Obesity in pregnancy: infant health service utilisation and costs on the NHS

In the UK, about one in five women is obese when attending their antenatal booking. Maternal obesity has now been identified as one of the greatest challenges for maternity services across the UK. Additionally, poor maternal health has been shown to predispose infants to adverse health outcomes. Maternal obesity is associated with an increase likelihood of childhood obesity and consequently a greater risk to become overweight or obese in adulthood. Targeting maternal weight pre-pregnancy is therefore urgent, as it can drastically impact the prevalence of childhood obesity. In addition to adverse health consequences, maternal obesity also has significant financial repercussions, with obese women using about £1,200 of NHS resources per pregnancy. The objective of this study was to estimate the direct healthcare cost of infants born to mothers with overweight or obesity to the National Health Service in the UK.

A total of 609 mother-child pairs were included in the study, with about 44% of mothers being overweight or obese. Specifically regarding utilisation of resources, infants born to obese mothers had on average 72% higher resource costs than those born to normal weight mothers. Overall, the findings show that infants who are exposed to obesogenic environments during pregnancy use an additional £1,138 in NHS resources during their first year of life compared to infants born to mothers with a normal BMI.