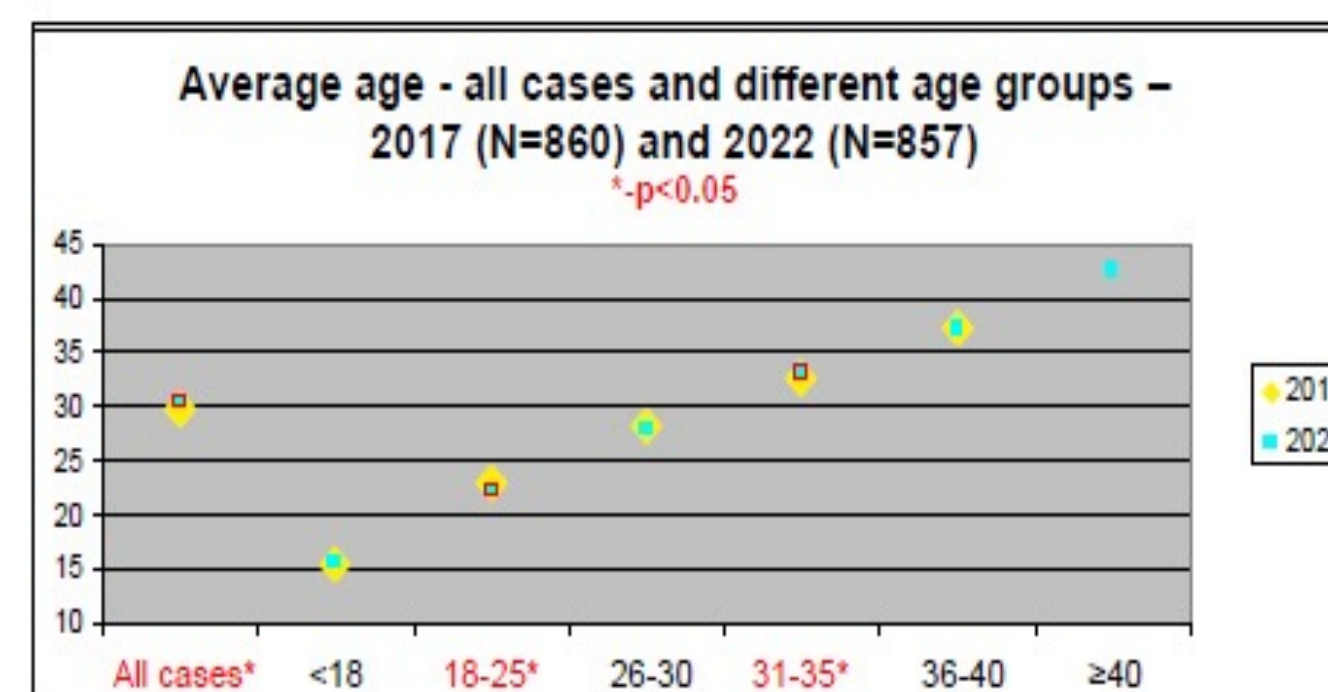
- BMI =weight (kg)/height (m)².

- Women classified as: 1). Underweight (UW)- BMI<18.5 kg/m²; 2) Normal BMI (N-BMI) – 18.5-24.9 kg/m²; 3). Overweight (OW) - BMI 25 - 29.9 kg/m²; 4). Obese (Ob) - BMI ≥30 kg/m²; 5) Morbidly obese (Mob) - BMI ≥35 kg/m².

- The % of women with different BMIs in 2022 were compared to 2017 - for the entire study groups and in age subgroups.

- Fisher’s exact test and Student’s t-test; p<0.05 - statistically significant difference.

Results



Conclusions

Data from 2022 compared to 2017 for Bulgarian pregnant women showed:

- decreased % of N-BMI women;
- increased % of OW women;
- increased average initial BMI - for the entire groups studied and in all age subgroups. Most of these differences were statistically significant.
- significantly increased % of cases with obesity and morbid obesity before the onset of pregnancy.

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