



Obesity in Pregnancy - The True Scale of the Epidemic

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OBJECTIVE

While rates of adult obesity are rising in the developed world, it has been difficult to specify the true scale of the problem in the obstetric population due to issues with medical record ascertainment and use of precise denominator figures. Our objective was to track the prevalence of overweight and obesity amongst all pregnant patients registering for initial antenatal assessment at the largest obstetric hospital in Europe over a >10 year time period.

STUDY DESIGN

This hospital maintains a prospectively collected database of detailed pregnancy demographics for all patients who register for antenatal care, including body mass index (BMI, kg/m²). The database is fully anonymized. We analyzed the database for incidence of BMI, using CDC categories, including overweight (BMI 25-29.9), class 1 obesity (30-34.9), class 2 obesity (35-39.9), and class 3 obesity (>40). Comparisons were made with these BMI categories in each year, using the Cochran-Armitage Test of Trend to determine statistical significance over time.

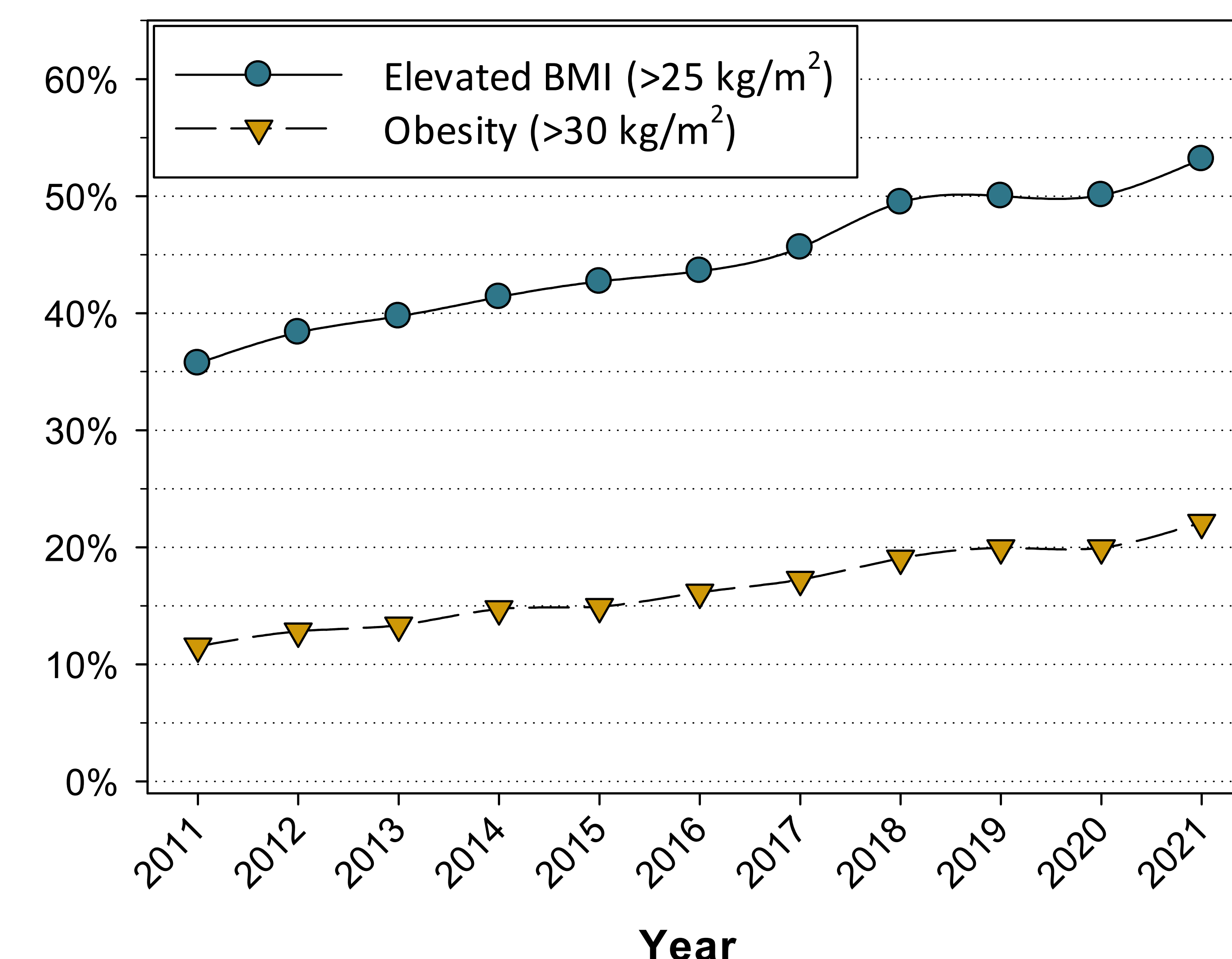
RESULTS

A total of 94,171 patients registered for care and were managed at a single center over 11 years, with detailed data available for analysis. The prevalence of raised BMI in pregnancy (BMI >25) increased by 50% from 35.7% (3,256 cases) in 2011 to 53.1% (4,905 cases) in 2021. The increase in prevalence specifically of obesity (BMI >30) was even more marked at 94%, from 11.5% (1,052 cases) in 2011 to 22.1% (2,041 cases) in 2021, while the super-obese group (BMI >40) increased by 136% from 1.0% (95 cases) in 2011 to 2.4% (224 cases) in 2021. Figure 1 demonstrates the rapid and inexorable increase in prevalence of overweight and obese BMI categories at our centre during the last 11 years.

CONCLUSIONS

By utilizing a detailed database from a single large obstetric hospital, we can confidently demonstrate that we are facing a veritable epidemic of overweight and obesity in pregnancy, with effectively a doubling of obesity rates.

Figure 1: Overweight (BMI >25) and Obesity (BMI >30) prevalence at a single large obstetric hospital over a >10 year time period.



CONCLUSIONS CONT.

The fact that this has occurred in such a short time period, with no evidence of an amelioration in rate of growth, is a call-to-arms for all agencies to act now to combat what is likely the most important public health emergency (other than the COVID pandemic) of recent times.