The prevalence of gestational diabetes mellitus (GDM) is growing in China, and it is associated with a boosted risk of complications for the mother and neonate, such as pre-eclampsia, intrauterine death, stillbirth, post-partum type 2 diabetes, and macrosomia. GDM is also related with birth trauma, hypoglycemia, hyperbilirubinemia, respiratory distress, long-term obesity and childhood diabetes. Early determination and treatment of GDM can significantly diminish the incidence of these complications.

Objectives

The purpose of this study was to estimate the cases of Gestational Diabetes Mellitus (GDM) diagnosed with seven major GDM clinical guidelines, and to estimate the economic burden of GDM.

Methods

This study used 7 major clinical guidelines (NICE2015, ADA2011, ADA2010, Japan 2002, National guideline-China 2007, WHO 1985, NDDG 1979) to estimate the cost of GDM among China. We synthesized the best available national census and statistics published data (2001-2013) to estimate the cases and the economic burden of GDM diagnosed with 7 major Gestational Diabetes Mellitus (GDM) guidelines.

Results

The prevalence of GDM varies from 1.01% to 23.12%, according to the different clinical guidelines. The economic burden was associated with the criteria factors of clinical guidelines. In the years 2001-2013, the economic burden approximated RMB¥ 2042.6 billion (224.9 billion pounds) with the current national clinical guidelines in China (ADA 2011), and the range of different guidelines varies from RMB¥ 98.0 billion (10.8 billion pounds) to RMB¥ 2253.1 billion (248.1 billion pounds).

References