Estimated global overweight and obesity burden in pregnant women based on panel data model

The large number of overweight and obese pregnant women was a huge burden on health care. This study estimated that nearly forty million pregnant women were overweight or obese in the world in 2014. More than 70% of overweight pregnant women occurred in upper middle-income countries (UMICs) and lower middle-income countries (LMICs), owing to a large population and a high birth rate in those countries. The number of overweight and obese pregnant women increased rapidly in middle income countries from 2005 to 2014, especially in India, China and Nigeria. In many countries, more than half of women were overweight, and nearly third of women were obese, such as Egypt, Turkey, Iran, and South Africa. More adverse maternal and foetal outcomes were observed in women with overweight and obesity.

For high income countries (HICs), the burden of overweight and obesity among pregnant women has been in a high level for many years. The increases of the number of overweight and obese pregnant women in UMICs and LMICs were faster than those in HICs. Those changes suggested a worldwide time-related phenomenon rather than a country-specific trend. However, considering the large population and the increase rate of overweight in middle income countries, the burden of maternal overweight in those countries would be more serious in future.